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Institute for Transnational and Euregional cross border cooperation and Mobility / ITEM

Analysing National and Institutional Doctoral Regulations

The Road to Successful Cross-border Cooperation on Joint Doctoral Programmes



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Analysing National and Institutional Doctoral Regulations

The Road to Successful Cross-border Cooperation on Joint Doctoral Programmes

LINK EDU-RES Project

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| 12.1 University of Essex | |
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University Abbreviations

University full name

Abbreviation

| University of Antwerp | UAntwerp |
|----------------------------------|-----------|
| University of Rijeka | UNIRI |
| University of Southern Denmark | SDU |
| University of Eastern Finland | UEF |
| Université Paris Dauphine | UPD |
| Universität Bremen | UBremen |
| University of Konstanz | UKonstanz |
| Ulm University | UUIm |
| Dublin City University | DCU |
| University of Limerick | UL |
| University of Rome Tor Vergata | URTV |
| Maastricht University | UM |
| Universidade Nova de Lisboa | UNL |
| Universidad Carlos III de Madrid | UC3M |
| Universidad Autónoma de Madrid | UAM |
| University of Essex | UEssex |
| Brunel University London | BUL |
| | |

Glossary of Terms

The glossary below includes the English terms employed in the context of the LINK EDU-RES project. These terms are also used in the context of this report and are used to describe for concepts commonly used in the context of doctoral education as provided across the universities part of the YERUN Network and the countries in which they are located. The definition therefore indicates how a particular term is understood in the context of this report.

| Term | Definition |
|-------------------------------|---|
| Doctoral research | Research conducted independently by a doctoral candidate aimed at preparing a doctoral thesis under supervision of a supervisor, ultimately leading to the degree of doctor. |
| Training programme | Programme involving, among others, courses relevant to the subject of the doctoral research, methodological skills training, transferrable skills training, participation in and organisation of seminars, workshops, and conferences, and (inter)national research stays. Depending on the university, the fulfilment of training programmes may or may not be obligatory to obtain a doctoral degree. |
| Joint programme | Training programme organised jointly by two or more universities, which may ultimately lead to a single, double, or joint doctorate degree. |
| Doctorate | Programme consisting of at least doctoral research and a training programme with the objective of obtaining a doctoral degree. |
| Diploma/certificate/ Award | Based on agreements between participating institutions, the result of a doctorate may be: One diploma by multiple universities (i.e. result of a joint degree) Multiple diplomas by multiple universities (i.e. result of a double doctorate) One diploma issued by one university (i.e. result of a cotutelle) |
| Joint doctorate | Doctorate consisting of doctoral research and/or a (joint) training programme conducted at two or more universities under the supervision of academics connected to the universities involved where the candidate the requirements set by all universities part of the joint doctorate, thereby ultimately resulting in one diploma. |
| Double doctorate | Doctorate consisting of doctoral research and/or a (joint) training programme conducted at two or more universities under the supervision of academics connected to the universities involved where the candidate fulfils the requirements set by all universities part of the double doctorate, ultimately resulting in multiple diplomas. |

Cotutelle Joint supervision of a doctoral candidate affiliated to one university, by academics connected to one or more other universities. Contrary to a joint or double doctorate, a cotutelle ultimately results in one diploma by the university to which the candidate is primarily affiliated and in which the candidate completes doctoral research and a (joint) training programme when so required.

Arguably, the term cotutelle may pose strong overlaps with that of a double doctorate. Indeed, in some Member States joint supervision leading to multiple diplomas is considered a cotutelle. For the purpose of this report, however, the distinction between a cotutelle and a double doctorate as reflected in these definitions applies.

- Admissions Committee Committee responsible for admitting doctoral candidates to doctorates. The composition of such a committee may differ per university and/or discipline. In some universities, the duty to admit doctoral candidates may be placed with a doctoral committee (see below).
- Doctoral Committee A faculty or university-wide body responsible for overseeing all matters related to doctoral education and training. In some universities, the doctoral committee may, for example, be responsible for both admission of doctoral candidates, overseeing training, and for granting candidates admission to the defence procedure.
- Supervisor Member of academic staff responsible for supervising the doctoral candidate. Usually a professor or in any case a member of academic staff with a doctoral degree.
- Co-supervisor Member of academic staff who supervises the work of a doctoral candidate jointly with the supervisor. May or may not be connected to the same university as the supervisor.
- SupervisoryCommittee consisting of the doctoral candidate's (co-)supervisors andCommitteepossible other members of academic staff overseeing the progress of the
doctoral research and training.
- *Evaluators* Persons responsible for the evaluation of the doctoral thesis and its approval for the defence. Who may act as evaluator differs per country, university and/or discipline.
- *Evaluation Committee* Committee responsible for the evaluation of the doctoral thesis and its approval for the defence. The requirements for the composition of evaluation committees may differ per university and/or discipline.

- Defence Committee Committee responsible for the evaluation of the doctoral thesis and research at the defence. The requirements for the composition of defence committees may differ per university and/or discipline.
- Defence procedure Administrative procedure to be initiated by the candidate upon conclusion of the doctorate through which the candidate may progress to the conclusion of the doctorate. The defence of the thesis is an indispensable element of this procedure.
- Pre-defenceExamination usually prior to a public defence through which the research
conducted by the candidate is assessed. The need for a pre-defence may
differ per university and/or discipline, as may the composition of the
evaluators present at the pre-defence.
- Defence Final examination for the conclusion of the doctorate during which the research conducted by the candidate as laid down in the doctoral thesis is assessed by the defence committee. The defence can be either public or private and comprises different formats depending on the university and/or discipline.

1. Introduction¹

Cooperation in higher education has been undertaken in the EU for a long time. Action can be held to have commenced in the 1970s and 1980s when the EU adopted several resolutions and conclusions on the topic.² However, action on education truly took off in the 1990s. In 1992, the Maastricht Treaty was adopted, thereby introducing a formal legal basis for the topic of education into the Treaties. Nevertheless, the EU was not the only actor undertaking action on education. The 1990s also saw the introduction of one of the most ambitious cooperations in existence for higher education in the form of the Bologna Process which ultimately led to the creation of the European Higher Education Area (EHEA).³ Despite being intergovernmental in its origin, the Process is closely connected to the EU since the European Commission is one of the members of the EHEA.⁴ The cooperation undertaken in the context of the Bologna Process is most renowned for introducing a structure transforming the higher education systems of participating countries into three cycles: bachelor's, master's and doctorates.

Whereas the first two cycles (bachelor's and master's) were originally proposed in the context of the Bologna Process,⁵ the inclusion of doctorates as the third cycle of the Bologna Process was proposed at a later stage.⁶ Doctorate degrees have unique properties distinguishing them from bachelor's and master's degrees. In particular, doctoral degrees are characterised by their intensive research practice, meaning they are covered by specific guidelines at European level, namely the Salzburg Principles and Salzburg II Recommendations.⁷ Apart from the fact that doctoral education is unique in its focus on research practice, it is also considered to be highly individualised.⁸ Considering the particular nature of doctoral training and the fact that the Member States in the EU remain responsible for their higher education systems,⁹ differences in practices concerning doctoral training are likely to persist. One important way of overcoming differences in national education systems is through cooperation. Indeed, a 2019 study conducted by the Council for Doctoral Education of the European Universities Association (EUA-CDE) confirms that practices in relation to doctorates vary considerably between countries, institutions, and disciplines.¹⁰ In particular, the report recommended future research to

¹ The authors would like to express their gratitude to Anke Moerland and the representatives of the universities part of the YERUN Network consulted in the context of this study for sharing their experiences in the area of international doctoral cooperation and for sharing their valuable insights.

² K. Lenaerts, 'Education in European Community Law after "Maastricht", 31 Common Market Law Review (1994), p. 9-10.

³ The Bologna Declaration of 19 June 1999 – Joint declaration of the European Ministers of Education.

⁴ See EHEA, 'Members', <u>http://www.ehea.info/pagina-members</u>.

⁵ The Bologna Declaration of 19 June 1999 – Joint declaration of the European Ministers of Education.

⁶ Berlin 2003, "Realising the European Higher Education Area" – Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003, p. 7.

⁷ European Commission/EACEA/Eurydice, The European Higher Education Area in 2018: Bologna Process Implementation Report (Publications Office of the European Union: 2018), p. 104.

⁸ EUA, Salzburg II Recommendations – European Universities' Achievements since 2005 in Implementing the Salzburg Principles, 2010.

⁹ Under Article 165 TFEU the EU can support, coordinate or supplement Member State action. The Article on education is paired with a prohibition on harmonisation, meaning that establishing provisions at EU level aimed at harmonising the structure of higher education may not be adopted.

¹⁰ A. Hasgall et al., Doctoral Education in Europe today: approaches and institutional structures, EUA-CDE 2019, p. 33. This 2019 EUA-CDE study is currently extended and updated also in light of the COVID-19 crisis. Results are expected to be published late 2021. For more information see EUA-CDE, '2021 EUA-CDE survey on current developments in doctoral education', <u>https://eua-cde.org/news/657:call-for-participation-2021-eua-cde-survey-on-current-developments-in-doctoral-education.html?utm_source=flexmail&utm_medium=e-</u>

mail&utm campaign=euacouncilfordoctoraleducationnewsletter22021824euacouncilfordoctoral202106&utm content=20 21+euacde+survey+on+current+developments+in+doctoral+education.

take into account disciplinary considerations.¹¹ Considerations such as these paired with a desire to further enhance cooperation on doctorates through joint degrees gave way to the present study. Building on the knowledge from the 2019 EUA-CDE study, this study has as its objective to dive into the national and institutional regulations of the 12 Member States and 17 universities covered by the Network of Young European Research Universities (YERUN). To promote cooperation in education, the YERUN Network actively cooperates across Member States and has a working group on joint programmes.¹² Whereas this working group has previously produced guidelines on joint bachelor's and master's programmes,¹³ it has since shifted its focus to the internationalisation of doctoral education. To give shape to the Network's desire to achieve joint programmes at doctorate level, six of the YERUN Network's universities are cooperating in the context of the LINK EDU-RES project.¹⁴ This study is located within the scope of this project.

The objective of this study – apart from analysing national and institutional doctoral regulations – is to identify common ground within those regulations enabling universities part of the YERUN Network to establish joint programmes in doctoral training. In terms of structure, the present report is divided into six Sections and an Annex. Section 2 discusses the approach adopted to conduct this analysis is explained. Indeed, conducting a comparative analysis of the national and institutional regulations of 17 universities located across 12 EU Member States requires its designated method. These regulation analyses are taken up in the Annex to this report (and make up the body of the work). The analysis in the Annex is structured following the 12 Member States in which YERUN universities are located. This means that regulations existing at national level are analysed first after which the focus is shifted to the institutional regulations of the universities involved in the YERUN Network. This mapping of regulations gives way to Section 3 of this report, namely a targeted comparison to identify common ground for future doctoral cooperation. Whereas this comparison already dedicates attention to provisions made for selected disciplines, Section 4 dedicates more attention to this topic. Section 5 subsequently presents the testimonials of the YERUN universities and their experiences in cooperating on doctoral education and will show that – despite positive experiences – many of the obstacles experienced indeed originate from differences in national and institutional regulations. Finally, Section 6 of the report consists of conclusions and recommendations for the development of joint programmes at doctoral level.

Before moving to Section 2 it is important to emphasise that the primary objective of the present study is to identify common ground and increase the transparency of national and institutional regulations applicable to the YERUN Network. This report therefore does not eliminate the need for one-on-one comparisons of national and institutional regulations. Instead, universities part of the YERUN Network may use this report as a tool to identify other universities within the YERUN Network whose provisions on doctoral education show similarities. Based on these similarities, YERUN universities may establish contacts to further determine whether there is sufficient common ground to create a joint or double doctorate.

¹¹ A. Hasgall et al., Doctoral Education in Europe today: approaches and institutional structures, EUA-CDE 2019, p. 33. ¹² YERUN, 'Linking Education and Research towards the European Education Area (LINK EDU-RES),

https://www.yerun.eu/strategic-actions/linking-education-and-research-towards-the-european-education-area-link-edures/.

¹³ For a full overview of the guidelines created see YERUN, 'YERUN Guidelines on Joint Programmes (Bachelor & Master)', <u>https://www.yerun.eu/publications/yerun-guidelines-on-joint-programmes-bachelor-master/</u>.

¹⁴ The University of Antwerp, the University of Bremen, the Universidad Carlos III de Madrid, the University of Essex, Maastricht University, and the University of Rome 'Tor Vergata'.

2. Method & Demarcation

It was already indicated in the introduction that this study builds on a previous study conducted by the Council for Doctoral Education of the European Universities Association (EUA-CDE). However, a different method will be maintained for the present study. Whereas the 2019 EUA-CDE study was conducted by means of a survey that was open to all European higher education institutions, the present study analyses national and institutional regulations by conducting a direct legal analysis of the relevant provisions of the universities party to the YERUN Network (and the EU Member States they are located in). A two-fold demarcation will be maintained to analyse the relevant provisions. First, the analysis will be focused on particular core provisions in each of the national, but mostly institutional regulations. Apart from core definitions, attention is given to nine core themes, namely, the regulatory models seen in the YERUN Universities, the candidate and modes of admission, the status of the candidate, provisions for supervision, provisions on the thesis, existence of training programmes during doctoral training, methods to assess the dissertation, provisions concerning the defence, and provisions on cooperation regarding joint doctorates and/or double degrees.

Second, a substantive demarcation will be maintained in order to take into account the particularities of doctoral education in different disciplines in existing regulations. Indeed, the 2019 EUA-CDE study recommended that future research should also explore disciplinary considerations.¹⁵ Therefore, a third layer of analysis is added to this study. Apart from examining national and institutional regulations, attention is also given to differences existing between disciplinary regulations maintained by various faculties/organisational units within the YERUN universities. The disciplines included in this study concern social sciences, humanities, law, economics, psychology, medicine, and engineering. To conduct a comparative analysis of regulations, it is important to consider that a direct match between faculties and disciplines may not exist among universities. Therefore, the aforementioned disciplines are organised into three clusters to ultimately facilitate a comparison of institutional regulations. Cluster 1 concerns social sciences, humanities, law, and economics. Cluster 2 encompasses psychology and medicine. Cluster 3 encompasses engineering. Nevertheless, it is important to stress that the analysis of discipline-specific regulations conducted in this report constitutes a first high-level exploration of the provisions made for particular disciplines. Considering also the broad scope of this study encompassing 17 universities, dedicated activities remain necessary to enable detailed comparisons of discipline-specific regulations.

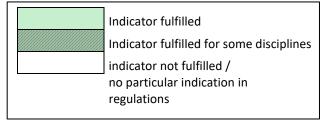
¹⁵ A. Hasgall et al., Doctoral Education in Europe today: approaches and institutional structures, EUA-CDE 2019, p. 33.

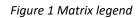
3. National and Institutional Regulations: A Comparative Study

The present Section encompasses the core of this study, namely the comparative exercise of the national and institutional regulations of the YERUN Universities and the countries in which they are located. The comparison in this Section will be conducted through matrixes following the core themes set out in Section 2 above. In particular, the following themes form the subject of comparison:

- 1. Regulatory models
- 2. Candidate & admission
- 3. Status of the candidate
- 4. Supervision
- 5. Thesis
- 6. Training programme
- 7. Thesis assessment
- 8. Defence
- 9. Joint/double degrees

Each theme is represented by a matrix after which the results in the matrix are elaborated. Each of the matrixes accordingly consists of several indicators on which the regulations are compared. The comparison is conducted by examining whether an indicator is or is not fulfilled. In the event that an indicator is fulfilled, the designated field is marked green.





Discipline-specific provisions are also taken into consideration in the context of this analysis. In particular, if an indicator is fulfilled but a provision is made in regulations that are discipline-specific, the green indicator is supplemented by a striped pattern. This provides the possibility to gain insight in the number of provisions that are disciplinary in nature versus the number of provisions that are university wide.

Since matrixes are only filled in when an indicator is fulfilled, this comparative exercise enables us to gain insight primarily into the similarities that exist between the 17 YERUN Universities. It is thereby important to stress that if an indicator is not fulfilled – or if no provision is made in the national or institutional regulation – the field is left blank. An empty field therefore does not necessarily mean that no provision is made in practice for a certain indicator, it merely indicates that no provisions were taken up in the formal regulations of a university. Indeed, it is very well possible that universities may have standard practices that are indeed practical in nature or that there are additional informal guidelines further designating certain procedures. In light of feasibility concerns paired with the multitude of regulations applicable across the 17 YERUN Universities, only selected formal national and institutional regulations have been taken into account for this comparison.

Overall, the key objective of the comparative exercise is to identify common ground between the universities and to examine which universities may most resemble one another in terms of the way in which they organise their doctoral research and training. Therefore, **this research does not seek to**

conduct an in-depth one-on-one analysis of the regulations of each of the YERUN Universities (with their faculties, programmes, doctoral schools, and departments). It is advisable that universities seeking to cooperate with one another on joint or double doctorates undertake their own comparative exercise of the relevant regulations tailored to the specific needs of the participating universities, doctorate, and the field at hand. The call for dedicated activities depending on a concrete desire to cooperate between universities, is all the more important viewed in light of discipline-specific needs expressed in those regulations. The purpose of this report is therefore to contribute to universities part of the YERUN Network being able to identify potential cooperation partners within that network. Once partners have identified one another and found a mutual desire to cooperate on a doctorate, the present report may provide a frame of reference when discussing the exact provisions to be made for their further activities on doctoral cooperation.

3.1 Regulatory models

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | E | S | UK | (|
|--------------------------|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| At national level | | | | | | | | | | | | | | | | | |
| At sub-national level | | | | | | | | | | | | | | | | | |
| At university level | | | | | | | | | | | | | | | | | |
| At faculty level | | | | | | | | | | | | | | | | | |
| At title level | | | | | | | | | | | | | | | | | |
| At programme level | | | | | | | | | | | | | | | | | |

Table 1 Regulatory models of national & doctoral regulations of the YERUN Universities

Analysis – Regulatory Models

The present theme examines the level at which doctoral regulations may be found. At country-level, we may make a distinction between regulations set at national level and regulations set at subnational level. When looking at the regulatory models of the YERUN Universities and the countries in which they are located, we may see that national legislation on doctoral education is mostly located at the national level. Exceptions to this trend may be seen in the two countries part of the YERUN Network that have a federal structure. This is particularly the case for Belgium where education is a competence of the Communities and Germany where the competence to legislate on education is in hands of the Federal States.

However, more importantly in the context of this study is the regulatory model of institutional regulations. At institutional level, we may perceive a greater disparity in regulatory models. Ten of the YERUN Universities set a regulation exclusively at university level (UPD, DCU, UL, URTV, UM, UEssex, and BUL). Nevertheless, eight of the universities (UAntwerp, UNIRI, UEF, UKonstanz, UUIm, UNL, UC3M, and UAM) also set discipline-specific regulations in addition to the general ones. Two universities (SDU and UBremen) exclusively set discipline specific doctoral regulations.

When it comes to discipline-specific regulations, we may again perceive a difference between regulations set at faculty level, those set at title level, and those set at the level of training programmes. Here, regulations set at faculty level supplementing the general university-wide regulation are the most common. UBremen can be considered unique in the sense that it is the only university providing discipline-specific regulations depending on the title a doctoral candidate is looking to obtain. In the case of UKonstanz, we may see that regulations detailing the content of the training programme are also set. Nevertheless, the conditions established in these provisions are relevant only after the university-wide and faculty-specific regulations have been fulfilled (i.e. they may be considered supplementary to the other regulations).

In general, universities laying down provisions on doctoral education exclusively at university level do not lay down specific information on the training programme or admission criteria. By contrast, universities providing for discipline-specific regulations at faculty, title or programme level do tend to provide more detailed information on how training should be structured and doctorates may be accessed. Nevertheless, even if specific provisions on the training programme are not laid down in formal regulations, this does not mean that individual faculties do not require their doctoral candidates to undergo a training programme as part of their doctorate or set additional access criteria.

Indeed, it is important to note that faculties or doctoral schools/programmes within the universities may provide for additional requirements primarily regarding access to a doctorate or to the training to be followed by doctoral candidates. Nevertheless, such additional requirements and specifications to the regulation set at university level are not formalized in official agreements or regulations. For example, UM and UEssex only have a formal university-wide regulation. Nevertheless, access requirements are be set per Graduate School (UM) or per PhD course (UEssex). Such additional practices located outside the realm of formal regulations support the need for dedicated comparisons in the even that two universities are looking to cooperate on a joint or double doctorate.

3.2 Candidate & Admission

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | PT | E | 5 | UK | |
|--|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Master's degree necessary to access doctorate | | | | | | | | | | | | | | | | | |
| Alternatives to master's degree possible | | | | | | | | | | | | | | | | | |
| Additional access requirements | | | | | | | | | | | | | | | | | |
| set in discipline-specific | | | | | | | | | | | | | | | | | |
| regulations | | | | | | | | | | | | | | | | | |
| Formal assessment to access | | | | | | | | | | | | | | | | | |
| doctorate (possibly including | | | | | | | | | | | | | | | | | |
| tests & examinations) | | | | | | | | | | | | | | | | | |
| Possibility for additional | | | | | | | | | | | | | | | | | |
| training prior to the doctorate | | | | | | | | | | | | | | | | | |
| Language requirement to | | | | | | | | | | | | | | | | | |
| access doctorate | | | | | | | | | | | | | | | | | |
| Enrolment and payment of fees | | | | | | | | | | | | | | | | | |

Table 2 Requirements related to the candidate and admission to a doctorate set in national & institutional doctoral regulations of the YERUN Universities

Analysis – Candidate & Admission

Regarding the second theme, namely the candidate and requirements related to admission, we may see in the matrix on the previous page that most universities part of the YERUN Network require a master's degree as a minimum requirement to access a doctorate.

We may also see that most universities provide for alternative routes to access the PhD. Different alternative routes may nevertheless be identified. The majority of universities (UAntwerp, UEF, UPD, DCU, UM, UC3M, and UAM) provides for possibilities to admit candidates who are not holder of a master's degree if the responsible body within the university decides to exceptionally admit a candidate. In the case of the Spanish universities (UC3M and UAM), the number of instances in which a candidate who is not holder of a master's degree may still be permitted to access a doctorate is limited to what is designated by national law. Other universities such as UBremen, UKonstanz, UUIm, DCU, UL, and UNL also provide the possibility for graduates of excellent bachelor's degrees to access doctorates under designated conditions.

The two UK universities part of the YERUN network do not require a general degree requirement as a minimum to enter a doctorate. Instead, UEssex sets requirements related to the minimum level of training depending on the PhD course one is looking at. Nevertheless, for most degrees either a combination of a good honours degree and a master's degree or a master's degree with merit/good master's degree is required to access a doctorate in social sciences, medicine and psychology, or engineering. Brunel University London instead requires a First or Upper Second Class Honours degree for designated doctorates (in education, engineering, philosophy, and public health). Access to higher degrees (in law, literature, science and technology) as well as an article-based PhD (Doctor of Philosophy) is reserved to those already employed at the university or those who are considered a distinguished authority in their field of study.

Some universities, such as SDU and UEssex also provide for the possibility for candidates to follow "integrated PhDs" in which case a candidate follows master's degree level training in the first year of their doctorate. Accordingly, entrance criteria for such a degree vary from the general requirement of a master's degree. A similar structure may be seen at UEF, where candidates can undertake their licentiate degree (to become qualified in a profession) as part of their postgraduate studies.

The matrix on the previous page also shows that additional access requirements set in disciplinespecific regulations are also common. Topics defined further in discipline-specific regulations are often related to the required content of previous training (i.e. pre-existing knowledge in mathematics and statistics for a degree in economics). In the case of UAntwerp, UNIRI, UEF, UKonstanz, UUIm, and UNL, (some of) the discipline-specific regulations also establish whether, and if so, how, formal assessments conducted prior to the candidate being admitted to a doctorate and additional training after admission but prior to the start of the doctorate¹⁶ are to take place for different doctorates. In the case of UL, URTV, UC3M, and BUL such provisions are taken up in the general regulations. In the case of UNIRI and URTV candidates must undergo a public competition to be selected for a doctorate.

¹⁶ Needed, for example, when a candidate is found to possess the necessary knowledge in most fields related to the doctorate, but not all (e.g. a candidate has a degree in economics relevant to the doctorate to be pursued but lacks certain statistical knowledge).

Language requirements are generally not taken up in the university-wide regulations. Only at DCU, UL, UEssex, and BUL is language knowledge a general requirement. Instead, if language knowledge is required to access the doctorate, this is taken up in the discipline-specific regulations (as is the case for UNIRI, UKonstanz, and UNL).

In terms of enrolment, such is required at UAntwerp, UPD, UBremen, UKonstanz, UUIm, UL, URTV, UC3M, UAM, UEssex and BUL. In the case of the German universities (UBremen, UKonstanz, and UUIm), enrolment is generally necessary although some candidates may be exempted from the enrolment requirement. In the case of UAntwerp, UNIRI, UPD, URTV, and UC3M candidates must also fulfil a fee to undertake their doctorates. The payment of this fee may nevertheless differ. Whereas some universities require annual payments, others (e.g. UAntwerp) require fulfilment of a fee only in the first and final years.

3.3 Status of the Candidate & Funding

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | E | 5 | UK | |
|---|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Employee status | | | | | | | | | | | | | | | | | |
| Student status | | | | | | | | | | | | | | | | | |
| Candidates with teaching duties | | | | | | | | | | | | | | | | | |
| Candidates with a personal research grant | | | | | | | | | | | | | | | | | |
| Candidates on scholarship | | | | | | | | | | | | | | | | | |
| Candidates working on a doctoral project (e.g. MSCA) / Funding from national agencies | | | | | | | | | | | | | | | | | |
| External candidates / self- funded candidates | | | | | | | | | | | | | | | | | |
| Alternative doctorate formats | | | | | | | | | | | | | | | | | |
| Full-time | | | | | | | | | | | | | | | | | |
| Part-time | | | | | | | | | | | | | | | | | |

Table 3 Status of the candidate and means of funding doctorates as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Status of the Candidate & Funding

As far as the status of the candidate and possible means of funding are concerned, relatively little information is generally taken up in the different national and institutional regulations. It is clear that some universities provide employment contracts for their doctoral candidates (UPD, UUIm, and UM). By contrast, DCU, UC3M, UAM and UEssex consider doctoral candidates to hold student status. Although the distinction between employee or student status may appear to be a strong one, the distinction between the two may be less solid than might appear at first.

Indeed, at some universities such as UAntwerp, UNIRI, SDU, and UEF, candidates can hold both student as well as employee status. Furthermore, having a closer look at the Netherlands, for example, we may see that only some categories of doctoral candidates are considered employed by the university. This applies especially to employee doctoral candidates and other university employees working on doctorates. Other categories such as candidates whose research is funded from a party granting doctoral scholarships are not considered employees. In some universities, such as UAntwerp, UNIRI, SDU, and UEF an overlap may be perceived in the student/employee status. At DCU, UL and UNL, doctoral candidates are considered to hold student status. In the case of UNIRI, candidates are considered doctoral students, but those doing their doctorate full-time nevertheless have an employment contract (although this may differ per faculty). A comparable provision may be seen in Spain where persons pursuing doctorates are not only considered students, but also researchers in training. However, different from UNIRI, they appear to formally hold a student status. At UKonstanz, candidates are generally considered students, unless they are partially employed by the university. In this case they will be considered employees. A similar provision is seen at UEssex where candidates can hold dual staff/student status if they are employed for additional duties in teaching or research. At BUL, candidates are considered to be doctoral researchers who can also be employed as, for example, graduate teaching assistants. At UEF, admission to a doctorate does not equal a position of employment since funding is not included in the application. Instead, the candidate can apply for funding via grants, scholarships and/or student aid. Those who work as a doctoral researcher nevertheless have an employment contract (and similar status). At the moment, a development is ongoing in Finland seeking to change the present policy to a situation where all doctoral students are offered options for a part-time employment position. In the case of UUIm, some candidates appear to have an employment contract. In particular, mention of this is made in relation to enrolment (which is not always necessary or optional for candidates holding an employment contract).

Looking at different types of doctoral candidates/students, this is an area where little information is taken up in the regulations. Much of the information provided here was received via representatives from the universities part of the YERUN Network. It may also be the case that the university does not maintain different categorisations for doctoral candidates (e.g. one registration for all candidates), but that the categories taken up in the matrix concern the source of funding. Based on the matrix, UAntwerp, SDU, UPD, UL, URTV, UM, UNL, and UEssex appear to have the largest variety of modalities in which doctoral candidates can undertake their doctorates. Several universities (UAntwerp, SDU, UPD, UL, UM, UNL, and UEssex) also have either external candidates or self-funded candidates. The matrix shows that teaching duties may often be combined with a doctorate. This is, for example, seen in UAntwerp, URTV, UM and UEssex. In the case of UNL the possibility (or necessity) to combine teaching with the pursuit of a doctorate depends on discipline-specific regulations.

Doctoral candidates holding personal grants (e.g. obtained by national research funding agencies to fund PhD research) are, for example, seen in UAntwerp, UEF, URTV, and UM. Scholarships are thereby also seen in SDU (depending on discipline-specific regulations), UEF, URTV, UM, UEssex, and BUL. Funding obtained in the context of a doctoral project for which funding was obtained by a supervisor or other senior researcher/academic or via a national funding agency is also a frequent source of funding.

Here, it is important to make mention here that overlaps or differences in terminology complicate the categorisation – especially when looking at personal research grants, scholarships and funding coming from a doctoral project/national agency. The latter category could, for example, contain an Innovative Training Network under the Marie Sklodowska-Curie actions of the past Horizon 2020 programme. Whereas some universities consider this a separate category, others consider doctoral candidates holding funding from this source as being on scholarship. For other universities, such as URTV, the term scholarship covers different sources of funding. Scholarships may consist of funding from the university and the national Ministry for Education, Universities and Research renewed annually on the condition that the candidate make sufficient progress. However, scholarships may also originate from abroad or from European mobility programmes. In such cases, the provisions in the agreements applicable to those sources of funding prevail. A similar complexity may be seen when seeking to categorise external candidates/self-funded candidates. Based on the analysis, these are candidates who are either not funded, provided their own funding, or are funded by a party external to the university (e.g. a company). Here, overlap may come to exist with another indicator taken up in the matrix, namely the alternative doctorate formats.

Indeed, some universities consider doctoral candidates whose research is funded by companies, for example, external candidates. Others, by contrast, provide for industrial doctorates or professional doctorates. These are seen, for example, in SDU, UPD, UL, and UC3M. Such doctorates may nevertheless be considered to constitute a separate category since their structure differs considerably from the traditional doctorate. More specifically, the candidate may be supervised by a supervisor from the university and by an experienced colleague at the company or organisation with which the industrial doctorate is concluded. The coincidence with some external candidates may then exist when the candidate spends dedicated time working on the thesis and working in the company/organisation. A different alternative to a "regular" doctorate seen at SDU and UEssex are integrated doctorates where the first year of the doctorate consists of postgraduate training (master's degree). Although an interesting structure, international cooperation through a joint doctorate may be complicated since some universities (e.g. URTV) do not permit the simultaneous pursuit of a doctorate and other university-level education. Another alternative format are the higher doctorates seen at DCU and BUL. These are generally only available to those with proven expertise in a particular area (e.g. someone having already completed a doctorate and having built significant expertise after that).

In the case of full-or part-time pursuit of a doctorate, the regulations generally provide that a doctorate may be pursued either full-time or part-time. This is the case for most universities of the YERUN Network (UNIRI, SDU, UEF, UPD, DCU, UL, UC3M, UAM, UEssex, and BUL). URTV by contrast requires the doctorate to be undertaken on a full-time basis. In the case of some universities such as SDU, whether or not it is possible to pursue a PhD full-or part-time may depend on faculty regulations. UAM allows both full-time and part-time pursuit of doctorates but nevertheless prohibits the part-

time pursuit of a doctorate in the event that candidates hold a contract to exclusively carry out doctoral research. Regulations of UAntwerp UBremen, UKonstanz and UNL do not provide specifications as to whether a doctorate may be pursued both on a full- or part-time basis. In the case of UM, this is not explicitly mentioned in the regulations but nevertheless implied from the availability of a part-time PhD programme in European studies for professionals.

3.4 Supervision

| | BE | HR | DK | FI | FR | | DE | | IE | IT | Ν | . PT | • | ES | 5 | UK | (|
|--|----------|-------|-----|-----|-----|---------|-----------|------|-----|--------|-----|------|------|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | IL URT | V U | N UI | NL U | JC3M | UAM | UEssex | BUL |
| 1 supervisor | | | | | | | | | | | | | | | | | |
| 2 or more (co-) supervisors | | | | | | | | | | | | | | | | | |
| External supervisor | | | | | | | | | | | | | | | | | |
| Distinction principal supervisor and secondary/co-supervisors | | | | | | | | | | | | | | | | | |
| Tutor in addition to supervisor | | | | | | | | | | | | | | | | | |
| Supervisory Committee in addition to supervisors | | | | | | | | | | | | | | | | | |

Table 4 Provisions on supervision as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Supervision

When looking at arrangements for supervision, many commonalities may be identified between the YERUN universities. In principle, all universities establish that a candidate should have at least one supervisor whereby a second supervisor (or co-supervisor) is possible. At UNIRI regulations make mention of a (single) mentor who guides and monitors the student. However, at most universities (UAntwerp, SDU, UEF, UBremen, UKonstanz, UUIm, DCU, UL, UM, UNL, UC3M, UAM, UEssex and BUL) multiple supervisors are either mandatory or allowed upon approval. Furthermore, most universities distinguish between a principal supervisor and secondary supervisors/co-supervisors. At UNIRI, UEF, UBremen, UUIm, UM, and UNL the supervisor (or at least one of the (co-)supervisors) may be external to the university. By contrast, at UAntwerp, UPD, SDU, UEF, and UL, the (principal) supervisor must be affiliated to the university or to the doctoral/graduate school. In some cases, a co-supervisor may originate from either another doctoral school (e.g. UAntwerp) or from outside academia (e.g. UPD). The level of qualification and position of the supervisor varies per university and sometimes even per discipline. The main trend nevertheless is that professors act as supervisors. Additional members of staff also qualifying for a supervisory role are senior members of academic staff (UAntwerp, UM), holders of a doctorate (UAntwerp, UL, UM), academics expert in the field of the doctorate (UNIRI, SDU, UEssex), postdoc (UBremen, UNL), scientist with Habilitation (UBremen), or researchers with recognised supervisor status (BUL). At UL, it is also possible that a joint supervisor hold (at minimum) the same level of qualification as the supervised candidate.

The role of the supervisor may be considered the biggest similarity between the universities. In all cases, the supervisor is responsible for guiding the research and teaching, assessing the research and making corrections, overall management of the progress, dedicating time to the candidate and their research, and ensuring interaction with other academics/bodies within the university, faculty, department, school, or institute.

A maximum number of supervisors is maintained at UAntwerp (max. 4 supervisors) and UM (3 supervisors). For URTV, no provisions in relation to supervision appear to be made. Nevertheless, the *Collegio dei Docenti* (doctoral board) consisting of professors and researchers plays a core role in supervising research and teaching activities of doctoral candidates by approving candidates' progress to subsequent years and admitting them to the final doctoral examination.

Nevertheless, URTV is not the only university who has an independent body monitoring annual progress of doctoral candidates. UAntwerp, UPD, DCU, UL, URTV, UC3M, UAM, and UEssex provide for supervision through committees that are either fully or partially composed of academics not directly involved in the supervision of the candidate. In general, these committees oversee the research progress (often on an annual basis) and approve the thesis for defence. At some universities such as UAntwerp, this individual PhD Committee consists of the supervisors and additional senior academics with relevant expertise. In Ireland, national legislation prescribes that doctorates are to be supervised by a principal supervisor together with a panel. At DCU, this panel provides advise and formal decision-making in relation to the progress made in the doctorate and consists of the supervisors and of an independent member of academic staff. A similar structure is maintained at UEssex where the supervisory panel is chaired by an academic staff member additional to the supervisors. At UL, research review panels are created per department to review the progress made

by doctoral candidates. Similarly, at UPD, the committee overseeing the doctorate is separate of the supervisors and consists of at least two researchers who are not involved in the research. A similar structure is maintained at UC3M and UAM.

At the Spanish universities, the Academic Committee fulfils a similar role as URTV's *Collegio dei Docenti*, namely to monitor progress, access to subsequent years, and approval of the thesis for defence. Nevertheless, in the case of UC3M and UAM, the role of the Academic Committee is supplementary to that of the thesis director (supervisor) and that of the tutor (although they are both appointed by the Academic Committee). The role of tutors is thereby unique to the Spanish universities. Whereas the thesis director is responsible for the research, the tutor oversees the training of the doctoral student. Nevertheless, the role of tutor and thesis director may coincide and thus be taken up by one and the same person. In the case of UC3M, the thesis director may be external to the university while the tutor must be a professor connected to the university. In the case of UAM, the thesis director must be holder of the title of doctor and have relevant research experience (but may be affiliated to any Spanish or foreign university). The tutor, by contrast, should be connected to one of the institutions involved in the doctoral project. The role of thesis director and tutor must be considered supplementary to one another. Nevertheless, both UC3M and UAM also provide for the possibility of allowing a thesis to be co-supervised. For this, UC3M requires a pre-authorisation from the Academic Committee and UAM limits co-supervision to one co-supervisor.

At BUL, each candidate is supervised by a supervisory team (consisting of the supervisors and the candidate) whereby one of the supervisors is considered the principal supervisor. This principal supervisor must have sufficient supervisory experience of other relevant experience to be able to assume that role. A similar structure is seen at UKonstanz for some disciplines. Here, supervisors may be united in a thesis committee (as primary, secondary and tertiary supervisor) and – depending on the discipline – may include an external supervisor. The role of the supervisory team/thesis committee must nevertheless be distinguished from other supervisory committees as seen in UAntwerp, UPD, DCU, UL, URTV, UC3M and UAM since it consists exclusively of the supervisors and candidate (and therefore not of additional members external to the supervision of the doctorate).

3.5 Thesis

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | E | 5 | UK | (|
|-----------------------------------|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Thesis must be in English or | | | | | | | | | | | | | | | | | |
| Member State language | | | | | | | | | | | | | | | | | |
| Alternative languages possible | | | | | | | | | | | | | | | | | |
| Thesis may be a single | | | | | | | | | | | | | | | | | |
| manuscript or consist of articles | | | | | | | | | | | | | | | | | |
| Thesis as a joint work possible | | | | | | | | | | | | | | | | | |
| Publication of the thesis | | | | | | | | | | | | | | | | | |
| required | | | | | | | | | | | | | | | | | ſ |
| Intellectual property rights are | | | | | | | | | | | | | | | | | |
| located with the candidate | | | | | | | | | | | | | | | | | |

Table 5 Requirements related to the thesis set in national & institutional doctoral regulations of the YERUN Universities

Analysis – Thesis

Regarding the doctoral thesis, the primary similarity that may be deducted from the matrix on the previous page concerns the language in which the thesis is written. Almost all universities of the YERUN network indicate in their regulations that the thesis must be written in either in the language of the Member State in which the university is located or in English (UAntwerp, UNIRI, SDU, UBremen, UUIm, DCU, UL, URTV, UM, UNL, UC3M, UAM, UEssex, and BUL). Alternatively, these universities also allow for the thesis to be written in other languages. However, this will often depend on the express approval of a relevant supervisory body. In the case of UAntwerp, UNIRI, SDU, UEF UBremen and UNL, additional provisions on the permitted languages are furthermore established in discipline-specific regulations (either exclusively in such regulations or such regulations specify the permitted languages in addition to a university-wide regulation).

In Spain, the thesis may indeed be drafted in Spanish or in English, but this follows on national legislation which prescribes that the thesis may be drafted in the languages used in a specific field of study. This indicates a broader approach where other languages beyond English and Spanish could also be considered if they are relevant to a particular field. UAM furthermore provides that – if the thesis is not written in Spanish – the introduction and the conclusion must be in Spanish. UKonstanz provides as a rule that the thesis should be written in German. Nevertheless, the university's department-specific regulations add that the thesis may be drafted in English or German – and occasionally also in another modern foreign language depending on an explicit approval. UUIm then provides that theses are to be drafted in German or English. UPD and BUL maintain different approaches. Whereas for UPD the thesis may be written in English (although it should be supplemented by a long abstract in French), BUL provides that the thesis is to be drafted in English thereby implying that drafting a thesis in an alternative language may not be possible.

When looking at the format of the thesis, either a monograph or an article-based doctorate are the most common thesis formats. These are seen at UAntwerp, UNIRI, SDU, UEF, UPD, UBremen, UKonstanz, UUIm, UL, UM, UNL, UC3M, and UAM. In some cases, express permission is required to be able to prepare a thesis in either of the two formats (e.g. seen in UNIRI, SDU, UAM, and UEssex). Furthermore, looking at some universities where discipline-specific regulations are also set we may also see that a preferred format may be designated based on a particular discipline. This is the case for UAntwerp, SDU, UEF, UBremen, UKonstanz, UUIm, UNL, and UC3M. Furthermore, UAntwerp, DCU and BUL also provide alternative thesis formats ranging beyond a monograph or article-based doctorate. In the case of DCU, an artifact or creative performance practice may also be considered a dissertation. At BUL, a thesis constitutes a portfolio, original literary text, practical performance or artefact.

When it comes to publication, we may perceive different practices across the universities. At some universities such as UAntwerp, UM, and UEssex, conclusion of the doctorate is not dependent on publication of the thesis although the thesis must be sent to the university library. An embargo period may nevertheless be maintained before the thesis becomes available. Similarly, other universities such as UBremen and DCU permit publication of the thesis (or parts thereof) either before or after the conclusion of the doctorate. Other universities such as SDU and UEF, require the thesis to be publicly accessible (even if this may be designated in discipline-specific regulations). Another possibility, seen at UPD and URTV is publication with a national repository. For example, in the case of Italy such a repository is maintained by the Italian Ministry for Education, Universities, and Research. The Spanish and some of the German universities require publication of the thesis prior to the defence so that other colleagues may also provide comments on the thesis. Furthermore, at UKonstanz, publication is necessary within two years

after the defence. UUIm also requires publication after the successful completion of the thesis. Furthermore, certain articles may already have to be either accepted for publication or published in order for candidates to proceed to the defence (for several disciplines). UEssex requires open access publication after conclusion of the doctorate.

Doctoral theses that are the result of a collaborative work are only seen at three universities, namely UKonstanz, UM, and UEssex. Unsurprisingly specific rules apply for such doctorates in order to ensure that each candidate has conducted research independently. At other universities, such as UAntwerp, SDU, and UPD much emphasis is put on the individuality of the research. In this case, candidates must clearly designate what part in the research they conducted if they conduct their doctorate on an article basis and cooperated with other researchers on certain publications.

In terms of copyright, most university regulations specify that that the intellectual property of the work lies with the author (i.e. the candidate). UAntwerp by contrast provides that the institution holds ownership of the results generated by its staff (including doctoral candidates), although the moral rights remain with the author. Similarly, at UL, the copyright of the thesis remains with the candidate whereas all other intellectual property conceived is property of the university. At UC3M, copyright is mostly with the candidate (unless specific provisions are made). DCU similarly establishes that matters on copyright are agreed between the candidate and the university.

Other interesting provisions taken up in regulations (not reflected in the matrix on the previous page) concern word or character limits. These are seen in UL, UNL, and UEssex. In the case of the latter university, candidates will need to acquire express permission from the dean if the word limit is exceeded. Other universities such as UAntwerp and UM establish specific requirements related to style (e.g. what the title page should look like). Others such as UBremen and UAM require the candidate to include a statement on ethical commitment, originality, and independence of the research.

3.6 Training Programme

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | ES | 5 | UK | (|
|--------------------|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Training | | | | | | | | | | | | | | | | | |
| programme | | | | | | | | | | | | | | | | | |
| mandatory | | | | | | | | | | | | | | | | | |
| Accreditation | | | | | | | | | | | | | | | | | |
| necessary | | | | | | | | | | | | | | | | | |
| (programme or HE | | | | | | | | | | | | | | | | | |
| institution) | | | | | | | | | | | | | | | | | |
| Use of ECTS | | | | | | | | | | | | | | | | | |
| Individualised | | | | | | | | | | | | | | | | | |
| programme | | | | | | | | | | | | | | | | | |
| Annual progress | | | | | | | | | | | | | | | | | |
| evaluation | | | | | | | | | | | | | | | | | |
| Minimum | | | | | | | | | | | | | | | | | |
| duration of the | | | | | | | | | | | | | | | | | |
| doctorate | | | | | | | | | | | | | | | | | |
| Maximum | | | | | | | | | | | | | | | | | |
| duration of the | | | | | | | | | | | | | | | | | |
| doctorate | | | | | | | | | | | | | | | | | |
| Teaching duties or | | | | | | | | | | | | | | | | | |
| other alternative | | | | | | | | | | | | | | | | | |
| activities | | | | | | | | | | | | | | | | | |
| permitted | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Table 6 Provisions on training programmes as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Training Programme

Training as part of a doctorate is an element that is mandatory again in most YERUN universities. Exceptions appear to be UBremen and UUIm where the institutional and discipline-specific regulations do not make specific provisions for the pursuit of training during the doctorate. When it comes to the assessment of the doctorate, these universities provide that the assessment depends on the thesis and the defence (thus making no mention of the possible role of training as part of the doctorate).

When looking at the universities where training forms a core part of the doctorate, training is in most cases highly individualised. Exceptions to this requirement appear to be UEF and BUL where training forms part of a designated programme. In other universities such as DCU and UL, structured training (i.e. taught courses) are part of structured PhD programmes. Nevertheless, these form separate categories of doctorates next to "regular" doctorates in which training is more flexible. Indeed, in most cases universities part of the YERUN Network provide for training that differs either per faculty/programme/graduate school or is individual to the candidate. in the latter case, the training programme is usually discussed by the candidate and the supervisor. Some universities furthermore lay down such agreements on training either in the agreement concluded between the candidate and the supervisor (UPD, UKonstanz, UM) or in a dedicated document or system (DCU, UL, UC3M, UAM, and UEssex). For example, in Ireland details on the training followed by the candidate is laid down in a personal development plan. In Spain, by context, candidates must keep track of annual progress reports which are then assessed by the thesis director, tutor, and Academic Committee. At Essex, use is made of a professional development scheme called *proficio* through which candidates obtain a dedicated budget to tailor their training plan to their specific needs.

Where training is mandatory, it is also often highly flexible. Indeed, even where training provisions are laid down in faculty/programme/graduate school regulations, it still often establishes only a general framework in relation to training (UAntwerp, UNIRI, UEF, UPD, UKonstanz, DCU, UM, UNL, UC3M, and UAM). Across the YERUN universities a trend may be perceived where training consists of several recurring aspects: training in research skills and methods, training in transferrable skills, substantive training specific to the area in which the candidate is conducting their research, and optional courses. Some universities such as UPD provided a limited number of mandatory courses after which the content of training is left open for the candidate to determine in agreement with the supervisor. Training usually takes place in the form of seminars, courses, workshops, and lectures. Nevertheless, at UKonstanz, some of the faculty regulations (especially in economics) also provide for written examinations. Some (faculties of) universities such as UNIRI also consider research stays abroad as part of training.

In most cases, progress made by the candidate in both research and training is analysed on an annual basis. The body responsible for this assessment is typically an authoritative body involved in the PhD. Whereas for some universities such as UPD, the assessment is conducted primarily by the supervisor or individual doctoral committee, others such as UAntwerp, UL, and UEssex provide that a body further removed from the research (e.g. a university- or faculty-wide PhD Commission) is to assess the progress. At some universities such as SDU, UC3M, and UAM, progress is monitored by both the supervisor and an authoritative university- or faculty wide body. In most universities where training is mandatory it must furthermore be completed before a candidate is able to access the defence. At

UAntwerp and UKonstanz candidates receive a certificate separate to their doctoral diploma specifying the completion of training.

The matrix also shows that only some universities – or better said – countries in which the YERUN universities are locates require accreditation of doctoral programmes in order to be provided to candidates. This is the case in UNIRI, UPD, and URTV. Similarly, ECTS are used by a relatively limited number of universities. More specifically, ECTS are used in UNIRI, SDU, UEF, UKonstanz, DCU, UL, and UNL. UAntwerp furthermore uses its own points system (based on 30 points) to weigh the activities of the candidate. UC3M furthermore uses ECTS, but only to measure the units of additional training that may be imposed for a candidate to be able to access doctoral training (e.g. when the candidate has a degree in another field than that of the doctorate they are looking to pursue).

As far as the duration of doctorates go, considerable similarities may be perceived among the YERUN universities. Whereas only UNIRI, DCU, UL, UEssex, and BUL maintain a minimum duration of the doctorate, more universities maintain a maximum duration (UNIRI, SDU, UBremen, UKonstanz, UUIm, DCU, URTV, UC3M, UAM, UEssex, and BUL). DCU is one of the universities that maintains both a minimum (3 years) and maximum (5 years) period of registration.

Some universities such as UAntwerp, UEF, UL, UM and UNL do not set a maximum period. In general, doctorates tend to average between three to five years. UNIRI and UUIm maintain a maximum of six years. At UBremen and UKonstanz, the exact maximum duration of the doctorate differs per discipline. Again, most universities (i.a. UPD, UBremen, UC3M, and UAM) allow for extensions on an annual basis if expressly approved by a supervisory body. URTV allows for extensions on a six-month basis (after a maximum duration of 3 years). UEssex makes use of a standard period of 3 years (which simultaneously acts as a minimum period), and a possible completion period applied in the event that the doctorate is not yet concluded of 1 year.

When it comes to activities conducted in addition to the doctorate, some universities (UAntwerp, UNIRI, UPD, UKonstanz, URTV, UM, UNL, and UEssex) explicitly permit or prohibit this. Teaching duties are thereby by far the most popular additional activity to be undertaken. UAntwerp, UPD, URTV, and UEssex allow for teaching activities. UAntwerp and URTV also permit other activities beyond teaching, although in the case of URTV express permission must be obtained by the candidate beforehand. UKonstanz thereby provides in some of its discipline-specific regulations for a combination of the doctorate with other activities. This is particularly the case for psychology, where the doctorate may be combined with practice so that the candidate is able to obtain the necessary activities to become qualified as a practitioner simultaneously as undertaking the doctorate. At UNIRI and UNL, teaching activities are taken up as a mandatory activity in some of the universities' discipline-specific regulations.

3.7 Thesis Assessment

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | E | S | UK | |
|--|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Approval of supervisors prior to formal evaluation procedure | | | | | | | | | | | | | | | | | |
| Thesis assessment committee | | | | | | | | | | | | | | | | | |
| Individual (External) evaluators | | | | | | | | | | | | | | | | | |
| Evaluators/committee consist of internal and external persons | | | | | | | | | | | | | | | | | |
| Supervisors part of thesis evaluation | | | | | | | | | | | | | | | | | |
| General evaluation criteria | | | | | | | | | | | | | | | | | |
| Other requirements needing to be fulfilled next to the doctoral thesis (i.e. completed programme) | | | | | | | | | | | | | | | | | |
| Thesis is graded before defence | | | | | | | | | | | | | | | | | |

Table 7 Provisions on the assessment of the thesis as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Thesis Assessment

Whereas all of the different topics related to international cooperation as presented in the different matrixes are of course strongly interrelated to one another, the two matrixes on the assessment of the thesis and the ultimate defence perhaps show the most overlap. In fact, at some universities such as DCU, UC3M and UAM, the assessment of the thesis coincides with the defence. At UC3M, for example, the general regulations provide that upon submission of the thesis a public defence is organised and a thesis committee appointed. Nevertheless, the discipline-specific regulations provide variations where either the thesis director, tutor, and Academic Committee first assess the thesis, or an external evaluator is consulted before the candidate proceeds to the defence. At UAM, a defence committee is instated to read and assess the thesis. This defence committee is instated by the Doctoral Committee connected to the UAM Doctoral School. Accordingly, the latter committee may also decide to require a prior assessment procedure before the thesis is sent to the defence committee.

As the examples above show, most universities provide for a two-step evaluation procedure to conclude the doctorate. Indeed, at the majority of the YERUN universities (UAntwerp, UNIRI, SDU, UEF, UPD, UBremen, UKonstanz, UUIm, DCU, UL, URTV, UM, UNL, UEssex, BUL), the evaluation and approval of the thesis is a separate step before a candidate can access the defence. Furthermore, universities such as UL, UEssex and BUL add a further step after the defence where a report is first issued by the examinators/defence committee after which the award of the doctorate must still be approved by an authoritative body of the university.

Some of the universities in the YERUN Network may also demonstrate an overlap in terms of the persons taking part in the assessment of the thesis and in the defence. This is especially the case for UBremen, UKonstanz, UUIm,¹⁷ UM, UAM, and UEssex). In this case, the persons reading and evaluating the thesis are the same ones as the ones present at the defence. Alternatively, the persons reading and evaluating the thesis in a first step are supplemented by other colleagues at the defence. At UBremen, for example, the thesis is first examined by a minimum of two reviewers who – for almost all disciplines – are also part of the examination committee. After a positive verdict, the reports of the reviewers will be transferred to the examination committee present at the defence. At other universities, the approval of the thesis is performed by a separate body than the one conducting the defence. For example, at UAntwerp, the individual doctoral commission issues a recommendation on whether or not the thesis may be defended. Only after approval of the individual doctoral commission may the thesis be submitted to the doctoral jury (present at the defence).¹⁸ At UNIRI, members part of the evaluation committee can also be members of the defence committee. Similarly, at UPD, two external rapporteurs issue an opinion on the thesis after which the authorisation for the defence is given. The vast majority of YERUN universities (UAntwerp, UNIRI, SDU, UEF (faculty-specific), UPD, UUIm, DCU, UL, URTV, UM, UNL, UC3M, UAM, UEssex, and BUL) moreover require some or most of evaluators/assessment committee members to be external to the university. In the case of UKonstanz, the regulations do not specify whether the assessment committee members and reviewers must be part of the university or not. In the case of UBremen, the evaluation committee members and reviewers must be part of the university, although external reviewers can be permitted on request.

¹⁷ For some disciplines.

¹⁸ Although an overlap exists between the members of the individual doctoral committee and the doctoral jury. More specifically, the members of the individual doctoral committee are also part of the doctoral jury.

Furthermore, it is important to note that, at some universities, supervisors (and co-supervisors) may not be part of the committee evaluating the thesis. This is especially the case for UNIRI, SDU, UM, UAM, UEssex, and BUL. At UBremen and UNL, it depends on the discipline whether or not a reviewer the supervisor may also take up the role of reviewer.

Apart from maintaining two separate evaluation moments (one concerning the assessment of the thesis, the other of the defence), some universities such as UAntwerp, UNIRI, SDU, UEF, UPD, and UAM make use of an evaluation moment *with the candidate* prior to the public defence. In these cases, access to the defence depends on a positive verdict on the prior evaluation. UBremen, UKonstanz, and UC3M provide that the thesis must be made available to other colleagues at the university after approval and before the defence for comments.

In the matrix, it may be seen that the thesis is graded *prior to the defence* at only a few universities (in particular, UKonstanz and UUIm). Again, reference must be made to the strong overlap that may exist between the assessment of the thesis and the defence thereof. As the matrix analysis on the defence will show, other universities also require the thesis to be graded, but only after the defence. This differs from the aforementioned universities where the thesis is graded separately from the defence.¹⁹ Nevertheless, what these universities again have in common with many others in the YERUN Network is that several options are possible regarding the evaluation of the defence. The thesis may generally be approved, approved with (small) comments or rejected. In the event that small comments are provided, the candidate may take time to review the thesis. In the case of a rejected thesis, the candidate must generally thoroughly review the thesis. In the event that modifications are necessary, most universities provide that the thesis must be assessed again. Apart from UKonstanz and UUIm, this type of provision regarding the thesis may be made after the defence. in which case the report made at the defence includes information on the amendments to be made.

Whereas nearly all universities provide detailed information on the procedure to submit the thesis, the composition of the thesis assessment committee and/or independent evaluators, some indicators taken up in the matrix are less easily identifiable in the regulations. This is especially the case for whether or not specific evaluation criteria are maintained to assess the thesis. Nevertheless, even in universities where particular evaluation criteria are maintained (SDU, UKonstanz DCU, UL, and UM), these are very general in nature. Examples include the overall quality of the research, contribution to the scientific discourse, understanding of the scientific field as expressed by the candidate in the thesis, understanding of relevant research methods, drawing of new insights and conclusions, and regard for ethics. At SDU and UKonstanz, such evaluation criteria may differ per discipline. It is nevertheless important to note here that specific evaluation criteria may not be taken up in the formal regulations but may still be maintained in practice. In a similar vein, the matrix shows that not all universities require approval of the supervisor before the thesis can be submitted. In this context, it is important to stress that this concerns a formal approval from the supervisor expressed in the regulations. In practice, it may be assumed that the candidate and the supervisor(s) agree whether or not the thesis is prepared for submission. The same can be said for additional requirements needing to be fulfilled before the defence may be accessed. Whereas the assessment concerning matrix 6 on

¹⁹ The ultimate grade for the defence is then decided based on the average of the defence and thesis grades, although this may differ per discipline.

the training programme showed that training is mandatory at nearly all YERUN universities (except for UBremen and UUIm), one may consider that fulfilment of training, either required in the context of a programme or after agreement between the candidate and the supervisor, must be completed before the thesis may be submitted.

3.8 Defence

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | РТ | E | 5 | UK | |
|--|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUlm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Public defence | | | | | | | | | | | | | | | | | |
| Private defence/preliminary examination prior to public defence | | | | | | | | | | | | | | | | | |
| Defence members are similar to evaluators/assessment committee | | | | | | | | | | | | | | | | | |
| Distinction possible | | | | | | | | | | | | | | | | | |
| Defence is graded | | | | | | | | | | | | | | | | | |
| Thesis is graded at defence | | | | | | | | | | | | | | | | | |
| Possibility of digital defences | | | | | | | | | | | | | | | | | |
| Fixed defence structure | | | | | | | | | | | | | | | | | |
| Specific requirements on the certificate | | | | | | | | | | | | | | | | | |
| Existence of the title of European PhD, "international doctor" or similar | | | | | | | | | | | | | | | | | |

Table 8 Provisions on the defence as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Defence

The defence can be said to mark the final step in a doctorate. Again, we may see large similarities as far as the public nature of the defence is concerned. Whereas most universities provide for a public defence, some such as UAntwerp, UNIRI, SDU, UEF, UPD, UC3M and UAM provide for an evaluation, assessment or pre-defence to be organised with the candidate present before the public defence. In the case of UAntwerp, UNIRI, and UC3M such an evaluation prior to the defence depends on what is provided in the different disciplinary regulations. Interestingly, at UKonstanz, the type of defence may differ depending on the degree pursued and what is provided in discipline-specific regulations. At UPD, the defence is in principle public, unless the candidate's research topic requires confidentiality. Notable is that DCU, UL, UEssex and BUL do not appear to provide for a public defence. Instead, the defence takes place in private with the candidate. In the case of UEssex, for example, the supervisor may even not be present at the viva voce.

The previous Section on the thesis assessment already showed that there may be some overlap in the procedure to assess the thesis and the ultimate defence. This again becomes apparent by looking at the composition of the defence committees. At UAntwerp, SDU, UBremen, UKonstanz, UUIm, UM and UNL there may be an overlap between the committee/evaluators assessing the thesis and the persons ultimately present at the defence. The exact composition of the committees/evaluators present at the defence to take place before other academics holding at least a doctorate and originating in part from the home institution and from other external higher education institutions. The number of persons present to evaluate the candidate's work at the defence ranges from a minimum of three scholars to be present at the defence (seen at, for example, SDU and UKonstanz) up to a maximum of eight members of the doctoral jury (seen at UAntwerp and UPD). At UEssex and BUL at least two examiners are responsible for evaluating the candidate's work at the viva voce (one internal, one external).

When looking at the results of the defence, it is interesting to note that a difference can be made between universities where the verdict of the defence is immediately known and those where the result of the defence may be communicated after a designated period after the defence has taken place. UAntwerp, SDU, URTV, UM, and UNL, the result of the defence is communicated directly thereafter. At UEF, DCU, UL, and UEssex, the result is not communicated directly after the defence. At UBremen we may perceive both, depending on what faculty regulations provide the results of the defence may either be immediate or communicated after a period of time.

At some universities, such as UEF, UBremen, UKonstanz, URTV, UNL, UC3M, and UAM the thesis is graded. This may occur with an actual numerical grade or via a description. An example of a university where numerical grades are provided is UUIm where both the thesis as well as the defence are provided with numerical grades that are subsequently averaged to form a grade for the complete doctorate. Exact provisions on how to calculate the average are thereby decided per disciplinary regulation. Nevertheless, the thesis is not graded at the defence but prior to it. URTV is an example of a university where the thesis is graded via a description. At URTV, the thesis may be evaluated as adequate, appreciable, relevant or excellent. Although grades are granted by relatively few universities, others also provide for the possibility to grant the doctorate with distinction. Apart from the aforementioned universities, this is also the case at UM. Here, if one of the members of the thesis

assessment committee believes the thesis to be of sufficient quality to deserve the mention *cum laude*, he or she must indicate this to the committee chair after which two other evaluators are appointed to consider whether the distinction can be granted. Ultimately, the grant of the distinction depends on the candidate's performance at the defence. Apart from the possibility to award the thesis with distinction, some universities (particularly UNIRI, UPD, URTV, UC3M, and UAM provide for the possibility to award a European or International Doctorate. This label can generally be obtained by fulfilling specific requirements. Examples of requirements are spending time at another institute, having written part of the thesis in a different language, and having the thesis assessed by academics from a foreign university.

Digital defences are – in whole or in part – possible at most universities. This is especially the case for UAntwerp, UNIRI, UPD, UKonstanz, UUIm, UM, UC3M, and UAM. In some cases, university regulations indicate that some parts of the defence may take place online or that some members of the defence committee may take part via digital means. In the case of UC3M and UM the availability of an online defence procedure is directly connected to the COVID-19 pandemic. Indeed, a consultation of the YERUN Universities showed that most of them have been maintaining online defences during the COVID-19 pandemic whereby most also indicated to expect that online defences would be maintained these to some extent afterwards (e.g. SDU, UNIRI, UEF, UL, UM, UNL (some faculties)).

From the matrix, it becomes apparent that faculty regulations often determine whether the defence has a fixed format (seen in SDU, UBremen, UKonstanz, UUIm, and UNL). UM, UC3M and UAM furthermore establish general provisions on the structure of the defence. This may mean that the candidate is to first present the research after which questions may be posed by the defence committee. The typical duration of the defence observed among the YERUN universities ranges between one and three hours.

Finally, after the doctorate has been concluded, candidates may obtain their certificate. In some cases, the issue of the certificate depends on whether the thesis has been deposited for open access publication. Furthermore, some universities provide a detailed account of the information that must be taken up on the doctoral certificate. This may, for example, be seen at UKonstanz where the diploma should include the grade, title, thesis grade, date of exam, university seal, and signatures of the rector and department head. The certificates are then generally granted in the language of the Member State issuing the degree, but provisions are mostly made allowing for the degree to also be issued in English.

3.9 Joint and Double Degrees

| | BE | HR | DK | FI | FR | | DE | | IE | | IT | NL | PT | E | S | UK | |
|--|----------|-------|-----|-----|-----|---------|-----------|------|-----|----|------|----|-----|------|-----|--------|-----|
| | UAntwerp | UNIRI | SDU | UEF | UPD | UBremen | UKonstanz | UUIm | DCU | UL | URTV | UM | UNL | UC3M | UAM | UEssex | BUL |
| Joint degree possible | | | | | | | | | | | | | | | | | |
| Double degree possible | | | | | | | | | | | | | | | | | |
| Cotutelle | | | | | | | | | | | | | | | | | |
| Cooperation on joint/double degree dependent on accreditation | | | | | | | | | | | | | | | | | |
| Separate agreement governing joint/double degree necessary | | | | | | | | | | | | | | | | | |
| Guidelines set for content of agreement | | | | | | | | | | | | | | | | | |
| Joint/double pursuit of doctorate may be determined after start | | | | | | | | | | | | | | | | | |
| Joint/double pursuit of doctorate to be determined before start | | | | | | | | | | | | | | | | | |

Table 9 Provisions on joint and double doctorates as seen in national & institutional doctoral regulations of the YERUN Universities

Analysis – Joint & Double Degrees

Core of the present report is to analyse the national and institutional regulations of the YERUN universities and the countries in which they are located in order to identify opportunities for more doctoral cooperation. The theme taken up in this last matrix is therefore of central importance to the study. Starting with the similarities, a positive finding is that all universities part of the YERUN Network provide for opportunities to cooperate with other universities on joint doctorates. In the case of DCU, joint doctorates are even the preferred form of international cooperation (as opposed to double degrees, which are possible only in exceptional cases). Similarly, almost all universities (except UKonstanz and UNL) establish in their regulations a need for additional agreements governing the joint doctorate.²⁰ These agreements are hereinafter referred to as cooperation agreements and may not only be required for joint doctorates, but also for double degrees and/or cotutelles.

When it comes to the latter form of cooperation, it is important to point to a difference in terminology used across the universities part of the YERUN Network. The term cotutelle is often understood to mean joint supervision by supervisors from two institutions resulting in the candidate fulfilling the requirements to obtain the doctorate from one of the universities (i.e. joint supervision leading to one diploma from one university). The matrix above only includes countries where a cotutelle concerns the conclusion of more detailed agreements on the doctorate to be pursued and leading to the grant of multiple diplomas. Indeed, the analysis of the national and institutional regulations conducted in the context of this study has shown that some universities maintain a different understanding of the term cotutelle. UNIRI, for example indicates that a double programme resulting in two diplomas is called a cotutelle. A similar definition of the concept cotutelle is maintained at UBremen. In Finland, a cotutelle entails the fulfilment of the programme requirements of both participating universities. Similarly, at UAM, a cotutelle is understood as joint supervision of a doctoral thesis whereby the candidate meets the requirements of two institutions leading to a degree from both universities.

When it comes to the approval of the cooperation agreement, this usually takes place at the highest administrative level in the participating universities, for example, at DCU the Vice President of academic affairs signs and at UM the Rector will sign. Whereas most universities require individual cooperation agreements to be signed per candidate (UAntwerp, UNIRI SDU, UEF, UPD, UBremen, UKonstanz, UUIm, DCU, UL, URTV, UM, UC3M, UAM, and UEssex), UL also provides for a possibility to establish a cohort agreement. Interestingly, UL also provides for two formats in which its cooperation agreements may be signed. One is the Memorandum of Understanding which is non-binding in nature. The other is the Memorandum of Agreement which, by contrast, is binding. Furthermore, BUL has a structure where a Memorandum of Agreement signed between the cooperating universities which is supplemented by an individual agreement signed by the institutions, candidate and supervisors laying down the terms and conditions governing the award.

Apart from requiring a dedicated cooperation agreement, almost all universities (except for UNIRI, UEF, UKonstanz, and UEssex) set requirements regarding which matters must be taken up in the agreement to govern the doctoral cooperation. In most cases, these agreements must establish which

²⁰ UBremen appears to be the only university who – in its faculty-specific regulations – indicates that its own regulations apply unless another agreement has been reached.

rules are applied in derogation of the rules applicable to a "regular" doctorate and designate which rules take precedence when a conflict of rules arises. Popular themes and matters to take up in these agreements are adherence to admission criteria, funding and other financial matters, provisions on supervision, training, time to be spent at each of the partner institutes, conclusion of the thesis and submission for evaluation, provisions on evaluation of the thesis, the defence (location and committee before it takes place), and the award of the diploma. Other themes seen at, among others, UPD provide that provision must also be made for the language of the doctorate, the modalities of recognition of the degree(s) obtained, and social security coverage. Moreover, DCU also provides that provision should be included on how to achieve credit transfer between the universities. UL provides that the themes of intellectual property and dispute resolutions are also to be taken up.

Whereas most universities merely establish that further provisions must be made in relation to the aforementioned themes, others already indicate how some of these themes must be filled in. UAM is nevertheless the only university that appears to have a standard format agreement. Other universities provide a general indication of how some topics must be filled in. UM, for example, requires a maximum of 4 supervisors whereby the committee assessing the thesis must consist of four to six members (one from each university and two external to the partner universities). Furthermore, UM requires the location of the defence to be determined in the agreement. Although the defence should ideally be in Maastricht, UM regulations must still apply in the event that the ceremony takes place at the other university. UUIm also provides for detailed information on how to establish international cooperation in its discipline-specific regulations. These include a requirement to fulfil the access criteria of UUIm, the foreign university being competent to award the doctorate, the ultimate title to be recognised in accordance with German federal state law, which university is in charge (and therefore where the thesis is submitted and defence takes place), grades to be awarded, how the defence committee is composed, and that supervisors must also act as evaluators. This latter requirement is also seen at UBremen. This is a criterion that may come to clash with the policy of some universities such as UM, BUL, and UAM where supervisors are prohibited from having a role in the evaluation of the doctorate.²¹

UAntwerp provides that fees may be waived or are to be paid only at one of the institutions. At national level in Finland, legislation establishes that no fees are to be paid for doctoral training in Finland, but may nevertheless be necessary in the case of a joint or double degree. UAM then establishes that there may not be a double burden in terms of paying fees at both universities. The university at which fees are paid shall be where the defence takes place.

As a rule, candidates pursuing a joint/double doctorate must spend between six and 24 months at the other partner(s) to qualify for the joint/double degree. A minimum of six months appears to be the most standard term. BUL by contrast requires the period spent to be a minimum of 24 months. At UL, the doctoral candidate can spend a maximum of 2 years at the partner institution in the event that UL is the lead institution in the doctorate. By contrast, if the other institution leads, the student must spend one year at UL. Indeed, UL is not the university part of the YERUN Network that maintains the distinction between a lead institution and a secondary institution. This similar provision is also seen in Spain (where one university is in charge of issuing the degree and registering it following national

²¹ In the case of UAM, however, the supervisor may play a role in the defence if it takes place at the foreign institution and that institution allows/requires the supervisor to be part of the defence committee.

procedures) $^{\rm 22}$ and at BUL where one principal supervisor is designated among the cooperating partners. $^{\rm 23}$

Most universities also provide alternative means for the defence. For example, at UNIRI candidates may do their defence at the partner institution. SDU requires the defence of a joint/double doctorate to take place in English. Whereas at UPD a pre-defence is normally necessary in a doctorate, that requirement may be waived for joint/double doctorates or cotutelles. Nevertheless, others such as UAntwerp maintain that only one public defence is to be held whereby the defence committee must consist of academic staff from both partner institutions. Similarly, France also requires one defence to be followed to conclude the doctorate. The French procedure for the instalment of the jury and the conclusion of the defence report is thereby to be followed. UM then requires one defence to be completed for a joint doctorate and two for a double doctorate (of which the first takes place at UM). The matrix also shows that some universities require the doctorate to be accredited by a national accreditation body. This is the case for UNIRI, UPD, URTV, UC3M, and UAM. In the case of France, higher education institutions that are accredited may enter into cooperation agreements. For most of the other aforementioned universities, however, joint/double doctorates are possible if both institutions are accredited in accordance with relevant national legislation. Needless to say, this may pose as an obstacle where cooperation is sought with a university not subject to an accreditation requirement. Nevertheless, URTV and the Spanish universities UC3M and UAM provide for a solution. Italian legislation provides that interuniversity consortia (of a maximum of four partners) that have the objective of issuing joint degrees may also acquire accreditation. Such accreditation depends on agreements made determining the contributions of the partners in terms of scholarships. Furthermore, the partners must ensure the candidates can divide their time between research and teaching. Spanish legislation establishes that joint doctorates undertaken within the framework of competitive calls by the European Commission are exempted from an accreditation requirement. In that case, the grant is considered accreditation in the sense of national law. Nevertheless, this requirement may considerably restrict opportunities for cooperation on joint doctorates.

Whereas accreditation may form an obstacle of which partners may be aware beforehand, it is of course possible that complexities related to cooperation on a joint or double doctorate are encountered when partners have already entered into cooperation. In that case, some national systems or universities provide for interesting solutions. Such solutions may, for example, be found in the French system in case of complexities related to the drafting of the diploma. If conflicts of rules arise in this respect, French legislation provides that – as an alternative – multiple degrees may be issued. UUIm in its regulations on international cooperation establishes that the thesis is to be evaluated by both participating universities. In the event that the other partner university does not approve the thesis, the joint procedure ends. Nevertheless, the end of the joint procedure does not necessarily signify the end of the joint/double doctorate is also an interesting topic. UUIm, DCU and UL require the joint/double pursuit of a doctorate to be determined before the start of the doctorate. Although most universities do not provide specific information on this, it is likely that – considering the need for an individual cooperation agreement – the joint/double pursuit of a doctorate is to be

²² In Spain, the diploma must be registered in the *Registro Nacional de Titulados universitarios Oficiales* to take effect. Hence even if the other university issues the degree, it must be presented to the Spanish university so that it may be registered following national procedures.

²³ The principal supervisor may nevertheless change depending on where the candidate is physically staying.

determined beforehand. Nevertheless, in some universities such as UAntwerp, UM, and UAM, where a request for either a joint/double doctorate or cotutelle may be submitted after admission to the doctorate (UAM) or even after the start of the doctorate.

In terms of the degree(s) issued to conclude the joint/double doctorates, it is common to see that universities set requirements. In the case of joint degrees, the joint signature of both participating universities is often required to indicate that the degree was jointly pursued. In the case of a double degree, universities often establish that both degrees need to express that the doctorate was pursued at two universities (or under supervision of supervisors from two universities). Other universities such as SDU, UPD, and BUL make requirements as to the effect of the diploma in both countries. This means that a foreign certificate may be granted as long as it is comparable to the title awarded by home state institution. In France, jointly issued diplomas are recognised in full as long as they are also recognised equally in the countries in which the partner institutions are located.

4. Disciplinary Differences – A Bird's Eye View

The previous Section containing the comparative analysis of the national and institutional regulations of the YERUN Universities already provided some information on the frequency of discipline-specific regulations. Within the YERUN Network, a majority of universities part of the YERUN Network (UAntwerp, UNIRI, SDU, UEF, UBremen, UKonstanz, UUIm, UL, UNL, UC3M, and UAM), maintains separate formal regulations per discipline at faculty, title or programme level. The analysis in the matrixes thereby provided some indication to the type of provisions made in these discipline-specific regulations. The purpose of the present Section is to examine the discipline-specific regulations more closely. More specifically, the clusters of discipline-specific regulations are compared across universities to see whether certain disciplines are more prone to provide particular organisational structures for doctoral education (e.g. monographs being required as a standard for doctoral theses in law whereas engineering doctoral theses are usually article-based). The objective of this analysis is therefore not to make one-on-one comparisons of each of the discipline-specific regulations. It is recommendable that universities looking to cooperate on a joint or double doctorate undertake such dedicated activities. The analysis of discipline-specific regulations included here therefore provides a high-level analysis – a bird's eye view – of common practices and prominent differences existing within similar disciplines.

4.1 Comparing Cluster 1 – Social Sciences, Humanities, Law & Economics

Cluster 1 forms the biggest cluster analysed in the context of this report. Accordingly, the broadest variety of programmes could be perceived here. Whereas 10 universities within the YERUN Network establish discipline-specific regulations, some of them again provide separate regulations for different programmes or doctoral titles. For example, UAM has over 20 doctoral programmes across various disciplines concerning cluster 1. In a similar vein, UBremen has four faculties relevant to cluster one (Law, Business studies and economics, Social sciences, and Cultural studies) which among them share 12 different doctoral regulations. Similarly, UKonstanz has a broad variety of departments where doctorates are offered in fields relevant to cluster 1. These particularly concern: Philosophy, History, Sociology, Empirical Educational Research and Sport Science, Literature, Linguistics, Law, Economics, and Politics and Public Administration. UUIm, by contrast, can be considered to be more beta oriented since it has only one department that falls within the scope of cluster 1, namely that of economics. Candidates of this course of study can obtain the title Doctor of Economics.

Staying with the theme of the titles granted, these also very across the different universities. Whereas the title of Doctor of philosophy (PhD) can be found at almost all of the YERUN universities with regulations in cluster 1, other titles are also used. For example, at UNIRI candidates in economics and business or in law may, for example, obtain the title Doctor of Science. At UEF, candidates can obtain (apart from the title Doctor of Philosophy) the titles of Doctor in Law or Doctor of Science, Economics and Business Administration. At UBremen, candidates pursuing a doctorate at one of the four faculties relevant to cluster 1 can receive one of the following titles (again next to the title Doctor of Philosophy): Doctor of Law, Doctor of Science and Social Sciences. At UKonstanz candidates can furthermore receive the titles of Doctor of Social Science, Doctor of Natural Sciences, Doctor of Law,

Doctor of Economics, Doctor of Politics and Public Administration. At UNL candidates may obtain the titles of Doctor in Law, Doctor in Economics and Finance, or Doctor in Management.

In terms of access criteria, these requirements are again heavily dependent on the type of programme one is applying to. Although the master's degree (or equivalent) can generally be considered the basic requirement, universities also set additional requirements. Prior qualifications alone may not be the only prerequisite for candidates to be admitted to a doctorate. For example, when looking across cluster 1 programmes at UAM, attention is also given to the overall academic record of the candidate, affinity with the field of the doctorate, the thesis proposal, international stays, CV with professional experience and publications, language knowledge (English, Spanish or otherwise relevant), and motivation letters, and results of a personal interview.

In terms of prior qualifications, we may also see differences across universities, departments, programmes, and fields of research. At UAntwerp, for example candidates looking to access a doctorate at the Faculty of Law and Safety Sciences and Faculty of Arts may need to undergo an assessment of suitability before being admitted. For each of these faculties, candidates may also need to follow a preparatory programme before starting their doctorates. At the Faculty of Business and Economics, the candidate must furthermore present a cum laude master's degree. Preparatory programmes and cum laude or grade requirements can indeed also be seen at other universities. For example, candidates in law at UC3M must have a suitable academic background with a minimum grade of 7/10 and may need to complete between 18 to 40 ECTS of additional training at master level prior to their doctorate (depending on their experience with law). At UKonstanz, candidates may also need to complete preliminary examinations in law if they do not fulfil the standard criteria set (be in possession of the first or second Staatsexamen together with a Seminararbeit). Furthermore, some universities such as UBremen and UUIm also allow some candidates with bachelor's degrees to pursue a doctorate, although under designated conditions. At UUIm such candidates may be admitted if they are in the top 5% of their year. UUIm also allows for additional training to be imposed above bachelor level before the start of the doctorate. To pursue a doctorate at UNIRI's Faculty of Economics and Business (field of social sciences and economics), candidates must have completed graduate studies in (business economics) or other study programmes in the social sciences and economics, have at least B2 level language knowledge, and a certain grade point average from previous studies. The Faculty of Law generally follows admission criteria established by the university statute, but nevertheless requires candidates to have completed legal studies with a designated grade point. Proficiency in Croatian and command of another foreign language are furthermore also required.

Indeed, requirements concerning language knowledge may be seen at other universities as well. For example, at UNL candidates need to possess relevant English language knowledge to pursue a doctorate in Economics and Finance or in Management. A similar requirement applies for candidates looking to pursue a doctorate at UC3M (in social sciences, humanities, and economics), UKonstanz (language knowledge in German required), and UAM (in English, Spanish or other relevant languages for the field of law, government and public policy). UC3M furthermore requires its law doctoral candidates to have relevant language knowledge based on a certification. Candidates in Humanities must furthermore have language knowledge in Spanish and must be able to provide proof of this (unless they have a diploma from a Spanish speaking country or want to prepare their thesis in English). Apart from language knowledge forming a prerequisite for admission to the doctorate,

requirements regarding language are also relevant when it comes to the language in which the doctoral thesis is prepared. Here, we can see that candidates must generally prepare the thesis in the language of the country in which the university is located or in English (UAntwerp, UNIRI, SDU, UEF, UBremen, UKonstanz, and UNL). Other languages may be possible but are again generally subject to explicit approval. Some disciplines may furthermore set stricter rules on the languages to be used for the dissertation. This can, for example, be seen at UKonstanz were candidates in Politics and Public Administration and Economics must write their thesis in English or German.

In terms of the thesis format, most universities appear to use the monograph or collection of scientific publications as a format (UAntwerp, UNIRI, SDU, UEF, UBremen, UKonstanz, UUIm, UC3M, and UAM). In some cases, such as UAntwerp's Faculty of Law and Safety Sciences, additional requirements may be set for those looking to write their thesis in the form of a collection of publications. At SDU, the collection of articles should consist of three to six articles together with a summary. The candidate must thereby be sole author in at least one contribution and principal author in at least one other. Similar requirements made to the publications can, for example, be seen at UAM where three of the candidate's articles must have been accepted for publication to count as a thesis in the Law, Government, and Public Policy programme. UEF's Economics programme also offers a third thesis format, namely to complete the thesis in the form of an essay dissertation. In this case, the candidate must prepare at least three published or unpublished entities which address the same research problem/set of problems. UC3M's Economics programme furthermore establishes that, in order to progress to the defence, candidates must have prepared at least two of three chapters that are suitable for publication in an indexed JCR journal in economics.

In terms of the duration of the doctorate, this can range between three years (e.g. UAM and UKonstanz) up to eight years (maximum maintained at UAntwerp for the Faculty of Law and Safety Science). Other universities appear to maintain six years as a maximum term for the doctorate (e.g. seen at UNIRI and UUIm). During the pursuit of their doctorate, candidates must mostly also follow training at the different YERUN Universities. At UAntwerp, the different Faculties part of cluster 1 all structure their training in accordance with the competence profile established by the Antwerp Doctoral School which consists of 30 credits in training spread over different categories of the competence profile, where individual departments may specify which activities must be undertaken (or these may be determined by the candidate in consultation with their supervisor). At SDU, candidates must follow courses and other teaching modules of 30 ECTS. At UEF, candidates undertake between 40-50 ECTS worth of courses or activities to develop their research skills and professional competences. Apart from SDU and UEF, other universities such as UNIRI, UKonstanz, and UNL also make use of ECTS in the context of the doctorate and doctoral training programme. UKonstanz thereby has training programmes specifically dedicated to humanities and social and behavioural sciences. At UC3M and UAM training can consist of a wide variety of activities such as attendance at conferences, presenting papers at conferences, training to strengthen research skills, mobility, participation in summer courses, and mandatory seminars.

A final topic related to doctorate of course concerns the defence of the thesis. This topic will not be discussed in-depth in this Section since there are considerable differences, not only between universities, but also between fields of study, programmes, and departments within universities. Differences may thereby be perceived in the choice of evaluators, size of evaluation and defence

committees, need for a preliminary assessment before the public defence, and procedures to apply for the defence.

4.2 Comparing Cluster 2 – Psychology & Medicine

As far as the disciplines in cluster 2 are concerned, these are again provided by 10 of the YERUN Universities through different discipline-specific regulations. More specifically, the following universities provide separate regulations on doctorates in psychology and medicine: UAntwerp, UNIRI, SDU, UEF, UBremen, UKonstanz, UUIm, UL, UNL, and UAM. The primary difference to be seen between these universities having separate regulations in the area of psychology and medicine concerns the possible distinction in different fields. Whereas UAntwerp, UUIm, and UAM, for example, have separate regulations depending on whether one is looking at the field of psychology or medicine, other universities such as UBremen and UNL have different regulations depending on the title to be obtained (in the case of UBremen, for example, different regulations apply depending on whether one is looking at the title of Doctor of Public Health or Doctor of Natural Sciences).

Furthermore, the fields of study may differ considerably between the universities. For example, UAntwerp provides doctorates in at two faculties: that of pharmaceutical, biomedical or veterinary sciences and that of medicine and health sciences. UNIRI provides doctorates in biomedicine, health and environmental engineering, and biomedicine and healthcare. SDU, in turn, provides doctorates in health sciences, laboratory research, social studies research, and clinical research. UEF provides doctorates in clinical medicine, pharmaceutical research, molecular medicine, and health sciences. Different titles are thereby connected to different doctorates (as seen also in, for example, UBremen, UUIm and UNL mentioned above). Indeed, candidates can obtain the title of Doctor in Medical Science, Doctor of Dental Science, Doctor of Philosophy, Doctor of Science (pharmacy), and Doctor in Health Sciences. UBremen has a Faculty of Human and Health Sciences that provides for four different doctoral titles. At UKonstanz, doctorates in psychology can result in the titles of Doctor of Social Science, Doctor of Philosophy or Doctor of Natural Sciences. Candidates may thereby pursue different training programmes either in clinical psychology, neuropsychology and psychotherapy, or in social and behavioural sciences. At UUIm, psychology is placed under the Faculty of Engineering, Informatics, and Psychology (again, paired with different titles in medicine or psychology). At UL, candidates can obtain a Doctor of Medicine (MD) or a Master of Surgery (MChir). At the NOVA Medical School, candidates can pursue a doctorate in health sciences, biomedical sciences, and global public health. The latter of these degrees is a joint doctorate organised in cooperation with the University of Porto in Portugal. UAM subsequently distinguishes between two doctoral programmes, one in psychology and the other in medicine. The programme in psychology is thereby divided into several research lines (e.g. development and education, basic psychological processes in learning and education, and social psychology).

In terms of access requirements, differences may be perceived among the various universities providing for doctorates in the fields of psychology and medicine. The master's degree can nevertheless again be considered the necessary basic qualification. For example, UNIRI requires appropriate graduate studies (as laid down in national law) to access a doctorate in medicine. SDU requires a master's degree or other relevant research-based programme of at least 5 years at a higher education institution.

However, apart from the basic requirement of a master's degree, admissions criteria differ considerably. At UEF, admission depends on the programme to which access is sought. For example, for access to a clinical doctoral programme a candidate will need a university degree suitable for the doctoral programme. In the case of a doctorate in pharmaceutical research, the applicant must have a pharmaceutical, scientific, or other appropriate higher education degree or equivalent. At UBremen, for example, admission may also depend on a candidate having successfully completed a Staatsexamen in medicine. At UUIm, candidates need to show that they possess a degree in psychology, social sciences, educational sciences, cognitive sciences, philosophy or history to gain access to a doctorate in psychology. For a degree in medicine, candidates again need to have completed basic medical training and have passed the Staatsexamen (as well as possess an Approbation – licence to practice medicine in Germany). At UL, applicants are particularly considered from the medical graduates within the university but may also be admitted with degrees from other universities if these can be considered equivalent to those issued by UL. UL thereby also requires three years of post-qualification experience and ideally an employment at a hospital or clinic affiliated with the university. In the case of a degree in clinical psychology, applicants at UL must have a quality credit average of 3.00 or higher. As far as admission to a doctorate in medicine is concerned at UAM, candidates must have already been admitted for specialised health training and have been pursuing such training for at least two years. Nevertheless, candidates who have a nursing and master's degree, degree in physiotherapy, biochemistry, food sciences, human nutrition and dietetics or related fields, as well as a master in biomedicine may also be admitted.

Furthermore, universities such as UBremen, UUIm, and UNL also allow for certain candidates with bachelor's degrees to be admitted (be it under designated conditions). Some other universities indeed also provide with the possibility of having to undergo a test or additional training prior to the doctorate. For example, candidates at UAntwerp may need to undergo an aptitude test before being admitted to a doctorate in pharmaceutical, biomedical or veterinary sciences as well as to a doctorate in medicine and health sciences. In a similar vein, additional training in psychology may be necessary for candidates looking to access a doctorate at UKonstanz if this was the result of a preliminary examination. At UAM, applicants may need to undertake additional training in one of UAM's master's degrees (up to 30 ECTS) that are not considered to form a part of the doctorate in medicine.

As far as the thesis is concerned, the monograph and collection of published articles appear to be the most common formats. Some universities thereby appear to place an emphasis on the collection of articles, although they may set specific rules for a thesis in such a format (seen at, for example, UAntwerp, SDU, UBremen, UUIm, and UNL). Of course, some universities, such as UNL, may again provide for more detailed arrangements on the format of the thesis depending on the regulation for a particular degree or programme. At UAM, for a doctorate in medicine, both types of thesis formats appear possible. Nevertheless, different criteria apply to be admitted for the defence. In the case of a monograph, the candidate must be first author of at least one indexed publication on the dissertation topic. By contrast, those writing an article-based thesis must have a minimum of three articles as first author. As far as the language of the thesis is concerned, this is usually English or the language of the country in which the university is located (e.g. UAntwerp, SDU, UBremen, UKonstanz, UNL). In the event that the candidates wants to write the thesis in another language, express permission is usually necessary. Furthermore, summaries in multiple languages are common. Special provisions may furthermore be made in the case of a joint doctorate (e.g. SDU and UUIm).

As far as training is concerned, most universities provide for dedicated training structures. At UNIRI, the doctorate (and training) is paired with ECTS, whereby training activities consist of compulsory and elective courses. At UEF, candidates may need to undertake extra studies next to the thesis (of 30-40 ECTS credits). At UAM, training activities, for example, consist of attending seminars, specialisation or technical courses, presenting and organising conferences, research stays at foreign universities, publication in journals, and activities related to dissemination and outreach. At UKonstanz, training is structured in doctoral study programmes where ECTS are also used to denote the research, training, and defence (based on 180 ECTS). One of UKontanz's doctoral programmes in psychology enables candidates to also obtain their licence to practice as a psychotherapist. As far as ECTS are concerned, these are also used by UNL (which maintains a four-year duration for its doctorates in health sciences, biomedical sciences, and global and public health). The duration of the doctorate furthermore differs between three years (seen, for example, at UKonstanz and UAM) to six years (seen, for example, at UUIm). At UUIm, degrees may generally last up to six years (e.g. in the case of psychology), but not for medicine where a maximum time period of three years applies.

As far as the conclusion of the doctorate is concerned, the defence procedures strongly resemble the ones maintained by the universities providing doctorates in cluster 2. Differences from standard procedures may nevertheless be perceived in the number of persons taking part of the evaluation and defence committees, procedures to apply for the defence, format of the defence (in particular duration, interaction with the defence committee, and language), and grading schemes (and whether or not these are used).

4.3 Comparing Cluster 3 – Engineering

Looking at engineering in relation to the YERUN Universities, we may see that seven of the 17 universities provide discipline-specific regulations on engineering. This is particularly the case for UAntwerp, UNIRI, SDU, UBremen, UUIm, UC3M, and UAM. Of these universities, UC3M and UAM are the universities to provide for specific provisions on engineering per programme. The other aforementioned universities set specific provisions for engineering at faculty level. The fact that UC3M and UAM provide for additional regulations on engineering per programme means that more specific requirements are made as to the substance of, for example, prior experience necessary to access the doctorate. Indeed, UC3M's regulations establish in detail which type of prior training is preferred to access the doctorate and conversely which complementary training prospective candidates may have to fulfil before they can access the doctorate. Admission requirements are of course also seen at the other universities providing for discipline-specific regulations on engineering, but these generally provide more general descriptions of required prior knowledge (e.g. a master's degree in a field relevant to the doctorate). Assumedly, it is the relevant body within those universities (e.g. an admission's committee or prospective supervisor) who assesses in detail whether a candidate possesses the relevant knowledge. In some cases, grade average (SDU) or particular excellence (in the case of bachelor's degrees at UBremen and UUIm) is necessary for prospective candidates to access the doctorate. Apart from UC3M and UAM, the possibility for prospective candidates to complete additional training before starting the doctorate is also seen at UAntwerp and UNIRI.

When it comes to engineering it is also interesting to note that there are large differences across the universities regarding the exact content of engineering degrees. At UAntwerp's Faculty of Applied

Engineering interdisciplinary research is conducted across the fields of civil engineering, electronics ICT, electromechanics, and (bio)chemistry. At UNIRI, prospective candidates of the Faculty of Technology may pursue a degree in shipbuilding, mechanical engineering, technical sciences, electrical engineering and computing. At SDU, the Faculty of Engineering conducts research on, among others, chemical engineering and biotechnology, civil and architectural engineering, and mechanics. At UBremen, doctorates in engineering can be pursued at three faculties in physics & electrical engineering, mathematics & computer science, and in production engineering. at UUIm, engineering within the Faculty of Engineering, Computer Science and Psychology focuses on the research lines on transmission and information processing and high-frequency systems and mixed-signal design. UC3M provides over 10 doctoral programmes in engineering and science comprising materials science and engineering, aerospace engineering, electrical engineering, mathematical engineering, mechanical engineering and industrial organisation, and telematic engineering. Finally, engineering at UAM comprises computer and telecommunication engineering.

The duration of the doctorate differs across the universities. SDU has the shortest duration of doctorates in engineering with three years (full-time).²⁴ At UAntwerp, a doctorate in engineering takes four years. UBremen maintains a five-year typical duration of a doctorate in engineering and UUIm maintains a maximum of six years. As far as the thesis format is concerned, the monograph still appears to be the most prevalent format (seen at UAntwerp, UNIRI, SDU, UBremen, and UUIm) – at least as far as the regulations are concerned. It is imaginable that other types of thesis formats may be used more commonly in practice. Article-based theses are also permitted following the regulations of UAntwerp, UNIRI, SDU, and UBremen). In terms of language, English appears to be the preferred language in which to draft the thesis (explicitly mentioned at UNIRI, SDU, UBremen, and UC3M). Nevertheless, the language of the country in which the university is located may also be maintained (seen at UNIRI, SDU and UBremen).

In terms of training, the universities setting discipline-specific regulations on engineering provide for different training structures. ECTS are used at UAntwerp (for doctoral training) and at UNIRI and SDU (for the whole doctorate). At UAntwerp, training activities are to be determined following the candidate's consultation with the supervisor. SDU establishes that training consists of, among others, active participation in research environments and a minimum of 300 dissemination hours. In a similar vein, UNIRI requires doctoral candidates in engineering to complete a research stay at another university or scientific organistion of at least three months and to fulfil teaching duties during their doctorate. UC3M and UAM establish per programme what training consists of. In general, training activities in engineering are seminars, presentations at conferences, publication of articles, research stays and research skills training.

Procedures for the approval of the thesis tend to follow university-wide trends. At UAntwerp, the candidate must first gain approval of the individual PhD commission before gaining access to the defences. This concerns first a pre-defence and then the public (and final) defence of the thesis. Of the "engineering universities" UNIRI and SDU also provide for a preliminary assessment prior to the defence. as far as the defence committee is concerned, all aforementioned universities establish that specific defence committees are to be assembled depending on the field of knowledge.

²⁴ A maximum of 6 years is maintained in case of a part-time doctorate.

4.4 Conclusion on Disciplinary Differences

To conclude this Section on disciplinary differences, this analysis has in essence confirmed the intended use of this report, namely to act as a transparency tool that can be used by universities to determine potential partner universities for closer cooperation. In light of the various differences that may be identified in the disciplinary regulations, this analysis confirms the need for more targeted action and one-on-one comparisons of the regulations of two (or more) universities looking to cooperate on joint or double doctorates. It is therefore recommendable for universities to use the present report to identify other potential partner universities to enter into contact and conduct a more targeted one-on-one comparison of a regulation regulating one particular discipline, programme, or title to see whether agreements on joint or double doctorates can be reached.

5. Experiences in International Doctoral Cooperation: Testimonials from the YERUN Universities

To gain insight into the present level of cooperation on doctoral education within the YERUN Network, a consultation was conducted among the universities part of the YERUN Network. In particular, representatives from the YERUN universities were asked to share their experiences with international cooperation on doctoral education both within the YERUN Network and beyond it. More specifically, the universities were consulted about what they considered to go well in cooperating internationally on doctoral education, what they considered most important to take up in any agreement to structure cooperation on doctoral education, and the number of joint doctorates taking place within and beyond the YERUN Network. The testimonials from the universities will be discussed below.

5.1 General Experiences on International Doctoral Cooperation

Overall, the representatives from the YERUN Universities consulted in the context of this report's consultation reported having positive experiences with (inter)national cooperation on joint and/or double doctorates – having either acquired experience themselves or having heard positive testimonials from academic staff.²⁵ Some of the most cited positive experiences connected to international cooperation on joint and/or double doctorates concern the interaction between different systems and academic cultures. For example, a reply from SDU attested to there being good experiences with showing mutual respect and consideration to differences in doctoral education by the university's administration, by the supervisor involved, and by the candidate.

Joint and/or double doctorates were also considered to be particularly beneficial for doctoral candidates and to pose a great opportunity for strategic cooperation between institutions, to enhance pre-existing cooperation with a certain institution, and to contribute to research capacity growth.²⁶ Other institutions added having positive experiences with pooling the best resources from different institutions and training doctoral candidates to carry out interdisciplinary research as well as expanding the reach of disciplines by cooperating with partner universities for certain disciplines that may not be represented at the university itself.²⁷ Positive notes were also expressed in relation to administrative cooperation. UAntwerp, for example, reported having established good communication procedures between the PhD, the supervisor and the Doctoral School by having established clear administrative support and approval processes for (the negotiation of) joint doctorates by, for example, using a special template for such contracts. Indeed, the importance of good communication and clear administrative procedures was also considered key by other universities.²⁸

Experiences could, nevertheless, differ considerably – even within universities. Whereas UNIRI's Engineering Faculty, for example, reported having to overcome institutional requirements (in this case

²⁵ Replies received from UAntwerp, UNIRI, SDU, DCU, UL, UM, UNL, UC3M.

²⁶ Reply received from UPD, DCU, UL, and UNL.

²⁷ Testimonial from various faculties at UNL.

²⁸ As expressed in, for example, a reply received from SDU. Similar positive experiences on communication processes were also reported by various faculties at the UNL.

by making use of larger evaluation and defence committees), the Humanities and Social Sciences Faculty of that university reported having to discontinue talks to cooperate on a joint/double doctorate due to considerable obstacles such as a lack of administrative support, unclear procedures for joint doctorates defined at national level, and lack of financial support. Indeed, the importance of sufficient financial means to support international cooperated was also mentioned in replies from other universities.²⁹

Therefore, as far as challenges are concerned, these mostly lie in the area of complex administrative processes and differences in regulations. One university indicated that careful consideration should be had regarding the choice of country/university with which doctoral cooperation is to be established since national frameworks and legislation may differ too much to be combined. Since cooperation on doctoral education requires a lot of time and effort and may result in few doctorates enrolled within agreements, attention should also be given to exploring other modes of cooperation beyond joint and/or double doctorates.³⁰ Another university even considered complicated administrative work and risks for students getting double credit for a single piece of work as important deterrents from international doctoral cooperation.³¹ Other universities also found the process to set up doctoral cooperation to be particularly time-consuming despite the general desire to extend opportunities for international doctoral cooperation.³² Some of them thereby also pointed to other modes of international cooperation such as international research stays.³³ Other examples of challenges cited concern long waiting periods when negotiating joint and/or double doctorates, differences in conditions to start a doctorate (some universities require the candidate to already be enrolled, others require the agreement to be made before enrolment), and difficulties identifying the correct contact person.³⁴ A comment was also received on Erasmus Mundus, which was not considered to work equally effectively in all countries with which cooperation was undertaken.³⁵

Accordingly, the main aspects of international cooperation to be improved concern the need for sustainable agreements between candidates, supervisors, and participating universities, need for streamlined administrative processes and less institutional bureaucracy related to setting up a joint and/or double doctorate.³⁶ UEssex, for example, indicated to be looking to expand its cooperation on joint degrees by looking to improve the route for approval, communication, and decision-making to make the creation of joint doctorates more efficient. The creation of common procedures for the use of digital signatures was also considered a measure capable of facilitating cooperation on joint and/or double doctorates.³⁷ When it comes to the most important aspects to be included in the cooperation agreements, several universities pointed to the conditions set in their national or institutional regulations or maintained in practice.³⁸ Apart from a reference to the conditions established, universities cited a wide range of different topics essential for the creation of a joint and/or double

²⁹ Funding was, for example, considered particularly necessary to support the (inter)national research stays of joint/double doctoral candidates and to realise sufficient administrative support; based on replies from some faculties within UNL and UEssex.

³⁰ Based on a reply received from SDU.

³¹ Based on a reply from BUL.

³² Replies from, for example, UPD, DCU, UM, some faculties within UNL, UC3M, and UEssex.

³³ Replies form SDU and UPD.

³⁴ Based on a reply received from UAntwerp.

³⁵ Based on a testimonial from UC3M.

³⁶ Replies from UEF, UKonstanz.

³⁷ Replies from UAntwerp, UNL.

³⁸ Replies from UNIRI, SDU, DCU, and UL.

doctorate that were not focused on a particular aspect of the doctorate. Topics to be included in cooperation agreements concerned, among others, agreements on (the location of) the defence, formatting and information included on the diploma, regulations on the composition of the evaluation/defence committees, provisions on the duration and location of research stays, guidelines concerning intellectual property, provisions on joint supervision, common agreements on the writing and assessment of the thesis, rules on the examination procedures, administrative and legal support to implement the cooperation, provisions on financing, defining obligations of the candidate, common provisions on training, responsibilities of each of the cooperating universities, clarity of expectations, and provisions on admission.³⁹ SDU also pointed to the importance of establishing conditions that are fair and comprehensible for the doctoral candidates and provides them with a framework for high quality doctoral education.

Furthermore, several universities pointed to the importance of the role of individual researchers in establishing international cooperation.⁴⁰ For example, a reply received from UPD pointed towards a need for the deeper involvement of potential supervisors as an important factor in enhancing opportunities for doctoral cooperation. In a similar vein UBremen reported international cooperation taking place on the basis of activities of individual researchers, meaning the status of a particular degree (being joint or double) is not considered a driver for international cooperation. UKonstanz thereby confirmed that cooperation in the context of cotutelles usually originates from the scientific contacts of the supervisors, longstanding partnerships with international institutions, and the particular initiative of doctoral researchers. Nevertheless, differences may be perceived in the way joint and/or double doctorates are established. For example, UM reports that since its agreements are made on an individual basis, a lot can be adapted to individual wishes. By contrast, DCU and UL report that the focus of their international cooperation is on joint doctorates and on cohort agreements. These universities indicate to look for strategic cooperation that can range beyond an individual joint doctorate to include a cohort (of at least five students for UL) and to ensure that students may also pursue that joint doctorate in the future (DCU).

5.2 Ongoing or Past Cooperation on Doctoral Education

As part of the consultation, the YERUN universities were also asked about the number of joint and/or double doctorates having taken place in the past, the number of joint and /or double doctorates taking place currently, and whether some of these past or ongoing cooperations took place with other universities part of the YERUN Network. It should be noted that the information included in Table 10 on the next page merely provides a general overview of the level of international cooperation currently taking place. Generally speaking, the overview shows that most universities have experience with national and/or international cooperation on joint and/or double doctorates although the level of experience may differ considerably per university. Furthermore, cooperation within the YERUN Network in the area of joint and/or double doctorates appears to still be limited.

³⁹ Based on replies from UAntwerp, UNIRI (different replies per faculty), UEF, UPD, UKonstanz, UM, UNL (different replies per faculty), UC3M, UEssex, and BUL.

⁴⁰ For example, UPD and UBremen.

| University | Ongoing | Past | Within YERUN Network | | | |
|------------|---|---|--|--|--|--|
| UAntwerp | 136 joint doctorates ongoing | 890 joint doctoral contracts negotiated since 2006. Since the 2011 and 2012 academic year 321 joint doctorates were defended (of which 182 with non-Flemish partner institutions). | Cooperation on joint doctorates has taken place with UM and UKonstanz. | | | |
| UNIRI | One ongoing joint PhD programme in governance and economics at the Faculty of Economics | Two joint doctorates in the field of engineering with French universities. | No cooperation with YERUN Universities. | | | |
| SDU | 17 double degrees awarded (of which most by the Faculty of Science) | 14 ongoing double doctorates and4 under negotiation. | Two double doctorates with YERUN Universities (Faculty of Science). | | | |
| UEF | Around 15 joint/double de | 1 double/joint doctorate with YERUN University. | | | | |
| UPD | 15 ongoing joint doctorate agreements | | No cooperation with YERUN Universities. | | | |
| UBremen | | | | | | |
| UKonstanz | 28 completed cotutelle doctorates | 6 ongoing cotutelle doctorates | | | | |
| UUIm | | | | | | |
| DCU | | Small number of joint doctorates taking place. | No cooperation with YERUN Universities. | | | |
| UL | Ca. 5-10 past/ongoing joint | No cooperation with YERUN Universities. | | | | |
| URTV | | | | | | |
| UM | Between 2016 and 2020 14 joint degrees and 54 double degrees completed. | 47 ongoing joint doctorates and 130 candidates in a joint doctorate programme. | 2 completed double doctorates with YERUN partners. | | | |
| UNL | 24 joint doctorates at the r joint doctorate (duly accred cotutelle agreements are o | No cooperation with YERUN Universities. | | | | |
| UC3M | 12 cotutelles in the framev (Erasmus Mundus) and 23 September 2011 until 2021 | No cooperation with YERUN Universities. | | | | |
| UAM | | | | | | |
| UEssex | | 1 ongoing joint doctorate with one candidate resulting from research partnership between UEssex scholar and colleague from the host institution. | No cooperation with YERUN Universities. | | | |
| | | n joint doctorates. | • | | | |

Table 10 – Overview of the number of joint and/or double doctorates as reported by YERUN Universities

6. Conclusions: The Road to Successful Cross-border Cooperation on Joint Doctorates

Over the course of the present report, the national and institutional regulations of the 17 universities part of the YERUN Network and the 12 countries they are located in were analysed. The comparative exercise taken up in Section 3 showed that – despite their differences – many commonalities could also be identified with the YERUN Universities. Furthermore, a first exploration of practices maintained for different disciplines was taken up in Section 4 of this report. Based on the analyses of all of the aforementioned regulations, several recommendations may be proposed to improve international cooperation on joint and double doctorates in the future.

The primary and most important recommendation centres on transparency and retrievability. The objective of this report was to increase transparency by allowing YERUN universities to find an overview of regulations in one central place. This report can, therefore, be used by the universities as a starting point to determine other potential partner universities to cooperate with on the development of joint and/or double doctorates. Nevertheless, other measures could also be taken to further enhance transparency and retrievability of institutional doctoral regulations. In some cases, doctoral regulations are not published in a central location online. This means that – in order to find the regulations - extensive web searches must be conducted (resulting in uncertainty about the correctness of the information found) or contact must be searched with a particular university. A further challenge may thereby be the identification of the right contact person. It is recommendable that universities make information on their doctoral regulations as well as the person responsible for them readily available. Once available, the process of universities getting in touch with one another to establish cooperation on doctoral education may be facilitated. It is even imaginable (or perhaps rather, recommendable) that universities – particularly where they establish provisions on doctoral education in discipline-specific regulations – appoint one person as a coordinator to oversee requests for cooperation on joint and double doctorates. That person could then also play a core role in connecting with academics at the university to keep track of cooperation undertaken jointly with other universities or new opportunities that may be of relevance to particular faculties and departments.

Another element concerning transparency and retrievability concerns making available **authoritative English translations of university regulations**. At present, many of the regulations are primarily available in the language of the university to which they pertain. In the event of cooperation on joint and double doctorates, the mutual understanding of the applicable regulations is of importance especially when determining which provisions to establish for that particular cooperation. It is thereby particularly important for the universities themselves to establish the terminology best-suited to describe their procedures on the grant of doctorates.

Referring back to matrix 3 on the status of the candidate, it was possible to see that funding constituted one of the areas in which considerable divergences existed among the universities part of the YERUN Network. Nevertheless, some universities provided exceptions to regular funding rules in the event of projects funded by the European Commission. It is therefore imaginable that YERUN Universities may seek to cooperate in the context of the new **Horizon Europe programme** to submit an application together, thereby avoiding difficulties from seeking to bridge diverging provisions on funding.

As mentioned before, the present report may serve as a starting point to encourage universities within the YERUN Network to reach out to one another to explore opportunities for joint and/or double doctorates. Universities may use this report to **acquaint themselves with practices concerning doctoral education at the other YERUN universities and find universities whose regulations perhaps align with their own.** Due to the broad scope of the present report, detailed and in-depth one-on-one analyses of relevant regulations were not feasible. It is nevertheless recommendable that universities part of the YERUN Network – and determined to cooperate on doctoral education – conduct a similar exercise themselves to establish which provisions in their own regulations must be maintained in the doctoral cooperation agreement and which may be set aside in favour of international cooperation. Considering the fact that most university regulations established that cooperation on joint and double degrees is subject to its own regulations and that derogations to the regulations normally applicable were often possible paired with the considerable common ground that was found among the YERUN Universities, the present report may form the foundation of fruitful future cooperation on joint and double degrees.

Annex – The YERUN Network: National and Institutional Doctoral Regulations

The present Annex contains the body of this study, namely the analysis of the national and institutional regulations of the 12 Member States and 17 universities involved in the YERUN Network. The analysis will be structured per Member State and the university or universities located within it that are part of the YERUN Network. For each of the national and institutional regulations we analyse the core provisions as indicated in Section 2 containing the method and demarcation of the study.

1. Belgium – Flanders

When it comes to analysing the Belgian legislation on higher education and the grant of doctoral degrees it is important to note that education is a competence belonging to the Belgian Communities.⁴¹ Due to its close connection of education with language, the competence for education is placed with each of the Communities.⁴² Seeing as the Belgian partner university party to the YERUN Network (i.e. Antwerp University) is located in the Flemish Community, the focus will be placed on that Community's legislation on doctoral education. Provisions on this topic may accordingly be found in Parts 2 and 5 of the *Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs* (Decision of the Flemish Government to codify decretal provisions relating to higher education – hereinafter: HE Codex).

According to the HE Codex, a person may obtain a doctorate after conclusion of a doctoral degree upon which the candidate receives a diploma.⁴³ Such diploma is awarded by universities who are competent to provide for higher education training at master level and to a limited extent at bachelor level.⁴⁴ In the latter case, it is necessary for the defence to take place before an interuniversity jury.

The preparation of the dissertation has as its objective to educate the researcher who has worked on the dissertation in an independent manner and has contributed to enhancing available scientific knowledge.⁴⁵ Conclusion of a doctorate means the candidate has fulfilled the learning outcomes set by the HE Codex. These include:⁴⁶ the systematic understanding of a certain area and possession of skills and methods relevant to it, being able to conduct critical analysis of new and complex ideas, and making innovative contributions in an academic and professional context leading to progress in a knowledge-based society.

As far as the title is concerned, only those awarded the degree of doctor after the public defence of a doctoral thesis are allowed to carry the title.⁴⁷ In order to gain access to a doctorate, a person must

⁴¹ Article 127(1)(2) Belgische Grondwet (Belgian Constitution).

⁴² Belgium.be, 'The powers of the Communities',

https://www.belgium.be/en/about_belgium/government/communities/competence.

⁴³ Article I.3 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁴⁴ Article II.73(3) Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁴⁵ Article II.58(7) Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁴⁶ Article II.141(5) Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁴⁷ Article II.75(1) and Art. II.251 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

be in possession of a master's degree.⁴⁸ However, the possession of a master's degree may not be the only requirement to access a doctorate, since the university board can require the candidate to undergo additional inquiry into his or her suitability to conduct scientific research by means of a doctoral thesis.

When it comes to the organisation of joint or double degrees, Article II.171 of the HE Codex states that two or more universities can jointly award the degree of doctor after public defence of a PhD following on joint supervision. According to Article II.172(4), double or joint doctoral degrees are possible following the public defence of a thesis in front of a jury consisting of professors of the institutions involved and on the condition that the candidate has spent at least six months at the partner university.

It is furthermore important to devote attention to the status of doctoral candidates. According to Article II.196 of the HE Codex, students can register for the preparation of a doctoral thesis. At the start of their training, doctoral candidates pay a tuition of 445 euros and pay another 445 euros in the academic year in which the doctorate is obtained.⁴⁹ However, the payment of tuition fees is only applicable to those candidates who have a diploma- or credit contract.⁵⁰ Therefore, there are different capacities in which persons may pursue doctoral training. Doctoral candidates may register as students as mentioned above, but will at the same time also hold the status of doctoral candidate connected to remuneration for the preparation of the doctoral thesis.⁵¹ Alternatively, doctoral candidates may have the position as an assisting member of academic staff, in particular an assistant or doctoral assistant.⁵² In this case, the doctoral candidate is considered both an employee as well as a doctoral student, thereby acquiring remuneration and full social security and labour rights.⁵³ In terms of activities, assistants are tasked with getting more familiar in academia and at least half of their employment contract may be used to prepare a doctoral thesis. Assistants have a contract of two years that can be renewed twice after positive evaluation.⁵⁴ In the case of doctoral assistants, they may be tasked with providing education next to preparing their doctoral thesis.⁵⁵ Their contracts consist of a maximum of two 3-year terms (the second period of which may only be accessed after positive evaluation).⁵⁶ Alternative positions as doctoral candidates may be held by those who originate from an EER country and are holders of a scholarship or non-EER candidates on scholarship. Their positions differ in terms of the extent of their social security rights, the rights of EER candidates are

⁵¹ EACEA, 'België-Vlaamse-Gemeenschap: Doctoraat', <u>https://eacea.ec.europa.eu/national-policies/eurydice/content/third-cycle-phd-programmes-3_nl</u>.

⁵³ EACEA, 'België-Vlaamse-Gemeenschap: Doctoraat', <u>https://eacea.ec.europa.eu/national-policies/eurydice/content/third-cycle-phd-programmes-3_nl</u>.

⁴⁸ Article II.184 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014. Based on Article II.185 the university board can also decide to admit a person to doctoral training where that person has not obtained a master's degree. This may depend on additional inquiry or an examination. ⁴⁹ Article II.211 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁵⁰ Article II.390 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁵² Articles V.3 and V.6 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁵⁴ Article V.6 and V.30 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁵⁵ Article V.8 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

⁵⁶ Article V.32 Besluit van de Vlaamse Regering tot codificatie van de decretale bepalingen betreffende het hoger onderwijs, BS 27 februari 2014.

more extensive than those of non-EER candidates.⁵⁷ A final category of doctoral candidates consists of external candidates who are not remunerated or on scholarship.

1.1 University of Antwerp

At the University of Antwerp, several doctoral degrees may be obtained depending on the faculty responsible. The University therefore has a general regulation and additional faculty-specific regulations.⁵⁸

General provisions are accordingly found in the General Regulations on Obtaining the Academic Degree of Doctor at the University of Antwerp (hereinafter: General Regulations). According to these regulations a doctorate is obtained after a public defence of the thesis which shows the candidate has conducted new scientific knowledge on the basis of independent, sound scientific research as described in the HE Codex.⁵⁹ Apart from preparing their doctoral thesis, candidates must also meet the requirements of the doctoral study programme set by the Antwerp Doctoral School.⁶⁰ Each of these requirements are determined and specified in the Faculty regulations along with procedures regarding progress reports and assessment of the doctoral thesis.⁶¹

The General Regulations show that doctoral candidates must enrol each academic year during the enrolment period. Application is open to those who possess a master's degree.⁶² Before starting their doctorate, candidates must nevertheless also obtain permission from the Registrar's Office by providing information on their prospective project.⁶³ Admission can then be made dependent on finalisation of a preparatory programme.⁶⁴

Details on the enrolment procedure are found in Appendix 3 to the General Regulations. In particular, candidates must send a written application to the Registrar's Office which will transfer the application along with a recommendation to the relevant faculty. The latter then has six to eight weeks to decide on the application. Upon a positive assessment, the faculty establishes an individual PhD commission and determines the candidate's supervisors. The Registrar's Office will then inform the candidate. Doctoral candidates all register in the same manner and pay the same tuition fees. Although candidates must reenrol annually, they only need to fulfil the tuition fees in the first and final years of their doctorates. The tuition fee payable in the final year of the doctorate may be waived in case of candidates undergoing joint or double doctorates. However, this only applies if their defence does not

⁵⁷ EACEA, 'België-Vlaamse-Gemeenschap: Doctoraat', <u>https://eacea.ec.europa.eu/national-policies/eurydice/content/third-cycle-phd-programmes-3_nl</u>.

⁵⁸ Since 2020 the University of Antwerp also has specific regulations for interdisciplinary doctorates. In particular, these are taken to form new doctoral degrees. However, these types of doctorates can only be undertaken at the University of Antwerp and may not be incorporated in a joint or double doctorate; See Article 1(2) and Article 6 General regulations on Obtaining the Academic Degree of Doctor at the University of Antwerp (version 31 March 2020). The regulation will henceforth be cited as General Regulations UAntwerp.

⁵⁹ Article 1(3) General Regulations.

⁶⁰ Although some candidates may be exempted from this if they can show that they fulfil the requirements of the faculty regulations before starting their doctorates; Article 2(12) General Regulations UAntwerp.

⁶¹ Article 1(4)(5) General Regulations UAntwerp. See Sections 1.1.1 through 1.1.3 to learn more about the Faculty regulations.

⁶² Article 2(7) General Regulations UAntwerp. It is nevertheless possible for the university to provide an exemption of this requirement. To this end, see Article 2(9) General Regulations UAntwerp.

⁶³ Article 2(8) General Regulations UAntwerp.

⁶⁴ Article 2(10) General Regulations UAntwerp.

take place at the University of Antwerp and the foreign institute provides the certificate. As far as funding is concerned, UAntwerp distinguishes four types of funding: teaching assistants who combine their doctorate with teaching and other tasks, candidates who have received personal funding, candidates whose funding originates from a project acquired by the supervisor (usually in the context of EU projects), and self-funded doctoral candidates.

During their time at the University of Antwerp, candidates are subject to the Charter for PhD students included in Appendix 1 of the General Regulations. Candidates are expected to draw up a research plan together with their supervisors and execute the research appropriately, timely, and in line with principles of scientific integrity. Much attention is paid to the candidate maintaining the timetable and deadlines set for the research and to submitting work and progress reports regularly. Candidates should furthermore be aware of and adhere to relevant administrative procedures and social provisions applicable to them as PhD students. They should also commit to taking part in the mandatory training organised by the Antwerp Doctoral School and ensure that their research is conducted with regard to the relevant ethical codes, provisions on transparency of research, and on data management.⁶⁵ As far as their training programme is concerned, they will follow training according to the general competence profile set by the Antwerp Doctoral School.

In terms of supervision, the candidate is supervised by supervisors and an individual PhD commission.⁶⁶ The latter commission is tasked with overseeing the progress of the research in a neutral manner and takes up the role of mediator if necessary. The commission is furthermore responsible for approving the draft thesis, thereby allowing submission to the full doctoral jury.⁶⁷ The commission is composed of the supervisors and two other members having sufficient expertise and affinity with the research field concerned.⁶⁸ At least two of the members should furthermore be members of the University's senior academic staff or emeriti with assignments.⁶⁹ Progress must be assessed annually – every two years at minimum – and is based on a report following Article 3(20) of the General Regulations. The candidate's progress is further monitored by a faculty PhD commission when it comes to the training programme.

The supervisors and members of the commission are instituted after the candidate has been approved.⁷⁰ In principle, each candidate will have one or two supervisors, but in case particular expertise is needed, a maximum of four supervisors is maintained.⁷¹ The supervisors should hold the academic degree of doctor and one of them should be member of the University's senior academic staff following Article 3(16.a.b). Additional tasks and duties of the supervisor are found in the Charter for PhD students (Appendix 1 to the General Regulations). Following the Charter, the supervisor is responsible for the first reception of the candidate within the department/faculty in which he/she will conduct research and with the members of the individual PhD commission. Apart from these

⁶⁵ Article 7(58)(59) General Regulations UAntwerp. Additional requirements on scientific integrity may be found in the Appendix to the Charter for PhD students: Integrity charter for PhD students and supervisors affiliated with the University of Antwerp.

⁶⁶ Article 3(13) General Regulations UAntwerp.

⁶⁷ General Regulations UAntwerp – Appendix 1.

⁶⁸ Article 3(17.a) General Regulations UAntwerp. All of the members of the commission should furthermore be in possession of the degree of doctor; see Article 3(17.b) General Regulations UAntwerp.

⁶⁹ Article 3.17.c) General Regulations UAntwerp.

⁷⁰ Article 3(14) General Regulations UAntwerp.

⁷¹ Article 3(15) General Regulations UAntwerp.

introductions, the supervisor also stresses the importance of principles of scientific integrity and core values of the University. The supervisor should also guide the candidate in developing a research plan including a timetable and discussion of relevant research methods. He or she should furthermore review draft versions of the thesis and be available to discuss all aspects of research at least twice per semester.

When it comes to the thesis itself, it may take different forms but must be written and defended in Dutch or English.⁷² Apart from a monograph, the thesis may also be a collection of manuscripts, an artistic or design work or a combination of these forms.⁷³ Despite these different forms in which the thesis may take shape, all theses must all follow the same style requirements for the cover laid down in Appendix 4 of the General Regulations.

In order for the doctorate to be concluded, approval of the thesis must be obtained from a doctoral jury (i.e. defence committee). This jury is composed by the faculty and consists of five to eight members including the supervisors and – ideally – the members of the individual PhD commission.⁷⁴ In addition to these requirements, a minimum of three members must be senior academic staff or emeriti with structural assignments, a minimum of two members must be external to the University, and at least two must not be involved directly in the doctorate.⁷⁵ In principle, all members of the jury must be holders of a doctoral degree.⁷⁶ The doctoral jury is chaired by a member of the senior academic staff at the University of Antwerp and may not be one of the supervisors.⁷⁷

In terms of the public defence procedure, this commences when the candidate sends the draft thesis to the individual PhD commission who then has four weeks to issue a recommendation in writing.⁷⁸ In case of a negative verdict, comments must be provided specifying objections and remarks. In case of a positive verdict, the commission may nevertheless formulate suggestions for improvement of the thesis. Upon approval, the candidate should send copies of the draft together with a written application to the chair of the doctoral jury.⁷⁹ The latter then evaluates the thesis.⁸⁰ This evaluation may include a pre-defence depending on faculty regulations. However, if a member of the doctoral jury objects to the immediate public defence of the thesis, the jury must convene to resolve this matter. All in all, the jury has a maximum of six weeks to decide on the thesis.⁸¹ Upon a positive verdict, the candidate must inform the Registrar's Office in writing after which he or she may be registered for the public defence. Nevertheless, the planning of the public defence may be made conditional on the candidate instituting a number of changes to the thesis.⁸²

⁷² Article 4(23) General Regulations UAntwerp. Exceptions are possible meaning that the thesis may be written in other languages as long as permission fort his has been obtained from the faculty. The thesis must also always include Dutch or English abstracts.

⁷³ Article 4(22) General Regulations UAntwerp.

⁷⁴ Articles 4(26.a.b.c.d.) General Regulations UAntwerp.

⁷⁵ Articles 4(26.e.f.g.) General Regulations UAntwerp. Furthermore, family members such as spouses, partners, blood or other relatives up to and including the fourth degree may never be appointed as members of the jury; see Article 4(26.h.).
⁷⁶ Article 4(27.a.b.) General Regulations UAntwerp. Certain exceptions may apply for specific areas of study designated in

Article 4(19.a) of the General Regulations UAntwerp.

⁷⁷ Article 4(28) General Regulations UAntwerp.

⁷⁸ Article 4(30)(31) General Regulations UAntwerp.

⁷⁹ Article 4(31) General Regulations UAntwerp.

⁸⁰ Article 4(32) General Regulations UAntwerp.

⁸¹ Article 4(33) General Regulations UAntwerp.

⁸² Article 4(35) General Regulations UAntwerp.

The public defence lasts a maximum of two hours including examination by the jury.⁸³ During the defence, at least two-thirds of the jury should be present (either in real life or via teleconferencing)⁸⁴ and two members of the jury should not be involved in the preparations of the thesis. Deliberations on whether or not the candidate has been successful⁸⁵ take place immediately after the conclusion of the defence after which the results are announced.⁸⁶ Once the research is concluded, the University of Antwerp (or in a case of a joint doctorate, each partner institution) is the owner of the results generated by its staff.⁸⁷ Whereas the publication of the thesis does not determine the conclusion of the doctorate, the thesis does need to be sent to the Central Library Office (both digitally and on paper) before the public defence date.

The regulations above in principle apply to all doctorates undertaken at the University of Antwerp. However, the General Regulations also provide for the possibility for candidates to undertake joint or double PhDs with another Belgian or international university. In particular, this is possible if the candidate has completed at least six months of research at each partner university.⁸⁸ The candidate must apply to all universities at least one year before submitting the draft thesis and must fulfil all relevant administrative requirements.⁸⁹

Each joint or double PhD is subject to its own partnership agreement drawn up between the candidate and the universities involved.⁹⁰ This agreement sets up rules that apply in addition to or in exception of the General Regulations. The agreement also sets out which institution's rules are to take precedence in case of potential confusion or conflict of rules. In this case, the rules of the main institution take precedence.⁹¹ In the case of joint or double doctorates, candidates may be exempted from having to follow the Antwerp Doctoral School's training programme.⁹² In terms of the defence and the evaluation thereof, Articles 5(45)(46) of the General Regulations stipulate that only one public defence is to take place and that the doctoral jury must include one member of senior academic staff from both institutions involved. Furthermore, the diploma(s) must include the date of the single public defence while the diploma supplement(s) must include a reference to the research being carried out at both universities.⁹³

⁸³ Article 4(37) General Regulations UAntwerp.

⁸⁴ UAntwerp has been using online defences for a longer period of time (preceding the COVID-19 pandemic)> During COVID-19 the defences were mostly held online, and at times in a hybrid format).

⁸⁵ The decision on the candidate's thesis should ideally be taken by consensus. However, if this is not possible, a positive decision can only be reached by simple majority vote (in which the supervisors together hold one vote). See Article 4(39) General Regulations UAntwerp.

⁸⁶ Article 4(38) General Regulations UAntwerp. The article also specifies that no grades are awarded.

⁸⁷ Information received from representatives of UAntwerp. It is possible that UAntwerp or another institution part of a joint doctorate may protect the research results with any appropriate rights or title, such as a patent application, in their own name and at their own costs in any country, as long as they mention the inventor's name. Each of the partner institutions is nevertheless to have, free of charge, a worldwide, non-exclusive, non-transferable, non-sublicensable right to use all Joint Results for further internal non-commercial research and education purposes.

⁸⁸ Article 5(41) General Regulations UAntwerp.

⁸⁹ Article 5(42) General Regulations UAntwerp.

⁹⁰ Article 5(43) General Regulations UAntwerp.

⁹¹ According to the General Regulations, the determination of the main institution takes place on the basis of the amount of funding, the institution at which the researcher is most present or the institution where the research was started; see Article 5(44) General Regulations UAntwerp.

⁹² Article 5(43) General Regulations UAntwerp.

⁹³ Article 5(46)(47) General Regulations UAntwerp.

1.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

At the Faculty of Social Sciences, several parties play a core role in the process of obtaining a doctorate. The most important of these are the Faculty Board, the Faculty doctoral and research commission, the Departmental Boards and Institute of Environment and Sustainable Development, and the individual PhD commissions.⁹⁴ The Departmental Boards and the Bureau of the Institute of Environment and Sustainable Development play a central role in admitting candidates, determining the academic title,⁹⁵ and composing the individual PhD commissions and juries.⁹⁶ When it comes to the Faculty doctoral and research commission (and chair), their role is, among others, aimed at coordinating certain PhD activities and assessing/approving the progress reports of doctoral candidates.⁹⁷ The individual PhD commission is again responsible with monitoring the progress and quality of doctoral candidates.⁹⁸ The latter commission exercises this monitoring function by submitting annual progress reports on the candidate to the Faculty doctoral commission.⁹⁹ The composition of this committee, as well as that of the doctoral jury, is decided after consultations between the supervisors and the doctoral candidate.¹⁰⁰

When focusing on the candidate, he/she has an obligation to submit a progress report on their activities as part of their doctoral training via the Student Information System Antwerp (SisA).¹⁰¹ It is possible that some candidates may be exempted from part of the programme if they have prior experience in a certain area. Some candidates may perform teaching duties in addition to writing their doctoral thesis. In their case, they are subject to an annual performance appraisal which is mainly aimed at ascertaining whether the candidate is able to maintain a 50/50 division between teaching duties and doctoral research.¹⁰²

The doctoral programme for the Faculty of Social Sciences is specified in Appendix 1 to the Faculty Regulations. Here, it becomes clear that the candidate together with his/her supervisors will decide which activities to undertake in the framework of their training. As with the other regulations of the University of Antwerp included in this research, the training must amount to a total of 30 credits spread over different categories designated for the competence profile of doctoral candidates at the University. Completion of the doctoral study programme is necessary before the candidate can progress to the final stages of the doctorate (i.e. before the jury is composed).

⁹⁴ Article 2 Additional Doctoral Regulations – Faculty of Social Sciences (version of 18 March 2020). The regulations will henceforth be cited as Regulations FSW.

⁹⁵ The Faculty of Social Sciences issues multiple degrees ranging from a doctorate in Film studies and visual culture to a doctorate in social sciences: sociology; See Appendix 2 Regulations FSW.

⁹⁶ Article 5 Regulations FSW.

⁹⁷ Article 6 and 7 Regulations FSW.

⁹⁸ Article 8(2) Regulations FSW.

⁹⁹ Article 12 Regulations FSW.

¹⁰⁰ Article 9 Regulations FSW. The exact composition of the individual PhD commission needs to take into account specific rules. In particular, the following parties are part of the commission: the supervisors, a member from the same department, a member from another department, faculty or university. One of the members of the commission must not be involved in the doctoral research; See Article 10 Regulations FSW. When it comes to the doctoral jury, two members of that jury should not be directly involved in the research; Article 13 Regulations FSW.

¹⁰¹ Article 15 Regulations FSW.

¹⁰² Article 17 Regulations FSW.

When preparing their thesis, candidates may either present their thesis as am monograph or as a coherent collection of publications.¹⁰³ In the regulations of the Faculty of Social Sciences, much attention is paid to co-authorship. For example, members of the individual PhD commission and the doctoral jury are considered as being directly involved in the research if they have co-authored a publication with the candidate.¹⁰⁴ Furthermore, in the event that the thesis of a candidate consists of a collection of publications, he or she must clearly designate their contribution to a particular piece.¹⁰⁵

1.1.1.1 Faculty Regulation on Law and Safety Sciences

As is the case for other Faculties at the University of Antwerp, admission to a doctorate is dependent on possession of a master's degree following an assessment of suitability.¹⁰⁶ This assessment is conducted by the Extended Executive Committee and the results must be communicated within six weeks.¹⁰⁷ Upon a positive decision as to the admission of the candidate, an individual PhD commission is established by the Extended Executive Committee.¹⁰⁸ However, admission is not always immediate, since the Faculty of Law provides for a possibility to grant a provisional admission to the PhD which can apply for a maximum term of 12 months. It is also possible that the candidate should complete a preparatory programme before admission to the doctorate,¹⁰⁹ or additional training during their doctorate.¹¹⁰

Upon admission to the programme, the candidate should take part in a doctoral study programme. This programme consists of 30 credits in various categories of the Antwerp Doctoral School's competence profile.¹¹¹ It is possible for candidates with prior experience to obtain exemptions from parts of the study programme, as long as no more than half of the 30 credits is awarded in this way.¹¹² In order to receive credit for activities, candidates must hand in an orderly list of activities to the faculty doctoral programme coordinator who determines how many credits will be awarded per activity.¹¹³ For joint doctoral candidates, Article 21(2) the regulations of the Faculty of Law indicate that such candidates may be exempted from following the doctoral study programme at the University of Antwerp if they can prove that they are following a doctoral study programme at their home institution.

In order to monitor a candidate's progress, annual progress reports must be submitted. These concern the doctoral research (which is assessed by the individual PhD commission) and the doctoral study

¹⁰³ Article 18 Regulations FSW.

¹⁰⁴ Articles 10 and 13 Regulations FSW.

¹⁰⁵ Article 19 Regulations FSW. Additional regulations on authorship and co-authored works can be found in Appendix 3 to the Regulations FSW.

¹⁰⁶ Article 10 Additional Doctoral Regulations Faculty of Law (version 4 July 2019). The regulations will henceforth be cited as Regulations FL.

¹⁰⁷ If the candidate does not receive word within three months, the candidate is admitted; Article 12 Regulations FL. ¹⁰⁸ Article 16 Regulations FL.

¹⁰⁹ Article 13 Regulations FL. This programme does not form part of the doctoral study programme.

¹¹⁰ Article 14 Regulations FL. This additional training can consist of a maximum of 30 credits and is integral to the doctoral study programme.

¹¹¹ The categories in the profile are: 1) research skills and techniques, 2) adaptation to the research environment, 3) research management, 4) personal efficiency, 5) communication skills, 6) networking and teamwork, and 7) career management; See Article 17 of the Regulations FL. Particular guidelines apply for the awarding of credits for each activity. ¹¹² Article 20 Regulations FL.

¹¹³ Article 25 Regulations FL.

programme (assessed by the faculty doctoral programme commission).¹¹⁴ The candidate has a responsibility to hand in these reports in time, since not doing so will result in a negative recommendation.¹¹⁵

In terms of duration, a doctorate at the Faculty of Law of the University of Antwerp may take longer than the average of four years, as doctoral research should be finished within eight years after the date of admission.¹¹⁶ As to the thesis itself, it should take the form of a book or collection of scientific contributions to be decided in the first year.¹¹⁷ In the event that a candidate opts for the former option, the thesis should be between 150 and 350 pages.¹¹⁸ In the event of a collection of contributions, there are specific rules to be adhered to.¹¹⁹ In particular, the candidate should produce at least four contributions that have undergone peer review of which two have been published or accepted for publication. Furthermore, each of the articles should be connected by one research topic, may not be more than eight years old, and several connecting texts (such as introductions, conclusions, explanations as to the methodology and research questions) must be included. In the event that the candidate has cooperated with others on certain articles, he or she must clearly state why such cooperation was necessary and which parts were conducted by the candidate.

To complete the doctorate, the candidate needs permission from the individual PhD commission to submit the thesis to the doctoral jury.¹²⁰ That jury and candidate must meet within six weeks after submission by means of a preliminary defence at which the candidate will answer the jury's questions.¹²¹ The verdict of this meeting may be positive or subject to conditions.¹²² This permission is necessary to for the candidate to proceed to the public defence.¹²³

1.1.1.2 Faculty Regulation on Business and Economics

Contrary to other regulations of the University of Antwerp's faculties, that of the Faculty of Business and Economics not only requires a master's degree for admission to a doctorate, but also for the degree to have been obtained cum laude.¹²⁴ In order to be admitted the candidate needs to provide an application form, curriculum vitae, copy of the master's degree and supplement, research proposal,

¹¹⁴ Article 22 and 23 Regulations FL.

¹¹⁵ Article 24 Regulations FL.

¹¹⁶ Article 26(1) Regulations FL. It may even be extended after eight years, although this must be the conclusion of the individual PhD commission after assessing the (potential) progress of the research. Furthermore, after 10 years the thesis supervision will be stopped automatically after which the candidate can still continue the research; Articles 26(3)(4) Regulations FL.

¹¹⁷ Article 28(2) and 29 Regulations FL.

¹¹⁸ Article 30 Regulations FL.

¹¹⁹ Article 31-34 Regulations FL.

¹²⁰ Article 36 Regulations FL.

¹²¹ Article 38(1)(2) Regulations FL.

¹²² Article 38(3) Regulations FL.

¹²³ Aritcle 39 Regulations FL.

¹²⁴ Lower degree classifications are also possible, but this may be made conditional on the candidate taking an extra study programme. Furthermore, the Faculty of Business and Economics also requires researchers with degrees in economics and business economics to enroll in the FBE. Researchers who have degrees in other fields and who plan on doing research that touches upon business or economics are also encouraged to enroll at the Faculty of Business economics. Free choice is left to researchers who do not fall in either of the aforementioned categories; Article 5 and 31 Additional Regulations on obtaining the academic degree of doctor in the Faculty of Business and Economics (version 2 May 2018). The regulation will hereinafter be cited as Regulations FBE.

and the names of the proposed supervisors.¹²⁵ As is the case for the other faculties, doctoral candidates undertake a doctoral study programme during their time at the Faculty of Business and Economics following the guidelines set by the Antwerp Doctoral School.¹²⁶ Again, practical experience can be used to obtain exemptions from certain parts of the doctoral programme.¹²⁷

Doctoral candidates also have an individual PhD commission consisting of the supervisors and two additional members (one internal to the University of Antwerp and one external).¹²⁸ According to Article 15 of the Faculty regulations, the individual PhD commission of joint or double PhD students may be composed differently. The composition of the commission in case of such a PhD depends on whether a similar committee exists at the main institution. If such commission exists, a smaller individual PhD commission is appointed consisting of the supervisors and a chair. If the home institution does not have a similar commission, a full commission should be appointed at the University of Antwerp.

Progress reports are again required and consist of a report on the doctoral research and on the doctoral study programme to be assessed by the individual PhD commission.¹²⁹ To progress to the final stages of the doctorate, the candidate needs to commence the procedure in consultation with their supervisors.¹³⁰ A doctoral jury needs to be composed by the FBE Faculty Board consisting of the supervisors and at least four other jury members.¹³¹ According to Article 23, different or additional rules may be maintained in the event of a joint or double doctorate. In particular, those rules can be included in the partnership agreement.

Before progressing to the public defence, the candidate needs to successfully conclude the preliminary defence.¹³² The jury may nevertheless propose major mandatory changes which need to be implemented within three months.¹³³ A failure to implement the changes in a satisfactory manner or to make the proposed deadline leads to suspension of the procedure.

1.1.1.3 Faculty Regulation on Arts

Within the Faculty of Arts, several Departmental Boards are responsible for selecting doctoral candidates.¹³⁴ The assessment of the candidate's suitability takes place on the basis of a file to which all proposed supervisors must have consented in writing. The result of the suitability assessment must be obtained within six weeks by the Faculty Board on recommendation of the Departmental Board. Apart from deciding on the suitability of the candidate, the Faculty Board also decides on the

¹²⁵ Article 6 Regulations FBE. The supervisors must give written consent to agree to the supervision.

¹²⁶ Article 8 and 9 Regulations FBE. The Faculty of Business and Economics nevertheless adds two more rules to the requirements to register certain activities. There is a need for 12 out of the total of 30 credits to have been obtained in the area of research skills and techniques and a minimum of two credits must have been earned in the category of networking and teamwork.

¹²⁷ See Articles 11 and 12 Regulations FBE.

¹²⁸ Article 13 Regulations FBE.

¹²⁹ Article 16 and 17 Regulations FBE.

¹³⁰ Article 24 Regulations FBE.

¹³¹ Article 22 Regulations FBE. A maximum of eight members is maintained for a doctoral jury.

¹³² Article 26 Regulations FBE.

¹³³ Article 28 Regulations FBE.

¹³⁴ Article 8 General regulations on obtaining the academic degree of doctor at the University of Antwerp and regulations specific to the Faculty of Arts. The regulations are hereinafter cited as Regulations FoA.

designation of supervisors and the composition of the individual PhD commission (again, on the recommendation of the Departmental Board).¹³⁵

Candidates may need to undergo a preparatory programme, the content of which is decided by the future supervisors and a doctoral coordinator.¹³⁶ During their doctorate, candidates will again take part in a training programme. If they have prior experience covering parts of the programme, they may obtain an exception for this.¹³⁷ Details on the doctoral study programme of the Faculty of Arts are given in Appendix 5 of the Regulations. For each of the Faculty of Arts' five departments, specifications are given for the doctoral study programmes, the competences, and activities involved.¹³⁸ Article 1 of Appendix 5 shows that candidates must submit annual progress reports through the Student Information System Antwerp (SisA). As is the case for the other faculties assessed under cluster 1, the Faculty of Arts maintains a doctoral study programme of at least 30 credits whereby credits must be sufficiently spread over different competence categories.¹³⁹ However, additional activities outside those listed in Appendix 5 may also be added to a candidate's doctoral study programme, as may activities pursued after the master's degree and before the doctorate.¹⁴⁰ Exemptions to the study programme requirements are possible, but only in very exceptional circumstances.¹⁴¹ As a rule, candidates must complete the study programme before the doctoral jury is assembled.¹⁴²

In terms of progress monitoring, candidates must submit annual reports indicating the progress made in their doctoral research and study programme.¹⁴³ Apart from reporting on their progress, candidates must also provide a timeline for the near future. Progress is assessed by the individual PhD commission.

As far as the thesis is concerned, published articles can be included as part of the thesis.¹⁴⁴ As a rule, the thesis should be written in English although exceptions are possible if they are approved by the Departmental Board.¹⁴⁵ The thesis is then assessed by a doctoral jury which is assembled by the Faculty Board on recommendation of the Departmental Board.¹⁴⁶ In terms of the document, a distinction is made between the draft thesis submitted to the individual PhD commission (submitted form free and electronically) and that submitted to the doctoral jury (in hardcopy and fulfilling all formal style requirements).¹⁴⁷ Contrary to other faculties of the University of Antwerp, the Faculty of Arts does not

¹³⁵ Article 14 Regulations FoA. Special attention is paid in the regulations to ensuring a balanced representation of both genders in the individual PhD commissions.

¹³⁶ Article 10 Regulations FoA.

¹³⁷ Article 12 Regulations FoA.

¹³⁸ See Tables 1 through 5 Appendix 5 Regulations FoA.

¹³⁹ Article 2 Appendix 5 Regulations FoA.

¹⁴⁰ Article 4 and 5 Appendix 5 Regulations FoA.

¹⁴¹ Article 6 Appendix 5 Regulations FoA.

¹⁴² Article 2 Appendix 5 Regulations FoA.

¹⁴³ Article 20 Regulations FoA.

¹⁴⁴ Article 22 Regulations FoA.

¹⁴⁵ Article 23 Regulations FoA. Apart from a language requirement, the FoA also requires doctoral candidates to consult specific parties on the layout of their thesis; see Article 24 Regulations FoA.

 ¹⁴⁶ Article 25 Regulations FoA. Again, attention is paid to maintaining sufficient gender representation in the doctoral jury.
 ¹⁴⁷ Article 30 Regulations FoA.

maintain a pre-defence before the public defence of the thesis.¹⁴⁸ In order for the candidate to therefore progress to the public defence, the members of the doctoral jury must prepare a report.¹⁴⁹

1.1.2 Cluster 2 – Psychology & Medicine

Like other doctoral candidates at the University of Antwerp, those seeking to access pharmaceutical, biomedical or veterinary sciences as well as medicine and health sciences need to possess a master's degree and have been notified explicitly of their admission.¹⁵⁰ Admission is based on an aptitude test, the results of which must be communicated within six weeks.¹⁵¹ Before accessing doctoral training it is possible that the candidate must fulfil a preparatory programme of maximum 30 credits.¹⁵² It is also possible that a candidate follows an additional educational programme of 30 credits during their doctorate.¹⁵³ Normally, the doctoral programme consists of 30 credits divided over seven competence categories set by the Antwerp Doctoral School. Candidates must have obtained at least one credit in at least four competence categories.¹⁵⁴ In the case of pharmaceutical, biomedical or veterinary sciences, the doctoral candidate must then decide how to allocate activities to these designated categories.¹⁵⁵ The activities for which credits may be obtained are again subject to their own provisions and specifications.¹⁵⁶ In principle, all candidates have to follow the doctoral study programme. According to Article 22, candidates may only be exempted from the doctoral study programme in highly exceptional circumstances. By contrast, in the case of medicine and health sciences, activities can contribute to two or more competence categories as long as the number of credits is divided equally.¹⁵⁷ Furthermore, activities undertaken after the master's degree but before the start of the doctorate may also be taken into consideration as part of the doctoral study programme.

When it comes to tracking the candidate's progress, both the Faculty of pharmaceutical, biomedical and veterinary sciences as well as the Faculty of medicine and health sciences assess the research and the doctoral study programme.¹⁵⁸ However, the way these are assessed differs per faculty.

For the Faculty of pharmaceutical, biomedical and veterinary sciences, the research component is assessed every two years, the educational component is assessed annually. Furthermore, the individual doctoral commission is responsible for assessing the research while the monitoring of the

¹⁴⁸ Article 32 Regulations FoA.

¹⁴⁹ Article 35 Regulations FoA.

¹⁵⁰ Article 8 Complementary faculty regulations for PhDs and doctoral programmes – Faculty of Parmaceutical, Biomedical and Veterinary Sciences (FBD). The regulation is hereinafter cited as: Regulations FBD; Article 6 Additional Regulations on obtaining the academic degree of doctor in the Faculty of Medicine and Health Sciences. The regulation is hereinafter cited as: Regulations FMHS.

¹⁵¹ Articles 9 and 10 Regulations FBD; Article 9 Regulations FMHS. If no reaction is received within three months, the decision can be considered positive.

¹⁵² Article 12 Regulations FBD; Article 11 Regulations FMHS. Parts of this preparatory programme may be exempted if the candidate has prior experience or knowledge in a certain area.

¹⁵³ Article 11 Regulations FBD; Article 10 Regulations FMHS.

¹⁵⁴ Article 14 Regulations FBD; Article 14 Regulations FMHS. In the case of the FMHS, candidates must provide certificates of participation for all activities they conduct. The candidate must furthermore complete the doctoral study programme before the PhD jury is composed.

¹⁵⁵ Article 15 Regulations FBD. Although candidates are allowed to designate which activities they want to be taken into account for certain competences, activities may not count for more than one competence.

¹⁵⁶ Articles 17 through 21 Regulations FBD.

¹⁵⁷ Article 16 Regulations FMHS.

¹⁵⁸ Article 24 Regulations FBD; Articles 20 and 21 Regulations FMHS.

whole progress report process is undertaken by the departmental coordinator.¹⁵⁹ The candidate has a responsibility to maintain contacts with their individual doctoral commission.¹⁶⁰ This commission is composed by the promotor at the start of the doctorate and must be approved by the Doctoral Board.¹⁶¹ For example, at the start of the research, the candidate must organise an introductory meeting. In their second year, they deliver a presentation about the progress made and future schedule to the individual doctoral commission. It is the commission's task to assess the research and – in the second year – to decide whether or not the candidate has made sufficient progress to continue the doctorate.¹⁶² A final progress report is submitted in the fourth year which should indicate how the research is to be concluded.¹⁶³ This is not necessary if the candidate must submit evidence of this to the Antwerp Doctoral School.¹⁶⁵

As far as the thesis is concerned, published articles may be integrated into the manuscript as long as the final result is homogeneous.¹⁶⁶ Candidates receive an automatic approval to write the thesis in English, exemptions must be granted for theses in other languages.¹⁶⁷

As is the case for the other faculties of the University of Antwerp taken up in this research, an internal defence is to take place before the public defence (before the doctoral jury¹⁶⁸). However, different from other faculties, the internal defence takes place before the individual doctoral commission (instead of the doctoral jury).¹⁶⁹ The internal defence can have three results: positive with small alterations, positive on condition that adaptations are made, and negative meaning fundamental alterations must be made.¹⁷⁰ In the latter case, the procedure for the public defence will be suspended pending further notice.¹⁷¹ If the verdict is positive with corrections, the PhD jury has another six weeks to decide whether or not the thesis may be defended.¹⁷² The public defence itself lasts a maximum of two hours ending in the proclamation and must then take place between three to six weeks after the positive decision of the PhD jury.¹⁷³ Apart from the PhD diploma, the candidate also receives a certificate of the doctoral study programme and a diploma supplement providing an overview of activities.¹⁷⁴

¹⁵⁹ Article 23 and 24 Regulations FBD.

¹⁶⁰ Article 25 and 26 Regulations FBD.

¹⁶¹ PhD guidelines – Additional information to the general (UAntwerpen) and complementary (Faculty) PhD rules and regulations, p. 2.

¹⁶² Article 28 and 29 Regulations FBD.

¹⁶³ Article 31 Regulations FBD.

¹⁶⁴ Article 32 Regulations FBD.

¹⁶⁵ Article 36 Regulations FBD.

¹⁶⁶ Article 39 Regulations FBD.

¹⁶⁷ Article 38 Regulations FBD; PhD guidelines – Additional information to the general (UAntwerpen) and complementary (Faculty) PhD rules and regulations, p. 5.

¹⁶⁸ The promotor of the candidate is responsible for proposing the composition of the PhD jury. After a check by the individual doctoral commission, approval must be obtained by the Doctoral Board; PhD guidelines – Additional information to the general (UAntwerpen) and complementary (Faculty) PhD rules and regulations, p. 5.

¹⁶⁹ Article 41 Regulations FBD.

¹⁷⁰ Article 42 Regulations FBD.

¹⁷¹ Article 43 Regulations FBD.

¹⁷² PhD guidelines – Additional information to the general (UAntwerpen) and complementary (Faculty) PhD rules and regulations, p. 5-6.

¹⁷³ Ibid., p. 6.

¹⁷⁴ Ibid.

In the case of the Faculty of medicine and health sciences, several committees are responsible for evaluating the candidate: the fundamental, clinical and public health doctoral evaluation committees, and the individual PhD committee.¹⁷⁵ The candidate must present his or her research before the doctoral evaluation committee two years after commencing the research, based on a report by the candidate.¹⁷⁶ This presentation is essential, as the evaluation of the doctoral evaluation committee and the individual PhD committee determines which additional requirements the candidate must fulfil before submitting the thesis for defence.¹⁷⁷ While the Faculty of medicine and health sciences does not have an internal defence, it does have an internal discussion with the individual PhD committee.

The thesis itself must be written in Dutch, English or French.¹⁷⁸ It is up to the candidate and the supervisors to decide whether the thesis is ready for defence.¹⁷⁹ In order to continue with the defence, the individual PhD committee must assess the thesis on the basis of a two-hour meeting after which the committee may formulate suggestions or approve the draft. In the latter case, the individual PhD committee proposes a jury of five to eight members that is confirmed by the doctoral evaluation committee.¹⁸⁰ As is the case for the Faculty of pharmaceutical, biomedical and veterinary sciences, 'published articles may represent an integral part of the thesis', as long as the thesis forms a coherent whole.

1.1.3 Cluster 3 – Engineering

The Faculty of Applied Engineering maintains its own criteria for admission of doctoral candidates. In order to be admitted to a doctorate, a person needs to be in possession of a master's degree and must have been given explicit permission to undertake the doctorate from the Faculty PhD Commission.¹⁸¹ This permission follows on an examination of the candidate's suitability which is examined on the basis of a standard subscription form, candidate resume and the research proposal.¹⁸² The candidate should receive the verdict within six weeks.¹⁸³ By contrast, if no decisions has been taken within three months, the candidate's application will be accepted. It is possible that a preparatory programme is imposed on the candidate.¹⁸⁴

The preparatory programme differs from the doctoral study programme. In particular, the latter is undertaken over the course of the doctorate and comprises an obligation for the candidate to obtain

¹⁷⁵ Articles 17 and 18 Regulations FMHS. Whereas the doctoral evaluation committees consist of a minimum of six elected members as well as the members of the individual PhD committee (of each candidate), the latter consists of the supervisors and at least two independent members.

¹⁷⁶ Articles 21 and 22 Regulations FMHS.

¹⁷⁷ Article 23 Regulations FMHS.

¹⁷⁸ Article 27 Regulations FMHS.

¹⁷⁹ Article 28 Regulations FMHS.

¹⁸⁰ Article 29 Regulations FMHS.

¹⁸¹ Article 8 Complementary PhD Rules & Regulations Faculty of Applied Engineering (Version 31 January 2020). The regulation will henceforth be cited as Regulation FAE. The FAE has several boards and commissions that are relevant to the candidate. The most important ones are the faculty board (e.g. responsible for composing the PhD jury), the individual PhD commission (e.g. responsible for monitoring the candidate's progress and for approving the draft thesis), and the Faculty PhD commission (e.g. responsible for admitting the candidate, appointing the supervisors, composing the individual PhD commission, and approving assessment reports).

¹⁸² Article 9 Regulation FAE. The examination may even include a language test.

¹⁸³ Article 10 Regulation FAE.

¹⁸⁴ Interestingly, prior experience and prior qualifications can be used to be exempted from part or even all of the preparatory programme. Nevertheless, the programme is truly preparatory in nature, meaning that it cannot be used to substitute the doctoral study programme; see Article 11(d) Regulation FAE.

credits in designated areas. In particular, the candidate is to complete 30 credits on various activities to be determined in consultation with the supervisor and to be registered in the Student Information System Antwerp (SisA).¹⁸⁵ Upon conclusion of their doctorates, candidates will receive a diploma supplement including a specification of all the activities they have undertaken as part of their doctoral study programme.¹⁸⁶ The doctoral study programme is therefore structured by the doctoral candidates on the basis of the competence profile drawn up by the Antwerp Doctoral School.¹⁸⁷ Although the doctoral study programme is mandatory, parts of it may be exempted through recognition of a candidate's prior experience.¹⁸⁸

In terms of monitoring progress, the candidate should submit a progress report showing how he/she is progressing in the doctoral study programme.¹⁸⁹ The research is evaluated at least every two years by the Individual PhD Commission.¹⁹⁰ The total duration of the PhD is – in principle – four years. This means that two specific research evaluation points are foreseen: one in the second year and the other in the second half of the fourth year.¹⁹¹ In order to initiate the completion of the doctorate, the candidate should submit a draft thesis to the individual PhD commission.¹⁹² In order to submit the thesis, a candidate writes either a monograph or a collection of manuscripts published over the course of the PhD.¹⁹³ If the thesis has been approved by the individual PhD commission, the Faculty PhD commission will examine if all necessary criteria have been met.¹⁹⁴ The Antwerp Doctoral School also issues a confirmation that all necessary credits have been obtained after which the doctoral jury is composed by the Faculty PhD commission.

Before the public defence, a mandatory pre-defence takes place before the doctoral jury which may last up to 3 hours.¹⁹⁵ After this pre-defence, the jury decides whether to accept the thesis (directly, with minor or major corrections) or refuse the thesis after which it must be thoroughly revised. Successful completion of the pre-defence leads to admission to the final stage of the doctorate, namely the public defence.¹⁹⁶ After this defence, the candidate is proclaimed Doctor in Applied Engineering.¹⁹⁷

2. Croatia

On the national level in Croatia, higher education is regulated by the Act on Scientific Activity and Higher Education (*Zakon o znanstvenoj djelatnosti i visokom obrazovanju*), and by the Act on Academic and Professional titles and Academic Degrees (*Zakon o akademskim i stručnim nazivima i akademskom stupnju*).

¹⁸⁵ Article 13 Regulation FAE.

¹⁸⁶ Article 15(e) Regulation FAE.

¹⁸⁷ For an overview of all types of activities for which credits can be obtained see the table under Article 14 Regulation FAE. ¹⁸⁸ Article 15(c) Regulation FAE.

¹⁸⁹ Article 19 Regulation FAE.

¹⁹⁰ Article 20 Regulation FAE.

¹⁹¹ See Articles 21-23 and 24-26 Regulation FAE.

¹⁹² Article 33 Regulation FAE. The individual PhD commission has four weeks to assess the thesis.

¹⁹³ Article 30 Regulation FAE. Additional requirements in terms of style are also made to the thesis. These can be found in Articles 31 and 32 of the Regulation FAE.

¹⁹⁴ Article 34 Regulation FAE.

¹⁹⁵ Article 35 Regulation FAE.

¹⁹⁶ Article 36 Regulation FAE.

¹⁹⁷ Article 38(g) Regulation FAE. The Article also indicates that no degrees of distinction are awarded.

Universities are tasked with scientific research, studies and teaching, developing science, preparing students for professional activities on the basis of scientific knowledge and methods, and with promoting international and European cooperation in higher education.¹⁹⁸ Higher education institutions may offer joint studies with other institutions, also with institutions outside Croatia if they are accredited in accordance with European (or equivalent) standards and guidelines for quality assurance.¹⁹⁹

Universities provide education on undergraduate, graduate and postgraduate levels, leading to the acquisition of certain title or degree.²⁰⁰ Eligibility to postgraduate (doctoral studies) is provided after the completion of graduate university studies.²⁰¹ Postgraduate studies are offered in two forms, as postgraduate university studies and postgraduate specialist studies, where the focus of this research will be on the former.²⁰²

The minimum duration of a doctoral study is three years (180 ECTS). A doctoral candidate will obtain the title of Doctor of Science (Ph.D) upon the completion of all requirements and successfully defending their doctoral dissertation in public. In the field of arts, one acquires the academic degree of Doctor of Arts.²⁰³ In exceptional cases, the competent Council of the University may decide with the consent of the University Senate to grant the title of PhD to those who have achieved other scientific achievements corresponding to the conditions of the doctoral degree.²⁰⁴

The universities may adopt faculty regulations²⁰⁵ and study programmes, on the basis of which the studies are organised. The study program must be in accordance with the statutes and other acts of the University, and must define for instance the conditions on enrolment, learning outcomes, number of ECTS and the method of completion of studies.²⁰⁶ The studies can be either provided for full-time or part-time.²⁰⁷ The programmes follow a curriculum adopted by the educational institution, that determines the forms of teaching, exam deadlines, literature and structure of the programme for part-time students.²⁰⁸ The postgraduate students may participate in the teaching at the University as laid down in the study programme.²⁰⁹ The Universities may require that the student is appointed a supervisor, who is subject to the requirements set in the University's Statutes.²¹⁰

After completion of the doctoral programme, the student is issued a diploma.²¹¹ A supplementary study document may be issues in Croatian and English, stating the completed exams and other

¹⁹⁸ Article 53(1) Law on Scientific Activity and Higher Education.

¹⁹⁹ Article 76 Law on Scientific Activity and Higher Education.

 $^{^{\}rm 200}$ Article 70 Law on Scientific Activity and Higher Education.

²⁰¹ Article 73(2) Law on Scientific Activity and Higher Education.

 ²⁰² Article 73(1) Law on Scientific Activity and Higher Education., Article 73(6) postgraduate specialist studies last from one to two years, which results in academic title of specialist in certain field (univ. spec.), or in the field of medicine (univ.mag.).
 ²⁰³ Article 73(3) Law on Scientific Activity and Higher Education, Article 5 Law on Academic and Professional Titles and Academic Degrees.

²⁰⁴ Article 73(4)-(6) Law on Scientific Activity and Higher Education.

²⁰⁵ Article 62(3) Law on Scientific Activity and Higher Education.

²⁰⁶ Article 78 Law on Scientific Activity and Higher Education.

²⁰⁷ Artile 86(3) Law on Scientific Activity and Higher Education.

²⁰⁸ Article 79 Law on Scientific Activity and Higher Education.

²⁰⁹ Article 92(5) Law on Scientific Activity and Higher Education.

²¹⁰ Article 87 Law on Scientific Activity and Higher Education.

²¹¹ Article 84(2) Law on Scientific Activity and Higher Education.

necessary information.²¹² The final doctoral dissertations are published on the public internet database of the National and University library.²¹³

2.1 University of Rijeka

On the university level, regulation can be found from the Statute of the University of Rijeka²¹⁴, Regulation on Postgraduate Doctoral Studies²¹⁵, and from the Regulation on Studies.²¹⁶

The Regulation on Postgraduate Doctoral Studies lays down the minimum conditions for the organisation and performance of doctoral education.²¹⁷ The Doctoral School in the University supports the organisation of the doctoral programmes in the University.²¹⁸ Nevertheless, doctoral programmes may also be organised outside of the Doctoral School. Doctoral studies consists of basic characteristics of scientific research, acquisition of new competencies for research activities, internationalisation, transparency, quality and international competitiveness.²¹⁹ The studies aim to educate researchers and scientists by training them for independent and critical research. The studies also encourage networking with other relevant institutions and universities abroad.²²⁰

The University may offer doctoral programmes in collaboration with other domestic or foreign universities of scientific organisations.²²¹ According to Article 3(3), the doctoral studies in the University of Rijeka are open to all forms of cooperation with related institutions in country and abroad, promoting the mobility of students and teachers. Doctoral studies can be organised as a study carried out by the University, or as a joint study conducted by two or more higher education institutions in Croatia or abroad. In case of joint study with an institution outside Croatia, the joint program must be accredited by both institutions.²²² Studies can be also formed as a double programme, where the student obtains two diplomas (*cotutelle*). The organisation, performance, and completion of these programmes (both joint degrees and cotutelle) must be regulated by an agreement between the higher education institutions.²²³

The University Statute specifies (as also laid down on the national-level regulations) that postgraduate studies offered by the University take at least three years when conducted full-time²²⁴ or 5-6 years as a part-time²²⁵ (corresponding to 180 ETCS)²²⁶, leading to the title of Doctor of Science or Doctor of Arts (Ph.D).²²⁷

 $^{^{\}rm 212}$ Article 84(5) Law on Scientific Activity and Higher Education.

²¹³ Article 83(12) Law on Scientific Activity and Higher Education.

²¹⁴ Statute of the University of Rijeka, February 2020 (Statut sveučilišta u rijeci).

²¹⁵ Regulation on Postgraduate Doctoral Studies, 2020 (*Pravilnik o poslijediplomskim sveučilišnim (doktorskim) studijima sveučilišta u rijeci*).

²¹⁶ Regulation on Studies at the University of Rijeka, June 2020 (*Pravilnik o studijima sveučilišta u rijeci*).

²¹⁷ Article 1(2) Regulation on Postgraduate Doctoral Studies.

²¹⁸ Article 14 Regulation on Postgraduate Doctoral Studies.

²¹⁹ Article 3(1) Regulation on Postgraduate Doctoral Studies.

²²⁰ Article 3(2) Regulation on Postgraduate Doctoral Studies.

²²¹ Article 122(3) Statute of the University of Rijeka.

²²² Article 4 Regulation on Postgraduate Doctoral Studies.

²²³ Article 4(2) Regulation on Postgraduate Doctoral Studies, Article 17 Regulation on studies.

²²⁴ Article 8 Regulation on Postgraduate Doctoral Studies.

²²⁵ Article 123(3) Statute of the University of Rijeka.

²²⁶ Article 113(3) Statute of the University of Rijeka, Article 9(1) Regulation on Postgraduate Doctoral Studies.

²²⁷ Article 114(4) Statute of the University of Rijeka.

Those who have completed an appropriate graduate study, Master of Science or appropriate undergraduate study, are eligible to apply for the doctoral programmes. Furthermore, the applicants must have an appropriate grade average and a recommendation from at least one University professor who is familiar with the academic achievements of the potential candidate. The Doctoral Study Council may prescribe supplementary studies for students who yet need to acquire the basic knowledge required to attend and complete the studies. The faculties may set further criteria on admission.²²⁸ Finally, enrolment in the doctoral studies is carried out on the basis of a public competition.²²⁹

By concluding a study contract and paying agreed participation costs, the applicant acquires the status of a doctoral student (either full-time of part-time). The full-time doctoral students may be offered an employment contract for 6 years or for a shorter period depending on the funding source.²³⁰ The student status ends with the completion of the studies.²³¹

The doctoral programmes may be offered in either Croatian, English²³² or other official language of the European Union.²³³ Postgraduate studies consists of preparing a doctoral dissertation, completing compulsory and elective courses and activities, for instance participation in seminars and conferences.²³⁴ The specific programme is designed for each student.²³⁵ The programme may require a final exam to be taken in the end of the studies.²³⁶ In exceptional cases, where the student has achieved scientific achievements, he/she may be awarded the doctoral degree without attending classes and taking exams.²³⁷

Generally, the doctorate programmes follow a yearly structure: in first year, the students complete most of the compulsory and elective courses (at least 30 ECTS), participate in research and teaching activities at the faculty, and propose a framework for the completion of the doctoral dissertation (minimum 90 ECTS). During the second year, the students prepare the doctoral dissertation and participate in various conferences, seminars and roundtables, and during the final year they finalise and present the doctoral dissertation.²³⁸

Each student is guided by a supervisor, who is in scientific-teaching profession and expert within the field in which the student submits the doctoral dissertation.²³⁹ The supervisor guides and monitors the student throughout the study.²⁴⁰ At least once a year, the student's progression is reviewed by the University or the competent Faculty. At least once in two years the student must submit a report of his work to the evaluation by the expert council.²⁴¹

²²⁸ Article 124 Statute of the University of Rijeka, Article 19 Regulation on Postgraduate Doctoral Studies.

²²⁹ Articles 20-21 Regulation on Postgraduate Doctoral Studies.

²³⁰ Article 125(2) Statute of the University of Rijeka.

²³¹ Article 22 Regulation on Postgraduate Doctoral Studies.

²³² Article 122(2) Statute of the University of Rijeka.

²³³ Article 12 Regulation on Postgraduate Doctoral Studies.

²³⁴ Article 122(1) Statute of the University of Rijeka.

²³⁵ Article 122(4) Statute of the University of Rijeka.

 ²³⁶ Article 123(2) Statute of the University of Rijeka.
 ²³⁷ Article 122(5) Statute of the University of Rijeka.

Article 122(5) Statute of the University of Rijeka.

²³⁸ Article 128(1) Statute of the University of Rijeka, Article 9 Regulation on Postgraduate Doctoral Studies.

²³⁹ Article 126(2) Statute of the University of Rijeka, Article 26 Regulation on Postgraduate Doctoral Studies.

²⁴⁰ Article 126(3) Statute of the University of Rijeka.

²⁴¹ Article 127 Statute of the University of Rijeka.

The doctoral dissertation is an original, public, and independent scientific work that confirms the student's abilities to conduct scientific research.²⁴² The dissertation can be completed in a form of monograph, artistic dissertation or exceptionally, in the form of thematically related published scientific papers.²⁴³ The topic of the dissertation must be publicly defended before an evaluation committee, who will within one month either accept or reject the proposed topic.²⁴⁴

After completing all other requirements of the doctoral programme, the student must submit an application for the evaluation of the doctoral dissertation. The application must contain a positive statement from the supervisor that the work submitted meets the requirements.²⁴⁵ The evaluation is divided by a majority vote, where each member of the committee prepares an independent report. The chairman of the committee makes a joint report and submits it to the doctoral Study Council within two months after the receipt of the dissertation. The candidate's supervisor may not be a member of the evaluation committee.²⁴⁶

After the application and positive evaluation, the final public defence of the dissertation will take place.²⁴⁷ The defence will take place in the premises of the University or its constituents, or with the approval of the Council, it may take place through online means. During the COVID-19 pandemic online defences were indeed possible, whereby lessons learned form the pandemic concern the need to be more flexible and embrace digital tools also for the future.²⁴⁸ Students completing joint or dual doctorates may hold the defence at another university.²⁴⁹

The doctoral dissertation and its defence are assessed by a committee appointed by the Doctoral Study Council. The committee consists of at least three members with a scientific title. The members of this committee may overlap with those of the committee evaluating the thesis during the preevaluation (although this is not mandatory). The members must be from the scientific field in which the research topic relates to, and at least one member must be external to the University. Other members are appointed by the Faculty, or the university department or institute where the dissertation is to be defended.²⁵⁰

After successful defence, the doctoral dissertation is to be submitted as an electronic version to the University Library of Rijeka. In case the research include innovation suitable for the protection of intellectual property rights, the student can request the dissertation to be treated confidentially.²⁵¹ Upon completion of the doctoral study, as stated above, one may obtain the degree of Doctor of Science of Doctor of Arts, within an indication of scientific field in which the study is performed.²⁵² Under certain conditions, the defence and evaluation of the doctoral dissertation may also be

²⁴² Article 30 Regulation on Postgraduate Doctoral Studies.

²⁴³ Article 31 Regulation on Postgraduate Doctoral Studies.

²⁴⁴ Article 33 Regulation on Postgraduate Doctoral Studies.

²⁴⁵ Article 35 Regulation on Postgraduate Doctoral Studies.

²⁴⁶ Article 36 Regulation on Postgraduate Doctoral Studies.

²⁴⁷ Article 37 Regulation on Postgraduate Doctoral Studies.

²⁴⁸ Based on information received from a representative of UNIRI.

²⁴⁹ Article 37(3) Regulation on Postgraduate Doctoral Studies.

²⁵⁰ Article 129 Statute of the University of Rijeka.

²⁵¹ Article 44 Regulation on Postgraduate Doctoral Studies.

²⁵² Article 40 Regulation on Postgraduate Doctoral Studies.

conducted in accordance with the standards to obtain the informal title of European Doctor of Science. $^{\rm 253}$

2.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

2.1.1.1 Faculty of Economics and Business

The Regulation at the Faculty of Economics and Business governs the doctoral programmes in the field of social sciences and economics, leading to the academic title of *Doktor znanosti* (Dr.sc/Ph.D). Following the national- and university-level regulations, the Faculty Regulation specifies the requirements on admission. Persons from various backgrounds (university graduate study programmes in economics or business economics, or other study programs in social sciences in the field of economics) are admissible to the doctoral programme. Furthermore, it is required that the applicants possess B2-level English language skills and have a 3.5 grade point average from the previous university studies. Finally, upon enrolment the applicant must submit a research proposal in the English language.²⁵⁴

The candidates admitted to the programme, who study full-time (for a maximum of 6 years²⁵⁵), have a fixed-term employment contact at the University. Alternatively, a candidate who has other sources of financing or funding, may study full-time if they are not employed by another employer. Other candidates study part-time²⁵⁶, for a maximum duration of 10 years.²⁵⁷ The Faculty Council sets out the amount of tuition fees to be paid by the doctoral candidates. In case the doctoral program is organised as a joint programme with other institutions, the amount of tuition to be paid is set by the mutual agreement between the institutions.²⁵⁸

The Regulation further specifies the supervisory arrangements. The Faculty Council will appoint an advisor or supervisor to the candidate from the teaching staff from the field of Economics. The supervisor must have relevant scientific experience (either published articles, books or papers) in the preceding five years. The supervisor may be appointed outside the Faculty if he meets the eligibility criteria for supervisors at the home institution or faculty.²⁵⁹

The doctoral students follow a program consisting of minimum 180 ECTS. The students must earn 20-30 ECTS during a stay in another university or scientific institution abroad.²⁶⁰ The studies must be completed in a certain order, where for instance during the first year the student must complete three courses and submit a first draft of the doctoral dissertation proposal.²⁶¹ The doctoral dissertation (either monograph or collection of published scientific papers) is to be written in Croatian or English, or upon prior approval, in another language.²⁶²

²⁵³ Article 41 Regulation on Postgraduate Doctoral Studies.

²⁵⁴ Article 5 The Regulation at the Faculty of Economics and Business.

 $^{^{\}rm 255}$ Article 43 The Regulation at the Faculty of Economics and Business.

²⁵⁶ Article 7 The Regulation at the Faculty of Economics and Business.

 $^{^{\}rm 257}$ Article 43 The Regulation at the Faculty of Economics and Business.

²⁵⁸ Article 8 The Regulation at the Faculty of Economics and Business.

²⁵⁹ Article 13 The Regulation at the Faculty of Economics and Business.

²⁶⁰ Article 16 The Regulation at the Faculty of Economics and Business.

²⁶¹ Article 17 The Regulation at the Faculty of Economics and Business.

²⁶² Article 31 The Regulation at the Faculty of Economics and Business.

The doctoral dissertation is pre-evaluated during a defence by a Board consisted of at least four members, among whom at least one is a recognised expert in quantitative economics. The defence is public and follows a set-out structure, after which (on a positive evaluation) the final public defence may take place.²⁶³ The Board will decide either by unanimous decision or by majority vote if the candidate has defended the dissertation successfully.²⁶⁴

2.1.1.2 Faculty of Law

According to the Statute of The Faculty of Law, students are admitted in accordance with the University Statute.²⁶⁵ The completion of doctoral studies leads to the academic degree of Doctor of Science (Ph.D).²⁶⁶ Next to the Faculty Statute, the Faculty of Law has issued multiple decisions specifying the requirements of the doctoral programme, the rules on admission, doctoral dissertation and supervisory arrangements.

The Decision on admission stipulates that candidates who have completed legal studies and have knowledge and/or skills necessary for pursuing scientific activities in the field of law (with a 3.5 grade point average from prior studies), are admissible for the doctoral programmes. They must be proficient in Croatian and have a command in a foreign language as far as needed for pursuing research in law, for example English, German, Italian or French. In case the candidate has insufficient knowledge of Croatian, he/she must be proficient in one of the additional languages of the programme. Upon admission, the doctoral candidate must present a prospective supervisor or co-supervisors among the Faculty members and have two recommendations from two university professors or two renowned lawyers.²⁶⁷ The supervisor of the doctoral candidate must be a lecturer of the Faculty with a scientific-teaching title, or is a distinguished foreign professor or an internationally recognised researcher.²⁶⁸

The doctoral dissertation at the Faculty of Law may be written in the form of monograph or collection of published scientific papers.²⁶⁹ The topic of the dissertation is subject to a prior approval. The topic may be defended in Croatian language, or with the approval of the supervisor, in another language of the study programme.²⁷⁰ The Committee evaluates the doctoral dissertation topic in a closed session.²⁷¹

2.1.2 Cluster 2: Psychology & Medicine

The Faculty of Medicine offers postgraduate doctoral studies leading to the academic degree of Doctor of Science, consisting of at least 180 ECTS,²⁷² in Biomedicine, Health and Environmental Engineering

²⁶³ Articles 33-38 The Regulation at the Faculty of Economics and Business.

²⁶⁴ Article 39 The Regulation at the Faculty of Economics and Business.

 $^{^{\}rm 265}$ Article 55 Statute of the Faculty of Law in Rijeka.

 $^{^{\}rm 266}$ Article 62 Statute of the Faculty of Law in Rijeka.

²⁶⁷ Article 6 Decision on admission to the doctoral study programme of the Law Faculty of the University of Rijeka.

 ²⁶⁸ Article 1 Decision on eligibility for a mentor at the Doctoral Study Programme of the Faculty of Law, University of Rijeka.
 ²⁶⁹ Article 2 Regulations on writing and formatting of doctoral dissertations at the University of Rijeka.

²⁷⁰ Article 9 Decision on the procedure concerning application for approval, public defence and evaluation of the doctoral dissertation topic.

²⁷¹ Article 11 Decision on the procedure concerning application for approval, public defence and evaluation of the doctoral dissertation topic.

²⁷² Articles 60-61 Statute of the Faculty of Medicine in Rijeka.

and in the scientific field of Biomedicine and Healthcare.²⁷³ The programme consists of compulsory and elective courses and activities, next to the preparation of doctoral thesis. The study program can be organised either in Croatian or English, also in cooperation with other domestic or foreign universities or scientific organisations.²⁷⁴

Applicants who have completed an appropriate graduate study, or other (as laid down by the national regulations) are admissible to the programmes at the Faculty.²⁷⁵ For the doctoral programme in Biomedicine, applicants with an appropriate undergraduate study in the scientific field of Biomedicine and health, natural sciences or some social sciences (such as psychology) are admissible for the programme.²⁷⁶ The Faculty follows the requirements on supervisory arrangements, programme structure and the defence of the doctoral dissertation as set in the University Statute.²⁷⁷

2.1.3 Cluster 3: Engineering

At the Faculty of Engineering, doctoral studies can be conducted in the scientific fields of Shipbuilding, Mechanical Engineering, Technical Sciences, Electrical Engineering and Computing. The successful completion of these studies leads to the academic degree of Doctor of Science.²⁷⁸ As the other doctoral programmes offered by the University of Rijeka, the study consists of minimum 180 ECTS and are to be conducted in Croatian or English.²⁷⁹

Based on the Act on Scientific Activity and Higher Education, those with a university graduate studies or university undergraduate studies are eligible for the doctoral programmes. Students who have not completed technical studies may apply if they can demonstrate appropriate knowledge to complete the studies, where completion of supplementary studies may be required.²⁸⁰ The selection criteria will consider the applicant's success at the previous studies, the grade of their diploma thesis, other acquired competencies, and recommendations from a university professor.²⁸¹ Furthermore, during the application procedure, the student must propose a supervisor. The supervisor must be a teacher from the study program.²⁸²

Next to the doctoral dissertation (monograph or published scientific papers, of minimum 90 ECTS)²⁸³, the student must complete a stay outside the University in another university or scientific institution for at least three months. The student also must fulfil teaching obligations of at least 42 ECTS.²⁸⁴ As

²⁷³ Medical Faculty of the University of Rijeka, https://www.medri.uniri.hr/hr/studenti.html.

²⁷⁴ Article 69 Statute of the Faculty of Medicine in Rijeka.

²⁷⁵ Article 71 Statute of the Faculty of Medicine in Rijeka.

²⁷⁶ Section 2.5 Faculty of Medicine: Doctoral programme in Biomedicine.

²⁷⁷ Articles 73-75 Statute of the Faculty of Medicine in Rijeka.

²⁷⁸ Articles 2-3 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

 ²⁷⁹ Article 2 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.
 ²⁸⁰ Article 7 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

²⁸¹ Article 9 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

 ²⁸² Article 17 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

²⁸³ Article 23, Article 29 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

²⁸⁴ Articles 21-22 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

for the other Faculties, the doctoral dissertation is subject to a pre-evaluation.²⁸⁵ The final defence will take place between 15 days and two months from the positive evaluation.²⁸⁶

3. Denmark

At the national level in Denmark, *Universitetsloven* (The Danish University Act) lays down rules on higher education.²⁸⁷ Regulation specific to doctoral education can be found from *Bekendtgørelse om ph.d.-uddannelsen ved universiteterne og visse kunstneriske uddannelsesinstitutioner* (The Ministerial Order on Phd Programmes at the Universities and Certain High Artistic Educational Institutions, hereinafter: The Ministerial Order).

In Denmark, the universities are tasked with performing research and offering research-based education.²⁸⁸ The universities must collaborate with the society and contribute to the development of international collaboration.²⁸⁹

Applicants holding a master's degree or equivalent are admissible to doctoral programmes.²⁹⁰ However, it is possible to enrol students in a master's degree programme and a doctoral degree programme concurrently.²⁹¹ It is the educational institution who decides on further criteria of admission²⁹², organisation of the doctoral programmes, supervision, writing and submission of the doctoral dissertation and its defence.²⁹³

A doctoral programme comprises of 180 ECTS, that can be arranged either full-time or part-time.²⁹⁴ The objective of the doctorate programme is to train doctoral students at an international level to perform research and teaching assignments in private and public sectors.²⁹⁵ The doctoral degree is awarded to students who successfully complete the programme and successfully defend their dissertation.²⁹⁶ During the programme, the student is required to carry out independent research under supervision, complete PhD courses or similar studies of approximately 30 ECTS, participate in active research environment, gain experience of teaching activities or other form of knowledge dissemination related to their research, and complete a doctoral dissertation.²⁹⁷ On case-by-case basis

²⁹¹ Section 4(4) The Danish University Act.

 ²⁸⁵ Article 27 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.
 ²⁸⁶ Articles 33-34 Regulation on postgraduate university (doctoral) studies of the Technical Faculty at the University of Rijeka.

²⁸⁷ The Danish University Act 2019.

²⁸⁸ Section 2(1) The Danish University Act.

²⁸⁹ Section 2(3) The Danish University Act.

²⁹⁰ Section 5(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹² Section 5(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹³ Section 25 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹⁴ Section 4(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹⁵ Section 1(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹⁶ Section 3(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹⁷ Section 7(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

derogations to this programme may be approved, if the student has completed comparable study elements.²⁹⁸

The doctorate candidate is supervised by a recognised researcher within the relevant field, employed by the institution and affiliated with the doctoral school.²⁹⁹ The institution may appoint other supervisors who are qualified in the relevant research field.³⁰⁰ Within three months of the start of the doctoral programme, the institution approves a research and study plan containing a schedule, agreement on the type of supervision and plan for the doctoral dissertation and studies. Furthermore, the plan describes the student's participation in active research environments, teaching activities and contains an agreement on intellectual property rights and a financing plan.³⁰¹ The plan and the student's progression is regularly assessed by the institution and the supervisor of the doctoral student.³⁰²

The dissertation must show the doctoral candidate's ability to apply relevant scientific methods, and his/her ability to carry out research meeting international standards for doctoral degrees.³⁰³ The institution lays down further requirements on the writing and submission of the dissertation. The dissertation is not permitted to be submitted by two or more authors jointly. Articles included in the thesis may be written in cooperation, provided that each other submits a written declaration stating the student's contribution to the work.³⁰⁴ The dissertation must contain an abstract in Danish and English.³⁰⁵

Within one week of the submission of the doctoral dissertation, the supervisor must submit an opinion whether the doctoral programme as a whole has been successfully completed.³⁰⁶ On the basis of this opinion and the regular assessment of the research and study plan, the institution determines whether the doctoral programme has been completed satisfactorily.³⁰⁷ Only after this determination, the doctoral dissertation can be accepted for assessment.³⁰⁸ A dissertation written by a doctoral student from a foreign educational institution may submit the dissertation for assessment, if the student has completed part of study as part of mutually obliging collaboration agreement at the

²⁹⁸ Section 7(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

²⁹⁹ Section 8(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁰ Section 8(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰¹ Section 9 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰² Section 10(1) T The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰³ Section 11 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁴ Section 12 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁵ Section 12(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁶ Section 14(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁷ Section 14(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³⁰⁸ Section 15(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

Danish institution, if the institution assesses that the student has acquired qualifications comparable to those acquired under a Danish doctoral programme.³⁰⁹

The doctoral dissertation is assessed in two parts: first, a preliminary assessment takes place. If the preliminary assessment is successful, a public defence of the dissertation may take place.³¹⁰ For the assessment of the dissertation, the institution appoints an assessment committee composed of three members. These members must be recognised researchers within the relevant field, from which two must be external researchers. At least one of these members must be from outside Denmark unless it is not suitable concerning the subject in question. The student's supervisor is not permitted to be part of this committee.³¹¹

The preliminary assessment is to be concluded within two months of the submission of the doctoral dissertation. The assessment committee makes a reasoned recommendation to the institution whether the requirements for the dissertation are fulfilled. In case the recommendation is favourable, the defence of the dissertation may take place³¹², by the earliest two weeks after the submission of the recommendation, but within three months at the latest.³¹³ In case of non-favourable recommendation, the committee states whether the thesis may be submitted for revised version.³¹⁴ The institution decides whether the defence may take place, if a revised version should be submitted, or if the thesis should be assessed by a new committee.³¹⁵

The dissertation is to be defended in public before the members of the assessment committee, in accordance with the rules laid down by the institution.³¹⁶ The assessment committee makes its reasoned recommendation immediately following the defence whether the doctoral degree may be awarded.³¹⁷ If the recommendation is negative, a new assessment committee may assess the dissertation upon a decision by the institution.³¹⁸

The institution may derogate from these requirements set in the Ministerial order in case of mutually obliging collaboration agreements on doctoral training with one or more foreign educational institutions. Derogations may be agreed in respect to the composition of the assessment committee,

³⁰⁹ Section 15(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁰ Section 18 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹¹ Section 16 The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹² Sections 18(1)-(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹³ Section 20(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁴ Section 18(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁵ Section 18(4) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁶ Section 19(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁷ Section 21(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³¹⁸ Section 21(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

the deadline for the preliminary assessment of the dissertation and its defence.³¹⁹ If derogations are applied, the institution must inform of these changes to the applicants and doctoral students before the application deadline.³²⁰

After the doctoral programme is completed and the dissertation is successfully defended, the person has the right to use the title PhD.³²¹ The educational institution provides a certificate to this effect in Danish and English.³²² The university may issue a Danish diploma to students who have completed education abroad in collaboration with one or more foreign universities. ³²³ For mutually obliging collaboration agreements, the institution may provide a certificate, appearing as a joint document, from one or more foreign institutions if the document is enforceable also under the foreign law.³²⁴ A certificate from a foreign institution may also be granted, if the diploma is also made enforceable under Danish law, and if the institution assesses that the qualifications acquired are comparable to those under a Danish doctorate programme.³²⁵ Both the Danish educational institution and the foreign institution(s) may both provide a certificate of award of the same doctoral degree (double degree or multiple degree).³²⁶

3.1 University of Southern Denmark

The University of Southern Denmark is a self-governing institution funded by the government within the public sector³²⁷ and is supervised by the Minister of Science, Technology, Innovation and Higher Education.³²⁸ The institutional regulations for the university can be found from *Vedtægt for Syddansk Universitet* (Statutes for the University of Southern Denmark, hereninafter: the Statute).³²⁹

The University is responsible for conducting research and offering research-based education at the highest international level within its academic fields³³⁰ and contribute to the development of international co-operation.³³¹ On the basis of the University Act and the Ministerial order, the universities prepare regulations on the PhD programmes³³², the admission criteria, the organisation of the programmes, appointment of the supervisors, writing and submission of the doctoral

³¹⁹ Section 26(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²⁰ Section 26(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²¹ Section 3(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²² Section 23(2) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²³ Section 3(6) The Danish University Act.

³²⁴ Section 23(3) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²⁵ Section 23(4) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²⁶ Section 23(5) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³²⁷ Section 1(2) The Danish University Act.

³²⁸ Section 1 Statutes For University of Southern Denmark 2018.

³²⁹ Statutes For University of Southern Denmark 2018

³³⁰ Section 1(2) Statutes For University of Southern Denmark 2018.

³³¹ Section 1(3) Statutes For University of Southern Denmark 2018.

³³² Section 7(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

dissertations, and its defence.³³³ The internal regulations are approved by the head of the PhD school.³³⁴

The rector of the university appoints one or more PhD committees, that have the tasks to approve courses, prepare proposal for internal guidelines for the PhD school, and to express and opinion on all matters of importance to the doctoral education.³³⁵ Members of the PhD committees are thereby elected by and from the academic staff and teachers as well as by and from the PhD students.³³⁶

The faculties of the University of Southern Denmark offer multiple types of doctoral programmes: a standard university-based research doctorate, double or joint doctorates, integrated doctorate programme and industrial doctorate programme. The industrial PhD programme is a co-operation between the Danish Agency for Science, Technology and Innovation under the Ministry of Science, Technology and Innovation, a private company or the public sector, an Industrial PhD student, and a university. As far as international cooperation is concerned, most of SDU's faculties only enter into double degree agreements (e.g. double degrees are the preferred format at Health while Science has both joint and double doctorates). A student who has not yet completed their master's degree furthermore has the option to apply for an integrated doctorate programme, where the last year of master's degree is combined with the PhD programme.³³⁷

During their doctorates, doctoral candidates are mostly employed by SDU whereby they are considered both employees as well as students. Other types of candidates may not be employed (i.e. they are considered private students but hold the same privileges as employees), may be on scholarship, or may follow a four plus four programme where two years of studentship are followed by two years of employment).³³⁸ Depending on the type of contract, candidates may or may not perform additional duties and department work (such as teaching). Funding thereby mostly originates from various sources ranging from the institutions itself, to national funds from research/educational institutions, (private or public) companies, organisations, and funds, as well as foreign sources such as EU funds.³³⁹ During their doctorates, candidates are mostly subject to the doctoral regulations of the individual faculties. However, during their doctorates, all candidates must participate in a Responsible Conduct of Research course of 2 ECTS points. Candidates are furthermore offered screening of their theses for plagiarism. As far as the defence is concerned, SDU has been maintaining online ³⁴⁰

3.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

At the Faculty of Humanities, the decision on admission is made by the head of the Graduate School on the basis of reasoned request from the head of the department and after recommendations from

³³³ Section 25(1) The Ministerial Order on the Phd Programme at the Universities and Certain High Artistic Educational Institutions.

³³⁴ Section 36(4) Statutes For University of Southern Denmark 2018.

³³⁵ Section 16b The Danish University Act.

 ³³⁶ Section 37(1) Danish Statutes for University of Southern Denmark 2018.
 ³³⁷ University of Southern Denmark, 'Research training programmes'

https://www.sdu.dk/en/forskning/phd/forskeruddannelsesprogrammer.

³³⁸ Based on information received by a representative of SDU.

³³⁹ Ibid.

³⁴⁰ Ibid.

representatives of the academic staff. The admission is based on a master's or equivalent degree. The applicants are required to independently prepare a research project description.³⁴¹ Admission for double or joint degrees can take place against the background of a framework agreement between the faculty and the partner institution.³⁴²

The request of the head of the department should include the applicant's name and degree, title of the project and a statement on the applicant's academic potential for the doctoral degree. The request should also include suggestion for a principal supervisor and for the research degree programme to which the project will be associated.³⁴³ The principal supervisor of the doctoral candidate must be employed by the faculty and attached to the graduate school. The supervisor must be a recognised active researcher at no less than an associate professor or senior research level in the relevant subject area.³⁴⁴

The doctoral programme is normally arranged as a full-time study, but in particular circumstances it can be arranged as a part-time study for no longer than 6 years.³⁴⁵ The doctoral candidate must follow a PhD plan describing the research and other activities that are to be carried out in course of the programme.³⁴⁶ The programme must include courses or other similar teaching modules in total of 30 ECTS.³⁴⁷ For double and joint degrees, an individual agreement is made concerning the contents of the PhD programme, which the PhD plan follows.³⁴⁸

The doctoral dissertation can be concluded in a form of a monograph or an anthology. An anthology should consist of three to six articles and a summary. The student should be a sole author in at least one article and principal author for at least another article. The dissertation should demonstrate the student's ability to conduct independent research through academic methods, advancing research in its specific field. Its length and level should correspond to work of two years (120 ECTS).³⁴⁹ The dissertation is written either in English or Danish, or in special circumstances, in another foreign language.³⁵⁰ The dissertation should include an abstract in Danish and English.³⁵¹

After a successful preliminary assessment, a public defence takes place. It consists of presentation of the project no more than 30 minutes of duration, after which the external member of the assessment committee can oppose for 30 minutes. The assessment committee's chairperson concludes the defence after the discussion is opened to public. The entire process must be no longer than three hours in duration.³⁵² If the defence is completed satisfactorily, provided that the requirements of the programme has been met, the assessment committee recommends that the PhD degree is to be

³⁴¹ Section 6(1) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴² Section 33 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴³ Section 6(2) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴⁴ Sections 7(1)-(3) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴⁵ Section 6(3) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴⁶ Sections 8(1)-(2) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴⁷ Section 11 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁴⁸ Section 33 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.
³⁴⁹ Sections 14(1)-(2) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁵⁰ Sections 14(1)-(2) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁵⁰ Section 16 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities. ³⁵¹ Section 15 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁵² Section 24 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

awarded.³⁵³ As part of mutually binding cooperation agreement, the dean can permit a dissertation written by a doctoral student from a foreign institution to be accepted for assessment.³⁵⁴

The dissertation is the property of the author, however, the copies of the dissertation submitted belong to the university. The dissertation may be made public with the permission of the student.³⁵⁵

3.1.2 Cluster 2 – Psychology & Medicine

At the Faculty of Health Sciences, a doctorate degree (Ph.D) can be pursued in health sciences, laboratory research, social studies research and clinical research. To be admissible to the doctoral programme, the applicant must have completed a master's degree or other relevant degree that concludes a research-based study programme of minimum five years' duration at a higher educational institution. Applicants with other relevant degree might be admissible, where the institution makes an individual assessment of their academic qualifications. In addition to these qualification requirements, the applicant must have relevant research experience.³⁵⁶

The doctoral programme can be organised in various ways. At the faculty, a collaboration agreement for joint doctorate programmes is possible. The student and his/her main supervisor submit a form to the Graduate School of Health Sciences, where the Head of the Graduate school has the right to accept or reject the proposal. The doctoral candidate's academic qualifications, and whether the foreign doctoral programme is comparable to the Danish programme, is to be evaluated. The candidate must be admissible to the doctoral programme at the Faculty of Health Sciences, and have a main supervisor at the home university, and a co-supervisor at the collaborating university who is employed as an associate professor or at professor level. The agreement must describe financial conditions on tuition fees, and other fees and reimbursements.³⁵⁷

The doctoral dissertation can be completed as a monograph, or as form of manuscripts or accepted papers for scientific journals. In case of a manuscript, the dissertation consists of a text clarifying the research problem, the research methods, achieved results and a critical assessment of these in relation to the existing knowledge in the field. For a monograph, the doctoral candidate must enclose an explanation of how the monograph is to be published with reference to the international traditions within the specific research area. If parts of the project are jointly prepared with other researchers, the doctoral candidate's contribution must be clarified by a declaration signed by all contributors.³⁵⁸

The dissertation must be written in English or Danish, where a summary in both languages must be included. The dissertation is assessed by the assessment committee appointed by the Faculty. The dissertation must meet the standard requirements of originality and quality of scientific work, and use scientific methods correctly. The assessment is made on the basis of the research methods, data,

³⁵⁶ University of Southern Denmark, 'Required Qualifications'

³⁵³ Section 29(3) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁵⁴ Section 32 University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

³⁵⁵ Section 20(2) University of Southern Denmark: Regulations for PhD programmes at the Faculty of Humanities.

https://www.sdu.dk/en/forskning/phd/phd_skoler/phdskolensundhedsvidenskab/phd_students/getting_started/qualificat ion_requirements.

³⁵⁷ SDU Faculty of Health Sciences: Guidelines for collaboration agreements regarding joint PhD programmes for PhD students, p. 1.

³⁵⁸ SDU Faculty of Health Sciences: Guidelines for the assessment of PhD Theses, p. 1.

critical assessment of the results, discussion and bibliography. The committee makes a recommendation whether the doctoral dissertation is suitable for defence.³⁵⁹

The defence session consists of a lecture of 30-45 minute given by the doctoral candidate, after which two external members of the assessment committee examines the candidate. It is the responsibility of the chair of defence to assure that the defence session does not last longer than two hours. After the session, the assessment committee concludes the assessments and signs the Faculty's doctoral protocol, if the course of defence has been satisfactory.³⁶⁰ For joint doctorates in collaboration with a foreign university, the defence must be a public lecture in English.³⁶¹

3.1.3 Cluster 3 – Engineering

At the Faculty of Engineering, the head of the doctorate school approves admission to the doctoral programmes. Applicants with a Danish master's degree or equivalent are admissible for the doctoral programmes. In addition, the applicant must meet one of the two levels for grade point averages. For entire bachelor and master's programmes or equivalent a grade average of at least 8.2 (on Danish 7-step scale), or 9 (on a 13-step scale) is required. For a Danish two-year master's degree, a weighted average of at least 9.5 (on 7-step scale) or 9.4 (13-step scale) is required. Furthermore, the applicant must have attained a grade of 10 on Danish scale for their thesis or a final project.³⁶² The applicant may be exempted from the grade requirements if they hold other relevant qualifications, including scientific publications, professional experience, or high grades in relevant subjects for their research project.³⁶³

The programme is a three-year full-time study (180 ECTS)³⁶⁴, or in case of part-time a maximum of six years in duration.³⁶⁵ It consists of doctoral dissertation, its public defence and courses of 30 ECTS. In addition, the doctoral candidate must participate in active research environments for at least three consecutive weeks and perform a minimum of 300 dissemination hours.³⁶⁶

For the completion of the doctoral programme the student makes a research and study plan that is approved by the head of the doctoral school.³⁶⁷ The doctoral candidate is entitled and obliged to receive supervision. He/she is appointed a principal supervisor and up to three project supervisors or co-supervisors. The principal supervisor must be employed at the Faculty of Engineering as an associate professor or professor and actively conduct research in the field of the doctoral candidate's project.³⁶⁸ The project supervisors and co-supervisors may be lecturers outside the Faculty holding a doctorate degree or equivalent.³⁶⁹

³⁵⁹ SDU Faculty of Health Sciences: Guidelines for the assessment of PhD Theses, p. 2.

³⁶⁰ SDU Faculty of Health Sciences: PhD Defences Code of Conduct.

³⁶¹ SDU Faculty of Health Sciences: Guidelines for collaboration agreements regarding joint PhD programmes for PhD students, p. 2.

³⁶² SDU Rules governing the PhD Program at the Faculty of Engineering, p. 2.

³⁶³ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 3.

³⁶⁴ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 1.

³⁶⁵ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 25.

³⁶⁶ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 4.

³⁶⁷ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 5.

³⁶⁸ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 22-23.

³⁶⁹ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 24.

The doctoral students hold either a scholarship of employment from the university, or an industrial PhD position in collaboration with a company and the Faculty of Engineering. Alternatively, the doctoral candidate can be self-financed via external resources, where an agreement with one of the faculty's research units is required. Tuition fees can be charged.³⁷⁰

The doctoral dissertation must demonstrate the student's ability to apply relevant scientific methods and to conduct a research project complying with international standards for doctorate degrees within the academic field concerned.³⁷¹ The dissertation must be written in English and include an abstract in both Danish and English. With the permission of the head of the doctorate school, the dissertation may be written in Danish. The dissertation can be written in a form of monograph or an anthology.³⁷² The dissertations are submitted for a review of originality before submission, evaluation and defence takes place.³⁷³ Both the dissertation and the defence are publicly accessible.³⁷⁴

As for the other Faculties, the submitted dissertation undergoes a written preliminary assessment³⁷⁵ and is defended in public. After the defence the evaluation and defence committee establishes a written final evaluation of the dissertation and the defence.³⁷⁶ If the final evaluation is favourable, the doctoral degree is awarded by the faculty academic council. The diploma is written in Danish and English and includes the title of the dissertation, title of the degree, course activities and information on performed knowledge dissemination and change of research environment.³⁷⁷

4. Finland

At the national level in Finland, the requirements for doctorate degrees are laid down in several regulations. *Yliopistolaki* (The Universities Act) lays down rules on the operation of universities and the education provided.³⁷⁸ *Valtioneuvoston asetus yliopistojen tutkinnoista* (Government Decree on University Degrees, hereinafter: The Government Decree) further regulates scientific and artistic postgraduate degrees.³⁷⁹ The education by the universities may be organised in cooperation with another universities, where higher educational cooperation may be arranged with both Finnish and foreign higher educational institutions.³⁸⁰

The objective of the doctorate degree, as laid down in Section 21 of the Government Decree, is that the doctoral candidate becomes profoundly familiar in a field of research, understanding its social significance.³⁸¹ The candidate gains skills, knowledge, and methods for independent scientific research, enabling him/her to produce critically new academic knowledge within that field of

³⁷⁰ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 1.

³⁷¹ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 12.

³⁷² SDU Rules governing the PhD Program at the Faculty of Engineering, p. 14.

³⁷³ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 13.

³⁷⁴ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 14.

³⁷⁵ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 18.

³⁷⁶ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 20.

 $^{^{377}}$ SDU Rules governing the PhD Program at the Faculty of Engineering, p. 22.

³⁷⁸ Yliopistolaki 558/2009.

³⁷⁹ Valtioneuvoston asetus yliopistojen tutkinnoista 794/2004.

³⁸⁰ Section 7a Yliopistolaki and Section 3 Valtioneuvoston asetus yliopistojen tutkinnoista refers to international

cooperation on bachelor and master level education, and does not directly refer to doctoral education. However, the legal instrument also applies to doctoral education provided by the universities.

³⁸¹ Section 21(1) Valtioneuvoston asetus yliopistojen tutkinnoista.

research.³⁸² Furthermore, the candidate becomes conversant with the development, problems and research methods of his/her field³⁸³, where the knowledge of general theory of science enables the candidate to follow developments relating to their specific field of research.³⁸⁴ The objective is that the candidate gains communicative and language proficiency, among other knowledge and skills, that are adequate for specialist duties at work and in international collaboration.³⁸⁵

Postgraduate degree may be pursued after the completion of a master's degree or equivalent studies. This can be a relevant master's degree awarded by a university or by a university of applied sciences. A study programme completed abroad may provide admissibility, if the awarding country grants eligibility for the corresponding level of higher education.³⁸⁶ In addition, the university may deem a person eligible who holds otherwise sufficient knowledge and skills for the studies.³⁸⁷ Supplementary studies may be required, equipping the student with the necessary skills and knowledge needed for the programme.³⁸⁸

It has to be noted that in Finland, next to the doctorate degrees, one can pursue a licentiate degree as part of postgraduate studies.³⁸⁹ The degree is a pre-doctorate degree, that one is eligible for after completing master's or equivalent studies. Distinction must be made in the field of medicine, where due to the extent of the studies the student does not obtain a master's degree, but a licentiate degree, after which a doctorate degree can be pursued.³⁹⁰ For the purposes of this research, the focus will be on doctorate degrees.

The admission criteria on doctoral programmes are decided by the universities. However, the criteria must be consistent for all applicants. The applicants may be divided into separate applicant categories on the basis of their educational background. Exceptions on the admission criteria may be made to a limited extent in order to meet the educational needs of a given language group.³⁹¹

After enrolment to the doctoral programme, there is no legal limitation on the duration of the study right³⁹², but commonly the programmes are aimed to be concluded in 4 years.³⁹³ Education leading to university is, in principle, free of charge. However, this does not prevent foreign educational institutions charging fees as part of the joint or double degree programmes.³⁹⁴

For a successful doctoral degree to be obtained, the candidate is required to complete the components of the degree listed in Section 22 of the Government Decree. This includes completing the required postgraduate studies³⁹⁵, demonstrating independent and critical thinking in the chosen

³⁸² Section 21(2) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁸³ Section 21(3) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁸⁴ Section 21(4) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁸⁵ Section 21(5) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁸⁶ Section 37(5) Yliopistolaki.

³⁸⁷ Section 37(10) *Yliopistolaki*.

³⁸⁸ Section 37(6) Yliopistolaki.

³⁸⁹ Section 23 Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁹⁰ Section 13 Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁹¹ Section 36(3) Yliopistolaki.

³⁹² The study right on postgraduate degrees is not limited in the Universities Act

³⁹³ University of Eastern Finland, 'Doctoral Education in General', <u>https://kamu.uef.fi/student-book/tohtorikoulutus/</u>, 22 January 2020.

³⁹⁴ Section 8(1) Yliopistolaki.

³⁹⁵ Section 22(1) Valtioneuvoston asetus yliopistojen tutkinnoista.

field of research³⁹⁶, and writing a doctoral dissertation and defending it in public, or by supplying any other final project stipulated by the university.³⁹⁷

The diploma for postgraduate degree must indicate the name of the degree, field of the education, major subject of the degree programme, possible specialisations, and the main content of the degree.³⁹⁸ Degrees completed in another language than Finnish or Swedish will, next to the degree title in these languages, obtain a degree title in English.³⁹⁹ In case of education leading to one or more degrees together with one or more Finnish or foreign universities, the diploma specifies other degrees and diplomas issued on the basis of the same education and the other universities that issue the degree.⁴⁰⁰

4.1 University of Eastern Finland

The University of Eastern Finland is a corporation under public law.⁴⁰¹ The official language of education is Finnish, but the university may decide to provide degrees and educations in other languages.⁴⁰²

Itä-Suomen yliopiston Opintojohtosääntö (Study Regulations of University of Eastern Finland, hereinafter: the UEF Study Regulations) applies to studies and degrees completed at the university.⁴⁰³ Joint degree programmes, which are organised together with a Finnish or a foreign university, are subject to separate agreements between the universities involved. Students participating in education provided through the cooperation are subject to the administrative authority of the higher education institution that offers the education.⁴⁰⁴ The University also offers *cotutelle*-degrees, where the doctoral degree is completed at the UEF and a foreign university, fulfilling programme requirements in both the universities and leading to a degree from both universities.⁴⁰⁵

The UEF Doctoral School provides doctoral education in general transferrable skills for all its doctoral researchers and is in charge of the general development of doctoral education. Doctoral education at UEF is organised in 13 doctoral programmes. Doctoral programmes may be organised independently by a faculty or in cooperation with other faculties. The doctoral programmes may involve national and international cooperation, where joint national or international doctoral programmes may be organised.⁴⁰⁶ The degrees are offered at the faculty are defined by the faculty curriculum. The faculty curriculum defines the curricula for each degree programme and the common provisions applying to all programmes within the faculty.⁴⁰⁷

³⁹⁶ Section 22(2) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁹⁷ Section 22(3) Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁹⁸ Section 26 Valtioneuvoston asetus yliopistojen tutkinnoista.

³⁹⁹ Section 9(3) Yliopistolaki, Section 4 Valtioneuvoston asetus yliopistojen tutkinnoista.

⁴⁰⁰ Section 26 Valtioneuvoston asetus yliopistojen tutkinnoista.

⁴⁰¹ Section 1(2)(2) Yliopistolaki, Section 1(3), Section 123 Suomen perustuslaki (Finnish Constitution).

⁴⁰² Section 11 Yliopistolaki.

⁴⁰³ Section 1 UEF Study Regulations.

⁴⁰⁴ Section 7 UEF Study Regulations.

⁴⁰⁵ UEF, 'Cotutelle-kaksoistutkinto', <u>https://kamu.uef.fi/student-book/cotutelle-kaksoistutkinto/</u>. Accessed on 19.04.2021.

⁴⁰⁶ Section 26 UEF Study Regulations.

⁴⁰⁷ Section 20 UEF Study Regulations.

Each doctoral programme has a director and a steering committee. The steering committee is responsible for the organisation of the studies, developing the postgraduate education, preparing admission criteria and curricula, and evaluating the applications for the doctoral programme.⁴⁰⁸ Each doctoral researcher is guided by at least two supervisors, where one is a principal supervisor. The students are provided guidance for both their research work and their postgraduate degree studies.⁴⁰⁹

Once admitted to the doctoral degree, the candidate will have a study right to complete the degree and studies included in the programme. The right does not concern a position of employment by the university. Therefore, the study right on doctoral degree does not include funding. The doctoral candidate can apply for funding via grants or scholarships, and may be eligible for student aid. Alternatively, the doctoral candidate may work as a researcher in a research project or apply for an employment position as a doctoral researcher at the university for a maximum duration of four years.⁴¹⁰ Some candidates may also undertake additional duties beyond their doctorates. Since the benefits of social security are only available for those employed, from June 2021 it is aimed that also those doctoral students funded via scholarships would be eligible to apply for a part-time position of employment at the University. In order to be eligible for this, the funding of the candidate must be an external grant to that of University, and the doctoral student must be reside and work from Finland.⁴¹¹

The doctoral researcher submits the doctoral thesis for preliminary examination. The Dean of the faculty appoints two examiners who are in principle not connected to the university. The preliminary examination must be given within two months of the final thesis being sent to them, subject to extension by Dean if necessary.⁴¹² After a favourable preliminary examination, the Dean grants permission for the dissertation to be defended publicly. For this public examination, the Dean appoints at least one opponent from outside the university, holding at least a docent's qualification or a corresponding academic qualification. In addition, the Dean appoints a custos to represent the university. Within two weeks after the public examination is held, the opponents are required to issue a written statement on the dissertation and its defence. Based on the opponent's written statement, the dissertation will be evaluated by the faculty council. The doctoral researcher may withdraw the doctoral thesis from the process. In terms of format, UEF has made use of online defences during the COVID-19 pandemic and expects possibilities for online defences to be maintained in the future as well.⁴¹³

The doctoral dissertations are assessed on the scale pass-pass with distinction, or using the following seven grades (lowest to highest): *approbatur, lubenter approbatur, non sine laude approbatur, cum laude approbatur, magna cum laude approbatur, eximia cum laude approbatur* and *laudatur*.⁴¹⁴

⁴⁰⁸ Section 26 UEF Study Regulations.

⁴⁰⁹ Section 25 UEF Study Regulations.

⁴¹⁰ University of Eastern Finland, 'Funding options of doctoral studies', <u>https://kamu.uef.fi/en/student-book/funding-options-of-doctoral-studies/</u>. Accessed on 19.04.2021.

⁴¹¹ UEF, 'Itä-Suomen yliopisto parantaa apurahatutkijoidensa asemaa: tarjolla osa-aikainen työsuhde',

https://www.uef.fi/fi/artikkeli/ita-suomen-yliopisto-parantaa-apurahatutkijoidensa-asemaa-tarjolla-osa-aikainen-tyosuhde.

⁴¹² Section 37 UEF Study Regulations.

⁴¹³ Based on information received by a representative of UEF.

⁴¹⁴ Section 33 UEF Study Regulations.

The doctoral dissertations are public.⁴¹⁵ The dissertations shall be made available for a public viewing at the university library as an electronic or paper version no later than 10 before the public examination.⁴¹⁶ The universities are obligated to ensure that the dissertation does not include confidential material.⁴¹⁷ The copyrights to the dissertation remain with the PhD candidate, who signs a contract with the university providing them mere publication rights.⁴¹⁸ The student answers for the originality of their dissertation, where the originality is tested by using an electronic plagiarism detection system.⁴¹⁹

4.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

As was stated in the UEF Study Regulations, the Faculties specify their own curricula and requirements for the doctoral programmes.⁴²⁰ The Faculty of Social Sciences and Business studies follow common regulations, where each programme is specified further in their own guidelines.⁴²¹

Next to the doctoral dissertation, the programmes consist of 50 ECTS, 40 ECTS in business studies supporting the doctoral research. The doctoral candidate will be appointed two supervisors, of which the principal supervisor must be a professor, assistant professor, docent or equivalent from the Faculty of Social Sciences and Business studies. The second supervisor must hold a doctorate degree.⁴²²

In the preliminary assessment of the doctoral dissertation, the Dean appoints two persons outside the university, who hold at least the qualifications of a docent or equivalent academical proficiencies. The dissertation can be completed in a form of monograph (research written by the postgraduate student as an independent publication), or in form of article dissertation (that consists of at least three articles, of which one must be published and two to be approved for publication). The dissertation may be written in the language in which the faculty provides education.⁴²³

The faculty committee decides on the grade of the dissertation on the basis of the written statement given by the opponent. The most important evaluative criteria of the dissertation are the scientific relevance of the research and the students own research effort. Next to this, the evaluation will take in consideration the research process, results and their presentation, the defending on the dissertation, and whether ethical scientific practise has been followed in the research and in the documentation of the results.⁴²⁴

⁴¹⁵ Section 12(2) *Suomen Perustuslaki,* Section 1 *Laki viranomaisten toiminnan julkisuudesta* (Act on the Openness of Government Activities)

⁴¹⁶ Section 37 UEF Study Regulations.

⁴¹⁷ Finnish Ministry of Education Guidelines: Publicity of theses, 28 January 2004.

⁴¹⁸ University of Eastern Finland: Contract on publication.

⁴¹⁹ Section 37 UEF Study Regulations.

⁴²⁰ Section 20 UEF Study Regulations.

⁴²¹ UEF Faculty of Social Sciences and Business studies: Regulations on doctoral programmes.

⁴²² UEF Faculty of Social Sciences and Business studies: Regulations on doctoral programmes, p. 2.

⁴²³ UEF Faculty of Social Sciences and Business studies: Regulations on doctoral programmes, p. 3.

⁴²⁴ UEF Faculty of Social Sciences and Business studies: Regulations on doctoral programmes, p. 4.

4.1.1.1 Doctoral programmes in Law

The Faculty of Social Sciences and Business Studies offers two doctoral degrees in law: Doctor of Law (LL.D) and Doctor of Philosophy (Ph.D).⁴²⁵ Next to the doctoral dissertation, the doctoral degree consists of 50 ECTS of studies supporting the research project and professional competences. The objective of these studies is to familiarise the student with research methods and theories in their field of research that qualifies the student to prepare a doctoral dissertation.⁴²⁶

To be eligible to pursue a doctoral degree in law, the applicant must have completed a Master of Law degree (LL.M.) or other corresponding master's degree. In evaluation of the admission, attention is paid to the quality of the research plan, the applicant's success in his/her prior studies, and if relevant, prior publications.⁴²⁷

To be admissible to the doctoral degree in philosophy (Ph.D), the applicant must have completed a higher university degree that includes a sufficient amount (60 ECTS) of legal studies supporting the completion of the doctoral dissertation. In this evaluation the amount of methodological and theorical studies completed, as well as the relationship between the prior legal studies and the doctoral dissertation, will be considered. The quality of the research plan, the applicant's merits and the number of publications will be also evaluated.⁴²⁸

As an additional requirement for both programmes, it is required that the applicant's master thesis has been awarded by a grade of 3/5 or *cum laude approbator* or higher. If the applicant shows his/her eligibility by, for example, an outstanding research plan or publications, this requirement may be waived.⁴²⁹

The application procedure starts with the applicant presenting his/her research plan to a professor at the faculty, who will decide if he accepts to supervise the research. After the approval, the applicant can submit the application with the relevant documents. The board of the doctoral programme will interview the individual applicants, after which they provide a statement on the admission. Based on this statement, the final decision on admission is made by the Dean of the faculty.⁴³⁰

For each doctoral candidate at least two supervisors are appointed, of which one must be a professor or a docent at the university. A person who has equivalent scientific competence to a professor or a docent and is member of the staff at the faculty can also be appointed as a supervisor.⁴³¹

4.1.1.2 Doctoral programmes in Economics

The Faculty offers a doctoral programme in Business, providing the title of Doctor of Science, Economics and Business Administration. The objective of the programme is to familiarise the student

⁴²⁵ UEF Doctoral Programme in Law 2020-2021.

⁴²⁶ UEF Doctoral Programme in Law 2020-2021, p. 3.

⁴²⁷ UEF Doctoral Programme in Law 2020-2021, p. 1.

⁴²⁸ Ibid.

⁴²⁹ Ibid.

⁴³⁰ UEF Doctoral Programme in Law 2020-2021, p. 3.

⁴³¹ UEF Doctoral Programme in Law 2020-2021, p. 2.

with research on business, research methods, and to deepen their knowledge in the specific field of research chosen by the student. The programme encourages internationalisation, research exchanges, conferences and publishing in international forums.⁴³² Next to the doctoral dissertation, the student must complete studies of 40 ECTS.⁴³³

Admissibility for the doctoral programme can be granted on basis of various studies.⁴³⁴ To be eligible to pursue a doctoral degree in economics, the applicant must have completed a Finnish master's degree in economics, with at least *cum laude approbator* (with good knowledge).⁴³⁵ Other Finnish master's degrees may also provide eligibility, if their thesis is graded at least *cum laude approbator*, and the studies are completed with good knowledge. In this case, it is required that the applicant holds sufficient knowledge and skills in relation to the doctoral research.⁴³⁶

One may also be admissible for the programme with a foreign degree that provides in that country the eligibility for doctorate education. In this case, it is required that the applicant can demonstrate with his/her studies to have sufficient knowledge and skills in relation to the doctorate research.⁴³⁷ Applicants with a master's of business administration (MBA) degree may be eligible, if the content of the studies corresponds to the Finnish master's degree in economics.⁴³⁸

Applicants with corresponding Finnish or foreign degree, that includes a thesis or another research project as part of the education, may also be admissible. The director of the doctoral programme assesses the suitability of the candidate to the programme and if supplementary studies are required.⁴³⁹

The candidate must present two suitable supervisors.⁴⁴⁰ The doctorate research plan is evaluated assessing its relevance to the research field of business, its innovativeness, structure and by the research ethics applied. The applicant must be also proficient in English.⁴⁴¹

Next to monograph and article dissertation, the doctoral candidate may write the doctoral dissertation in form of an essay dissertation. The essay dissertation consists of at least three published or unpublished, independent entities which address the same research problem or set of problems. The independent entities can be scientific articles or other publications or parts of unpublished essays.⁴⁴² The final dissertation must show that the doctoral candidate is deeply acquainted with his or her own field of research related disciplines and general scientific theory. In addition, it must demonstrate the skill of the author to apply independently and critically methods of scientific research in their field of research.⁴⁴³

⁴³² UEF Structure of Doctoral programmes in Business, p. 2.

⁴³³ UEF Structure of Doctoral programmes in Business, p. 1.

⁴³⁴ UEF Selection criteria: Doctoral programmes in Business.

⁴³⁵ Section 1 UEF Selection criteria: doctoral programmes in Business.

⁴³⁶ Section 2 UEF Selection criteria: doctoral programmes in Business.

⁴³⁷ Section 3 UEF Selection criteria: doctoral programmes in Business.

⁴³⁸ Section 4 UEF Selection criteria: doctoral programmes in Business.

⁴³⁹ Sections 5-7 UEF Selection criteria: doctoral programmes in Business.

⁴⁴⁰ Section 8 UEF Selection criteria: doctoral programmes in Business.

⁴⁴¹ Section 10 UEF Selection criteria: doctoral programmes in Business.

⁴⁴² UEF Structure of Doctoral programmes in Business, p. 3.

⁴⁴³ UEF Structure of Doctoral programmes in Business, p. 3.

4.1.2 Cluster 2 – Psychology & Medicine

The Faculty of Health Sciences offers doctoral programmes in clinical medicine, pharmaceutical research, molecular medicine and in health sciences. Upon successful completion of the programme, one may obtain the title of Doctor in Medical Science, Doctor of Dental Science, Doctor of Philosophy, Doctor of Science (Pharmacy) or Doctor in Health Sciences, depending on the chosen doctoral programme.⁴⁴⁴

A person applying for a clinical doctoral programme must have completed a university degree suitable for the doctoral programme.⁴⁴⁵ To be eligible for doctoral programme in pharmaceutical research, the applicant must have completed a pharmaceutical, scientific, or other appropriate higher university degree or equivalent study.⁴⁴⁶ For doctorate programmes in molecular medicine, applicants with a completed scientific, medical, dental, pharmaceutical, health science or equivalent university degree are eligible. A person who holds otherwise sufficient knowledge and skills may be also deemed admissible by the university.⁴⁴⁷ The doctoral programme in health sciences accepts persons with a master's or licentiate degree, or an educational background appropriate to the areas of the programme. Postgraduate students in nursing are required to have completed a university degree before applying.⁴⁴⁸

Next to the criteria on education, the Faculty applies common selection criteria. The selection criteria assess the quality of the research plan, scientific and practical relevance of the research topic, the applicant's previous experience in research, their success in previous studies and his/her international orientation and language skills required for the studies. Depending on the doctorate programme, the doctoral candidate completes studies of 30-40 ECTS next to their doctoral dissertation.⁴⁴⁹

The doctoral dissertation can be written in a form of monograph or compilation of articles. Before the final examination, the doctoral dissertation is subject to a pre-assessment by two external evaluators. The dissertation is evaluated based on common criteria on a 1-5 scale. The criteria refer to the research plan, methods, results, the candidate's effort and knowledge, and reflections.⁴⁵⁰

5. France

In France, the third cycle is understood as doctoral education in and through research that contributes to the realisation of original scientific research resulting in the title of doctor.⁴⁵¹ To obtain the degree, a candidate has to defend the thesis or original scientific work which may be the result of a collective work.⁴⁵² The doctoral diploma must make mention of the institution that has delivered it and provides

modalités conduisant à la délivrance du diplôme national de doctorat.

⁴⁴⁴ UEF Admission criteria for Faculty of Health Sciences.

⁴⁴⁵ UEF Admission criteria for Faculty of Health Sciences, p. 1.

⁴⁴⁶ UEF Admission criteria for Faculty of Health Sciences, p. 2.

⁴⁴⁷ UEF Admission criteria for Faculty of Health Sciences, p. 3.

⁴⁴⁸ UEF Admission criteria for Faculty of Health Sciences, p. 4.

⁴⁴⁹ UEF Admission criteria for Faculty of Health Sciences.

⁴⁵⁰ UEF, 'Terveystieteiden tiedekunnan ohjeet väitöskirjan vaatimuksista ja tarkastamisesta', <u>https://kamu.uef.fi/student-book/terveystieteiden-tiedekunnan-ohjeet-vaitoskirjan-vaatimuksista-ja-tarkastamisesta/</u>. Accessed on 19.04.2021.
⁴⁵¹ Article L612-7 Code de l'éducation; Article 1 Arrêté du 25 mai 2016 fixant le cadre national de la formation et les

⁴⁵² In that case, the candidate must draft and defend a memoire indicating the part of the research conducted by the candidate; see Article L612-7 Code de l'éducation.

proof of professional experience in the field of research which may be recognised in the context of collective agreements.⁴⁵³ The national doctoral diploma may, furthermore, only be delivered by public higher education institutions that have been accredited.⁴⁵⁴

In accordance with the *Code de l'éducation* (Education code), doctoral education is organised in close cooperation with laboratories and research teams the quality of which is to be evaluated periodically. In fact, higher education institutions may be accredited for a limited period of time for the organisation of doctoral training and the grant of doctoral degrees.⁴⁵⁵ Doctoral training is then organised at doctoral schools and is further regulated per ministerial decree.⁴⁵⁶ More specifically, doctoral training is organised in doctoral schools that unite research teams from one or more institutions.⁴⁵⁷ Doctoral schools are tasked with, among others:⁴⁵⁸

- Putting in place the conditions of access to a doctorate;
- Organising scientific exchanges between doctoral candidates and the scientific community;
- Guaranteeing that each candidate receives training on research ethics and integrity;
- Ensuring the quality of doctoral training by putting in place an individual doctoral committee (*comité de suivi individuel*);
- Implementing support systems for the pursuit of public and private professional careers after the doctorate;
- Contributing to European and international cooperation within existing frameworks;
- Formulating an opinion on applications for the admission of research teams.

The doctoral school plays a core role during the doctorate, as does the thesis supervisor (*directeur de these*).⁴⁵⁹ During their doctorates, candidates are integrated into the research unit/team supporting their research. In order to be admitted to the doctorate and corresponding training, the head of the institution is to decide on a proposal of the director of the doctoral school after an opinion of the thesis supervisor and the director of the research unit/team on the quality of the project.⁴⁶⁰ Admission to a doctorate is dependent on the possession of a master's degree. Should a person not hold a master's degree, the head of the institution may – on a proposal of the doctoral school council – admit

⁴⁵³ Since 2019 the doctorate is also recognised as a degree as such in the National Directory of Professional Skills. That document is considered the reference document to define professional positions and salaries in the private sector; see Arrêté du 22 février 2019 définissant les compétences des diplômés du doctorat et inscrivant le doctorat au répertoire national de la certification professionnelle

⁴⁵⁴ Article 1 Arrêté du 25 mai 2016.

⁴⁵⁵ Article L612-7 Code de l'éducation.

⁴⁵⁶ Article L612-7 Code de l'éducation; Article 1 Arrêté du 25 mai 2016.

⁴⁵⁷ Although doctoral schools may unite multiple research teams, a research team may only participate in one single doctoral school – only in exceptional cases may they be part of multiple doctoral schools. In order to participate, research teams or units must have been recognized by the *Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur*. In particular, teams from higher education institutions, public organisations for education or research, and research foundations may qualify for participation in doctoral schools. If such teams were accredited by the *Haut Conseil*, they must undergo an approval procedure set by the establishment to which the doctoral school belongs; see Articles 2 and 5 Arrêté du 25 mai 2016.

⁴⁵⁸ Article 3 Arrêté du 25 mai 2016.

⁴⁵⁹ Article 10 io. 16 Arrêté du 25 mai 2016. Supervisors are either university professors or persons holding similar status or other persons that hold a doctorate degree that have been specifically appointed as supervisor by the head of the educational establishment. Co-supervision of a thesis is possible and co-supervisors may come from both the academic world as well from the socio-economic world. In the latter case, the number of co-supervisors is increased to two. ⁴⁶⁰ Article 11 Arrêté du 25 mai 2016.

a person having completed studies or professional experience of an equivalent level.⁴⁶¹ During their doctorates, candidates may either be employed (including benefits and pension opportunities), on scholarship or unfunded.⁴⁶² Candidates must thereby enrol to undertake the doctorate. Enrolment in the doctorate is then renewed at the beginning of each academic year.⁴⁶³ During the first two years, enrolment is renewed by the head of the institution on a proposal of the doctoral school director who has consulted the thesis supervisor. From the third year onwards, additional approval of the candidate's individual doctoral committee is necessary. In the event that enrolment is not renewed, a reasoned opinion is to be produced by the thesis supervisor. Ultimately, the head of the institution decides on the non-renewal. The doctoral research generally lasts three years on a full-time basis and six years on a part-time basis.⁴⁶⁴ Annual extensions may be accorded on an exceptional basis if they are proposed by the thesis supervisor and approved by the doctoral committee and director of the doctoral school. In a similar vein, a candidate may pause their doctorate.

Doctoral schools are to set further regulations on the doctorate in doctoral charters which are to be signed by the candidate and thesis supervisor at the start of the doctorate.⁴⁶⁵ In addition to the charter, the doctoral candidate and his/her supervisor also sign a training agreement (*convention de formation*) which stipulates, among others, the timetable of the project, terms and conditions for supervision, procedures for integration into the research unit/team, and objectives in terms of valorisation. Over the course of their doctorate, candidates are furthermore obliged to maintain a portfolio comprising a list of all research, teaching, and dissemination activities candidates have completed during their doctorate.⁴⁶⁶

The doctoral committee also plays a role in ensuring the overall progress of the doctorate by issuing recommendations and preventing possible conflict, discrimination or harassment.⁴⁶⁷ The exact composition and organisation of the committee is determined by the council of the doctoral school. Although the committee is involved with ensuring the overall progress of the doctorate, its members are not involved in the supervision of the candidate's work.

When a candidate has finished the research, there is a need to obtain authorisation to proceed to the defence of the thesis. The head of the institution provides such an authorisation upon consultation with the doctoral school director at the request of the thesis supervisor.⁴⁶⁸ A minimum of two rapporteurs appointed by the head of the institution examine the candidate's work.⁴⁶⁹ As a rule, rapporteurs must originate from institutions outside candidate's university and may not be involved in the work of the doctoral candidate. In order to assess the candidate's work, the rapporteurs issue

⁴⁶¹ Ibid.; In such a case, the individual concerned must have undergone a procedure for the validation of their experience in accordance with Article L613-5 Code de l'éducation.

⁴⁶² Campus France, 'FAQ – Doing my Doctorate in France – What is involved in a doctorate?', <u>https://www.campusfrance.org/en/FAQ-Doctorate-France-questions</u>.

⁴⁶³ Article 11 Arrêté du 25 mai 2016.

⁴⁶⁴ Article 14 Arrêté du 25 mai 2016.

⁴⁶⁵ Article 12 Arrêté du 25 mai 2016.

⁴⁶⁶ Article 15 Arrêté du 25 mai 2016.

⁴⁶⁷ Article 13 Arrêté du 25 mai 2016.

⁴⁶⁸ Article 17 Arrêté du 25 mai 2016.

⁴⁶⁹ These rapporteurs have to fulfil the same requirements as thesis supervisors or co-supervisors must fulfil found in Article 16 Arrêté du 25 mai 2016. In the event that a person from the socio-economic world is involved in the assessment of the thesis, a third rapporteur may be appointed; see paragraph 3 Article 17 Arrêté du 25 mai 2016.

an opinion by means of a written report at least two weeks before the scheduled date for the defence. Only after issue of these reports may the head of the institution authorise the defence. Both the jury as well as the candidate receive a copy of these reports.

The defence itself is public unless the subject of the thesis requires a particular level of confidentiality.⁴⁷⁰ During the defence, the candidate's research will be assessed by a four- to eightperson jury composed by the head of the institution after consultation of the doctoral school director and thesis supervisor. At least half of the jury members must originate from outside the university and selected for their scientific or professional competence in the field of research. Furthermore, an adequate gender balance must be achieved and the jury must also represent particular categories of staff (i.e *professeurs ou personnels assimilés*).⁴⁷¹ The jury is presided by a chair and may be assisted by a rapporteur designated by the jury itself. Whereas the supervisor takes part in the jury, it may not take part in the ultimate decision on the award of the degree. Instead, the jury will assess the quality of the candidate's work, innovative nature, and ability to place the research in its scientific context.⁴⁷² After a positive assessment, the chair of the jury as well as all jury members sign a defence report to be forwarded to the candidate.

Before the defence, the doctoral thesis must be submitted to the doctoral department of the higher education institution at which it is to be defended and must be distributed to the jury members.⁴⁷³ The defence is conditional on the issuance of a certificate attesting to the submission of the thesis to the jury chair. Apart from being submitted in a digital format, the thesis must also be supplemented with a French and English summary as well as a list of keywords and metadata necessary for archiving of the thesis in accordance with the *recommendation national TEF (theses éléctroniques françaises)*. If the jury has requested the candidate to make corrections to the thesis, the new doctor has three months to submit the corrected thesis in electronic format.⁴⁷⁴ The institution at which the candidate has defended the thesis shall then deposit the final thesis in its dissemination and archiving formats in the database managed by the *Agence bibliographique de l'enseignement supérieur*.⁴⁷⁵

International cooperation through double or joint doctorates is possible. Institutions involved in such a cooperation may therefore deliver one and the same diploma or deliver multiple diplomas simultaneously.⁴⁷⁶ Any diploma awarded jointly is recognised fully in France as long as it is recognised equally in the countries in which the partner universities are located. Additional agreements must be made in order to specify the recognition of the degree.⁴⁷⁷ More specifically, accredited French higher education institutions can enter into *cotutelle* agreements with similar foreign higher education institutions.⁴⁷⁸ In the event of clashes between provisions of applicable law between the different participating institutions, the French higher education institutions are able to derogate from the applicable provisions of French law. Additional arrangements to this end must be made in a *cotutelle*

⁴⁷⁰ Article 19 Arrêté du 25 mai 2016. Futhermore, the head of the institution may decide on an exceptional basis that both the candidate and the jury members may take part in the thesis by virtual means.

⁴⁷¹ Article 18 Arrêté du 25 mai 2016.

⁴⁷² Article 19 Arrêté du 25 mai 2016.

⁴⁷³ Article 24 Arrêté du 25 mai 2016.

⁴⁷⁴ Article 19 and 24 Arrêté du 25 mai 2016.

⁴⁷⁵ Article 25 Arrêté du 25 mai 2016.

⁴⁷⁶ Article D613-20 Code de l'éducation.

⁴⁷⁷ Article D613-18 and D613-20 Code de l'éducation.

⁴⁷⁸ Article D613-20 Code de l'éducation; Article 20 Arrêté du 25 mai 2016.

agreement.⁴⁷⁹ The agreement sets specific conditions for the alternating training periods spent in the countries concerned, procedures for setting up the jury, providing support for candidates, information on the thesis, supervisor, candidate and institutions, language in which the thesis is written, modalities of recognition of training activities, methods of payment of tuition fees, and social security coverage.⁴⁸⁰ Regarding supervision, the candidate is to have a supervisor in each of the countries concerned that cooperates with the other thesis supervisors.⁴⁸¹ One single defence is organised upon conclusion of the research.⁴⁸² According to the applicable French decree, the chair of the jury is to sign a defence report signed also by the members of the jury after which the diploma is awarded by the academic institution(s) authorised to do so. Additional provisions concerning the publication and dissemination of the thesis must be in accordance with the legislation of each of the countries involved in the *cotutelle* and must be defined further in the *cotutelle* agreement.

More specific provisions on the exact form of the doctoral diploma in case of international cooperation may be found in a Bulletin published by the Ministry for Higher Education, Research and Innovation.⁴⁸³ The Bulletin specifies that the degree scrolls are available for doctoral degrees issued by institutions accredited by the state if the cooperating partners have agreed on the award of a joint French diploma. This provision is particularly relevant to doctorates developed within the context of European programmes. Apart from the signatures of the partner universities' rectors, the diploma should also include proof of accreditation and the diploma title in French and the other relevant languages. These requirements, however, do not prejudice legislation applicable to the diploma in the countries in which the partner universities are located. In the event of difficulties in establishing a joint diploma, the proposed solution is to issue multiple degrees signifying the simultaneous award of several national degrees.

5.1 University Paris Dauphine

The doctoral school of the University of Paris-Dauphine consists of a cooperation between the University of Paris-Dauphine and MINES ParisTech. The doctoral school is carried by the University Paris Sciences et Lettres (PSL). The doctoral school SDOSE (*Sciences de la Décision, des Organisations, de la Société, et de l'Echange*) sets out its own regulation regarding the organisation of doctoral education. When it comes to the management of the doctoral school, an important role is foreseen for the director, co-director, and doctoral school council.⁴⁸⁴ The latter is essential for the registration of new doctoral candidates and is responsible for proposing the list of candidates that may be

⁴⁷⁹ These agreements may either be framework agreements supplemented by a specific agreement for a particular thesis or agreements designated per individual thesis. The agreements must in nay case be signed by the thesis supervisors and the doctoral candidate; Article 21 Arrêté du 25 mai 2016.

⁴⁸⁰ Article 21(1-5) Arrêté du 25 mai 2016.

⁴⁸¹ Article 22 Arrêté du 25 mai 2016.

⁴⁸² Article 23 Arrêté du 25 mai 2016.

⁴⁸³ Modalités d'élaboration et de délivrance des diplômes nationaux et de certains diplômes d'État par les établissments d'enseignement supérieur relevant du ministère de l'Enseignement supérieur, de la Recherche et de l'innovation, Bulletin officiel n° 35 du 26 September 2019.

⁴⁸⁴ See Paragraphs 2.1 and 2.3 Projet de règlement intérieur de l'École Doctorale Sciences de la Décision, des

Organisations, de la Société et de l'Echange – ED SDOSE – approuvé à l'unanimité moins une abstention par le Conseil de l'EDD du 24 01 2019, approuvé à l'unanimité par le Conseil scientifique du 7 02 2019, approuvé à l'unanimité par le Conseil d'administration du 18 02 2019 (hereinafter: Paris Dauphine Regulation).

(re)registered at the school.⁴⁸⁵ The proposed list is subsequently forwarded to the head of the institutions by the doctoral school director after consultation of the thesis supervisor. Whereas doctorates in principle last three years on a full-time basis (and six years part-time), they may be extended annually as an exception by the head of the institution on a proposal of the thesis supervisor after consultation of the doctoral committee and doctoral school director.⁴⁸⁶

Doctorates at the SDOSE doctoral school may be financed via three different means: (1) via public funds originating from the Ministry, (2) via the institutional budget of the institutions involved in the doctoral school, and (3) via laboratories and research centres.⁴⁸⁷ For the first means of finance, the contract is awarded by the doctoral school while in the latter two cases, the doctoral contracts are awarded by institutions and research centres from which the funding originates as long as the registration to pursue the doctorate is validated by the doctoral school. Of course, funding can also originate from European programmes.⁴⁸⁸ Despite funding for doctorates, doctoral candidates must pay a registration fee to the institution where they prepare their doctorate.⁴⁸⁹ Registration very much depends on the availability of funding. SDOSE only makes one exception to the funding requirement in the area of law since many doctoral candidates in that field conduct research into a subject in which they also conduct professional activities (i.e. they undertake their doctorate on a part-time basis). Nevertheless, the majority of candidates are employed by the university. A small number of candidates holds a contract with a company or public organisation, meaning they divide their time between working for the company/organisation and research.⁴⁹⁰

Doctoral theses are supervised by a supervisor connected to the SDOSE doctoral school. Cosupervision is possible and the co-supervisor may originate from another doctoral school as long as the request for co-supervision has been made by the doctoral candidate at his/her first registration and has been duly motivated.⁴⁹¹ In the event of international cooperation on a joint or double degree, a separate agreement is to be designated among partners following the relevant national legislation of the *Arreté du 25 mai 2016*.⁴⁹²

Apart from the supervisor, doctoral candidates also have an individual doctoral committee that will follow their research progress. In particular, the committee is to provide an annual opinion on the reregistration of the candidate which is the result of an assessment of the research progress and contains possible recommendations. The committee furthermore ensures the smooth running of the doctoral training pursued by the candidate.⁴⁹³ The committee is composed of at least two researchers

⁴⁸⁵ Paragraph 3.1 Paris Dauphine Regulation. In the event of a fourth-year re-registration a pre-defence is organised after which the doctoral school council issues a report to approve the registration.

⁴⁸⁶ Paragraph 2.4 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

⁴⁸⁷ Paragraph 4 Paris Dauphine Regulation.

⁴⁸⁸ Based on information received by a representative of UPD.

⁴⁸⁹ Paragraph 5 Paris Dauphine Regulation.

⁴⁹⁰ These degrees are called the *Convention industrielle de la formation à la recherche (CIFRE);* Personal Communication with representative from the SDOSE Doctoral School.

⁴⁹¹ Paragraph 1 Paris Dauphine Regulation.

⁴⁹² The agreement is to provide particular provisions on registration requirements, the obligation to have a thesis supervisor in both countries, provisions on time spent at the two partner universities, provisions on the composition of the jury consisting of members of both partner universities, the language in which the thesis is written and defended, and the grant of double or joint doctorates; Paragraph 1 Paris Dauphine Regulation and University Paris Dauphine – Form *Theses en cotutelle international* (version mai 05 05 2014.

⁴⁹³ Paragraph 3.2 Paris Dauphine Regulation; Paragraph 2.3 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

not involved in the supervision of the thesis.⁴⁹⁴ These researchers must be identified by the programme director at the proposal of the research unit to which the candidate belongs. Ultimately, the director of the doctoral school approves the committee.

Following a doctorate at the University Paris-Dauphine means the preparation of a thesis consisting of research and participation in a training programme.⁴⁹⁵ UPD does not maintain a fixed model for the drafting of theses, depending on the discipline, either a collection of articles or monograph may be used.⁴⁹⁶ The pursuit of the doctorate is thereby considered a personal and professional project defined clearly.⁴⁹⁷ In order to register for the doctorate, the candidate must clarify the topic of the thesis, its context, the research unit or team and - if applicable - the relevant doctoral programme.⁴⁹⁸ An important aspect of the thesis concerns its originality and innovative nature which is to be promoted by the supervisor. The supervisor must furthermore dedicate considerable time to the doctoral candidate – frequent meetings should take place throughout the doctorate.⁴⁹⁹ The supervisor is also tasked with correcting the candidate's work to ensure it evolves in a way that is scientifically favourable.⁵⁰⁰ Apart from the supervisor, the research unit/team to which the candidate belongs also plays an important part in granting access to necessary resources and ensuring the candidate is well integrated into the research team/unit. The candidate also has his/her own role in this, since part of their duty is to take part in the activities of the team/unit and of the doctoral school.⁵⁰¹ The candidate must furthermore adhere to ethical rules and must inform the thesis supervisor on a frequent basis of the research and possible difficulties faced.

When it comes to the training programme, this is pursued in the context of research centres/laboratories. The University of Paris Dauphine offers five different doctoral programmes.⁵⁰² Each of the programmes provides discipline-specific training. For economics, for example, this means following training on i.a. data management and programming, market design, and micro/macroeconomics.⁵⁰³ Similarly, those following a doctorate in management also follow designated courses relevant to their field.⁵⁰⁴ In social sciences, candidates are integrated in one of two

⁴⁹⁴ Paragraph 3.2 Paris Dauphine Regulation.

⁴⁹⁵ Paragraph 2.1 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

⁴⁹⁶ Based on information received by a representative of UPD. Theses may thereby be prepared in English as long as a long abstract is included in French.

⁴⁹⁷ Ibid.; To help fulfil the candidate's ambitions, the research team to which the candidate belongs must help clarify the candidate's ambitions and to provide support in the realisation thereof.

⁴⁹⁸ Paragraph 2.2 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018. The SDOSE doctoral school consists of 5 doctoral programmes covering different disciplines (in particular, mathematics, IT, economics, management, and social sciences). The content of these programmes is determined by the doctoral school in cooperation with research centres. Two courses followed by doctoral candidates are nevertheless general in nature and must be followed by all candidate, namely a course in English for research and scientific integrity. Furthermore, the Université Paris Dauphine also offers training to develop soft skills. For more information on the doctoral training programmes see Université Paris Dauphine, Présentation de l'École Doctorale SDOSE', <u>https://edd.dauphine.fr/fr/presentation-de-lecole-doctorale.html</u>.

 ⁴⁹⁹ Paragraph 2.3 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.
 ⁵⁰⁰ Paragraph 3.1 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

 ⁵⁰¹ Paragraph 3.2 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

⁵⁰² See Université Paris Dauphine, '6 programmes doctoraux', <u>https://dauphine.psl.eu/formations/doctorat</u>.

⁵⁰³ Université Paris Dauhpine, 'Programme Doctoral en Economie – Formation Doctorale',

https://edd.dauphine.fr/fr/programme-doctoral-en-economie/formation-doctorale.html.

⁵⁰⁴ See Université Paris Dauphine, 'le programme doctorale', <u>https://edd.dauphine.fr/fr/programme-doctoral-en-gestion/formation-doctorale/programme.html</u>.

laboratories that organise doctoral training.⁵⁰⁵ Nevertheless, all candidates will follow two general courses: one on English language proficiency and one on scientific integrity.

Before the candidate can be admitted to the defence, he or she will have to undergo a pre-defence. The pre-defence is based on a dossier containing part of the work conducted by the candidate and a planning on how the thesis is to be completed.⁵⁰⁶ The pre-defence takes place at least six months before the actual defence before the thesis supervisor and one other member who will also be part of the defence jury. They produce a report indicating the term of the defence or a possible second pre-defence. Nevertheless, whereas the pre-defence is mandatory for anyone undertaking a doctorate at the University Paris Dauphine, separate agreements are to be made for joint/double doctorates or doctorates co-supervised internationally.

In order for the candidate to be admitted to the defence, the thesis will be examined by at least two rapporteurs external to the doctoral school and external to the University PSL.⁵⁰⁷ During the defence, the candidate's research is assessed by a jury of four to eight members out of which at least half is external to the University PSL. Not all jury members must be present physically, defence via video-conference is permitted. Indeed, online defences were made possible by the Ministry of Education.⁵⁰⁸ After the defence, the thesis is submitted in digital format accompanied by a number of documents related to the defence and dissemination of the thesis.⁵⁰⁹ Only after all documents have been received will the diploma be issued. In some cases, candidates may qualify for the label *"Doctorat Européen"*. This is particularly the case when (1) they have conducted research at a research institution in another EU Member State for at least three months, (2) the supervisor has submitted an opinion to the doctoral school on the contribution of the research stay to the thesis, (3) the thesis contains a summary in an EU language that is not French,⁵¹⁰ (4) at least two rapporteurs are affiliated to a higher education and research institute in another EU Member State, and (5) the jury must include at least one jury member belonging to a higher education and research institute from the Member State in which the candidate spent his/her research stay.⁵¹¹

6. Germany

The German *Grundgesetz* (Constitution) provides in Article 5(3) for the freedom of arts and sciences, research and teaching. Article 7(1) then provides that the entire school system shall be under the supervision of the state. The notion "state" employed here does not refer to the *Bund* (Federal Republic of Germany), nor to the *Länder* (Federal States), but refers to the general concept of the sovereign/government. The competence to legislate on matters related to (higher) education lies to a large extent with the Federal States. This follows from Article 30 of the Constitution, which states that the exercise of state powers and the discharge of state functions is a matter for the Federal States, unless the Constitution provides otherwise. The Constitution does so in several Articles, yet only as

⁵⁰⁵ Université Paris Dauphine, 'Programme doctoral en sciences-socials', <u>https://edd.dauphine.fr/fr/programme-doctoral-</u><u>en-sciences-sociales.html</u>.

⁵⁰⁶ University Paris Dauphine – *Fiche La Procédure de Pré-soutenance* (2011).

⁵⁰⁷ Paragraph 3.3 Paris Dauphine Regulation.

⁵⁰⁸ Based on information received from a representative of UPD. At present, hybrid defences are taking place and the expectation is that physical defences will again become the norm after COVID-19.

⁵⁰⁹ Paragraph 2.6 Charte des thèses – Université Paris Sciences et Lettres, Avril 2018.

⁵¹⁰ Part of the thesis will also take place in the language chosen.

⁵¹¹ Article 2 and 3 Reglement portant Création du Label "Doctorat Européen", Ecole Doctorale de Dauhpine – ED 543.

regards some educational niches. One such example is Article 72 of the Constitution. Accordingly, the Federal Republic of Germany is still responsible for the admission to higher education and degrees from higher education, but the Federal States have the power to deviate from these federal laws by adopting their own legislation.⁵¹²

Seeing as the German partner universities party to the YERUN Network (i.e. the University of Bremen, Ulm University and the University of Konstanz) are located in different Federal States, the focus will be placed on those Federal States' legislation on doctoral education. The University of Bremen is situated in the Federal State known as the Free Hanseatic City of Bremen. In the Free Hanseatic City of Bremen, universities, such as the University of Bremen, are regulated by the *Bremisches Hochschulgesetz* (Bremer Law on Higher Education – hereinafter BremHG). Ulm University and the University of Konstanz are both situated in the Federal State known as Baden-Württemberg. In Baden-Württemberg, universities are regulated by the *Gesetz über die Hochschulen in Baden-Württemberg* (Law on Higher Education in Baden-Württemberg - hereinafter LHG).

6.1 Universität Bremen

According to Article 3 of the BremHG, universities can adopt their own statutes or regulations in furtherance of the rules laid down in the BremHG. Article 65 confers the right to grant a PhD to the University of Bremen. Everyone who has a Master's degree (or equivalent) can be allowed to do a PhD. Further details are to be regulated by the doctoral regulations of the university.

The University of Bremen does not have one university-wide doctoral regulation, but has different regulations depending on the doctoral title awarded after having successfully completed the doctoral programme and the *Fachbereich* (faculty) where the doctoral candidates resort under. There are 12 different faculties, and also 12 different doctoral regulations. The regulations cover different faculties and also different titles. In general, however, the doctorate is research based, meaning that candidates do not need to pursue a research programme to acquire the title of doctor.⁵¹³ Some doctoral candidates who are also a member of a programme or graduate school may follow a training programme. All candidates can nevertheless take part in qualification offers by various research units. Apart from training, some candidates (depending on their contract) may also be required to teach. As far as contracts are concerned, most candidates are employed by the university (usually through third-party funded projects), although it is not necessary to be funded (by the university) to be admitted as a doctoral candidate. Candidates can undertake their research both on a full- as well as part-time basis and do not pay a tuition fee.

Upon conclusion of the doctorate, candidates themselves are holders of the intellectual property rights.⁵¹⁴ As far as the defences are concerned, these were organised online during COVID-19. The

⁵¹² Until the 2006 reform for the modernisation of the federal system (*Föderalismusreform*), the Bund played a more important role in (higher) education as it was responsible for setting the framework. This was done through the Framework Act for Higher Education (*Hochschulrahmengesetz* or HRG). The HRG laid down the general principles with which the legislation of the *Länder* had to comply. Now that the Bund is no longer responsible for setting the framework, the HRG has lost its relevance.

 $^{^{\}rm 513}$ Based on information received by a representative from UBremen.

⁵¹⁴ Ibid.

expectation is thereby that the possibility for online defences will be maintained in the future (or at least in a hybrid format).

6.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

Cluster 1 encompasses different faculties. For the purpose of this report, the focus is placed on the faculties of law, business studies and economics, social sciences, and that of cultural studies. Each of these faculties have different regulations (total of 12) which apply depending on the different doctoral titles they issue. For the purposes of clarity, only where there are divergences between the different doctoral regulations, will these divergences be explicitly stipulated.

Each regulation starts in Article 1 with a general statement that the University of Bremen has the power to grant the doctoral degree, through the respective faculties. This is followed by an indication of the different doctoral titles to be awarded. For the abovementioned faculties, this concerns the following titles.

- Doktor*in der Rechtswissenschaft (doctor iuris, Dr.iur.) (Doctor of Law) by faculty 6;
- *Doktor*in der Wirtschafts- und Sozialwissenschaften (Dr. rer. pol.)* (Doctor of Economics and Social Sciences) and Doctor of Philosophy (PhD) by faculties 7, 8 and 11;
- Doktor*in der Philosophie (Dr.phil.) (Doctor of Philosophy) by faculties 7-12; and

All regulations then provide for the establishment of the *Promotionsausschuss* (Doctoral Committee) for each doctoral title to be awarded, which is responsible for the implementation of the doctoral procedure.⁵¹⁵ It is composed of professors, students, academic staff members and other staff members. The professors must have an absolute majority in seats and votes, while the other groups must have an equal number of seats.⁵¹⁶ All staff members are appointed for a period of two years, students for a period of one year.⁵¹⁷ The Doctoral Committee elects a chair from among its members,⁵¹⁸ decides on the acceptance of doctoral candidates, provides a model of a supervision agreement, decides on the opening of the doctoral procedure, and appoints the reviewer as well as the members of the Examination Committee.⁵¹⁹ Slight differences exist in terms of the composition of the Doctoral Committee, depending on the doctoral title to be awarded.

⁵¹⁵ Article 3(1) of the Promotionsordnung der Universität Bremen für den Fachbereich 06 (Rechtswissenschaft) (doctor iuris, Dr. iur.) (hereinafter: Dr.iur. Doctoral Regulation), Article 2(1) of the Promotionsordnung der Universität Bremen für die Verleihung des Grades Dr. rer. pol. und für Studierende der Bremen International Graduate School for Social Sciences (BIGSSS) des Grades Doctor of Philosophy PhD durch die Fachbereiche 7, 8 und 11 (hereinafter: Dr.rer.pol. Doctoral Regulation), Article 2(1) of the Promotionsordnung der Universität Bremen für die Fachbereiche 7 – 12 (hereinafter: Dr.rer.pol. and PhD Doctoral Regulation).

⁵¹⁶ Article 3(2) of the Dr.iur. Doctoral Regulation, Articles 2(2) of the Dr.rer.pol. Doctoral Regulation, and PhD Doctoral Regulation.

⁵¹⁷ Article 3(2) of the Dr.iur. Doctoral Regulation, Articles 2(3) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵¹⁸ Article 3(2) of the Dr.iur. Doctoral Regulation, Articles 2(3) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵¹⁹ These competences are summarized in Article 3(3) of the Dr.iur. Doctoral Regulation, but are spread throughout the other Doctoral Regulations.

Decisions of the Doctoral Committee can be appealed before the *Widerspruchsausschuss* (Appeals Committee).⁵²⁰ The Appeals Committee is appointed by the Academic Senate and usually consists of three professors, an academic or other staff member and a student.⁵²¹ It decides on the appeals procedure after having taken into account the advice of the Doctoral Committee.⁵²²

The application to become a doctoral candidate must be filed to the responsible Doctoral Committee,⁵²³ and must include the following documents and evidence:

- A curriculum vitae;
- A list of scientific publications;
- A written declaration as to whether, and if so with what result, the applicant has already been a candidate in a doctoral examination or applied for admission elsewhere;
- A declaration on the part of the professor that a grounded scientific interest exists;
- A written statement permitting the thesis to be checked for plagiarism using appropriate software tools;
- A Master's degree, or *Diplom* awarded by a German university, or a *Magistergrad*, or a *Staatsexamen*. For degrees awarded by universities of applied sciences and bachelor's degrees, specific rules apply.⁵²⁴

Furthermore, the candidate is free to choose the subject of the doctoral thesis, but must describe the problem of the planned work. The Doctoral Committee must decide on an application within six weeks.⁵²⁵ However, different rules apply for the doctoral title Doctor of Laws (Dr.iur.). In addition to having completed any of the above-listed degrees or having been employed as a researcher,⁵²⁶ a prerequisite for acceptance is a declaration by a professor of providing academic supervision to the thesis. If the candidate does not find a supervisor, the doctoral committee will try to find a supervisor.⁵²⁷ Doctoral candidates must be rejected if they have been unsuccessful in more than one doctoral procedure, have been disqualified from a doctoral procedure on the grounds of attempted deception.⁵²⁸ If the requirements are fulfilled, an application may only be rejected if the faculty does not have the necessary expertise and reasons are given.⁵²⁹ The application must be submitted to the chair of the Doctoral Committee.⁵³⁰

⁵²⁶ Article 4(1) of the Dr.iur. Doctoral Regulation.

⁵²⁰ Article 3(7) of the Dr.iur. Doctoral Regulation, Articles 3(1) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation. The Dr.iur. Doctoral Regulation does not provide information on the composition of the Appeals Committee.

⁵²¹ Article 3(7) of the Dr.iur. Doctoral Regulation, Articles 3(2) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵²² Article 3(7) of the Dr.iur. Doctoral Regulation, Articles 3(3) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵²³ Articles 4(1) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵²⁴ Articles 5(2) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵²⁵ Articles 4(1) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵²⁷ Article 4(2) of the Dr.iur. Doctoral Regulation.

⁵²⁸ Article 4(3) of the Dr.iur. Doctoral Regulation.

⁵²⁹ Article 4(4) of the Dr.iur. Doctoral Regulation.

⁵³⁰ Article 5 of the Dr.iur. Doctoral Regulation

In terms of supervision, the doctoral candidate must be supervised by a professor who is a member of the University of Bremen and both parties must agree thereto.⁵³¹ However, the supervisor need not always be a professor of the University of Bremen, but might also be a professor of another university, an honorary professor of the University of Bremen, a postdoctoral researcher of the University of Bremen, or a scientist with a *Habilitation*.⁵³² Upon request of the doctoral candidate, a second supervisor can be appointed.⁵³³ After a successful application, the applicant receives the status of doctoral candidate. The status of doctoral candidate will end after five years unless otherwise provided.⁵³⁴

When it comes to the thesis itself, the only requirements are that it must meet academic standards and contribute to the advancement of research.⁵³⁵ It may be a monograph or may consist of a number of the doctoral candidate's own published articles and other publications,⁵³⁶ but specific rules apply if this is the case.⁵³⁷ The thesis must be written in German or in English, but the doctoral committee can allow the doctoral candidate to write the thesis in another language.⁵³⁸ The thesis may be published in part or in full prior to the examination and the defence.⁵³⁹ Upon completion, the thesis must be submitted in several bound and electronic copies and must be accompanied by a statement of the candidate that the work was performed without any unauthorised help, that no other sources were used than the ones indicated and that direct quotations are clearly indicated.⁵⁴⁰ Whereas the aforementioned applies to most doctoral degrees issued by the University of Bremen, the Dr.iur. Doctoral Regulation does not provide any specific provisions on the thesis.

Upon completion of the thesis, the doctoral candidate first applies to the examination procedure before the public defence can take place. The doctoral candidate does so by submitting the thesis in accordance with the requirements set out in the doctoral regulations.⁵⁴¹ In essence, this includes the same documents and evidence as required for the application to become a doctoral candidate.⁵⁴² Furthermore, the doctoral candidate must have completed a relevant study that prepares for a doctoral degree.⁵⁴³ Specific rules apply, depending on the level of the completed study.⁵⁴⁴

However, different rules apply for the doctoral title Doctor of Laws (Dr.iur.). Any doctoral candidate is to be admitted to the examination procedure, provided there is no reason for rejection.⁵⁴⁵ Reasons for rejection are incompleteness of the application documents or culpable deception as regards the application to become a doctoral candidate or the application to the examination procedure.⁵⁴⁶ The

⁵³⁶ Articles 6(2) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵³⁷ Article 6(3) of the Dr.rer.pol. Doctoral Regulation.

⁵³¹ Articles 4(2) and 7 of the Dr.iur. Doctoral Regulation, Article 4(3) of the Dr.rer.pol. Doctoral Regulation, Article 4(4) of the Dr.rer.pol. and PhD Doctoral Regulation.

 ⁵³² Article 4(3) of the Dr.rer.pol. Doctoral Regulation, Article 4(4) of the Dr.rer.pol. and PhD Doctoral Regulation.
 ⁵³³ Article 4(4) of the Dr.rer.pol. Doctoral Regulation.

⁵³⁴ Article 8 of the Dr.iur. Doctoral Regulation, Articles 4(5) of the Dr.rer.pol. Doctoral Regulation and Dr.rer.pol. and PhD Doctoral Regulation.

⁵³⁵ Articles 6(1) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵³⁸ Article 6(4) of the Dr.rer.pol. Doctoral Regulation and Articles 6(3) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵³⁹ Article 6(5) of the Dr.rer.pol. Doctoral Regulation and Articles 6(4) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴⁰ Article 6(6) of the Dr.rer.pol. Doctoral Regulation and Articles 6(5) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴¹ Articles 5(1) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴² Articles 5(2) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴³ Articles 7(1) of the Dr.rer.pol. Doctoral Regulation, the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴⁴ Article 7(2-5) of the Dr.rer.pol. Doctoral Regulation, Article 7(2-4) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁴⁵ Article 9(1) of the Dr.iur. Doctoral Regulation.

⁵⁴⁶ Article 9(2) of the Dr.iur. Doctoral Regulation.

application for admission to the examination procedure must be addressed to the Chair of the Doctoral Committee.⁵⁴⁷ The application must include the following elements:

- The subject of the thesis;
- The name of the supervisor(s);
- If applicable, the proposal for the preparation of the second opinion;
- A curriculum vitae;
- The thesis in six bound copies;
- The written declaration that the doctoral candidate produced the work without outside help, identified all passages that are taken literally from publications and did not use any literature other than the one identified, and that the electronic version of the dissertation identical is to the submitted printed version; and
- The written declaration that a review of the thesis with qualified software is permitted for the investigation of plagiarism.⁵⁴⁸

Furthermore, an identical electronic version of the thesis must be made available to the examinations office, together with the bound copies.⁵⁴⁹ The application may be withdrawn until the first opinion of the reviewers is available.⁵⁵⁰

The thesis is then examined by reviewers who are appointed by the Doctoral Committee. The Doctoral Committee appoints at least two reviewers, but the doctoral candidate can request the appointment of more reviewers. At least one of the reviewers must be a professor at the University of Bremen. The other reviewers can be any of the persons having the capacity to function as a supervisor.⁵⁵¹ The same goes for the doctoral title Doctor of Laws (Dr.iur.), except for in case the doctoral candidate was supervised. In that case, one of the supervisors must also act as reviewer.⁵⁵²

Each reviewer must submit a report suggesting the approval or the rejection of the thesis within a prescribed time limit.⁵⁵³ A positive vote on the thesis can be made conditional upon the doctoral candidate taking into account the remarks by improving or supplementing the thesis.⁵⁵⁴ The reports of the reviewers must be sent to the doctoral candidate, the Doctoral Committee and the members of the Examination Committee.⁵⁵⁵ Once all reports are available, they must also be made available to the members of the University of Bremen, for a certain period of time.⁵⁵⁶ The doctoral candidate can request to postpone the public defence in order to revise the thesis or can withdraw the application for a doctoral degree. The request to postpone the public defence can only be made once. The revised

⁵⁴⁷ Article 10(1) of the Dr.iur. Doctoral Regulation.

⁵⁴⁸ Article 10(2-3) of the Dr.iur. Doctoral Regulation.

⁵⁴⁹ Article 10(4) of the Dr.iur. Doctoral Regulation.

⁵⁵⁰ Article 10(5) of the Dr.iur. Doctoral Regulation.

⁵⁵¹ Articles 8(1) of the Dr.rer.pol. Doctoral Regulation and the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁵² Article 11(1-2) of the Dr.iur. Doctoral Regulation.

⁵⁵³ Article 11(2) of the Dr.iur. Doctoral Regulation and Article 8(3) of the Dr.rer.pol. Doctoral Regulation both provide for a time limit of three months; Article 8(2) of the Dr.rer.pol. and PhD Doctoral Regulation provides for a time limit of six weeks. ⁵⁵⁴ Article 11(4) of the Dr.iur Doctoral Regulation.

⁵⁵⁵ Article 11(3) of the Dr.iur. Doctoral Regulation, Article 8(3) of the Dr.rer.pol. Doctoral Regulation, Article 8(2) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁵⁶ Article 8(5) of the Dr.rer.pol. and PhD Doctoral Regulation does not stipulate a time limit, but states that they should be available until the public defence, Article 13(2) of the Dr.iur. Doctoral Regulation, Article 8(4) of the Dr.rer.pol. Doctoral Regulation all provide for a period of 14 days.

version of the thesis must again be submitted to the reviewers. If the doctoral candidate fails to do so, the thesis will be rejected.⁵⁵⁷ In addition, the Doctoral Committee must appoint a third reviewer in case the two reviewers do not agree on the approval (or rejection) of the thesis.⁵⁵⁸

If the reviewers have approved the thesis,⁵⁵⁹ the Doctoral Committee appoints the Examination Committee (acting also as defence committee), which consists of the reviewers, an equal number of professors or postdoctoral researchers (among whom at least one member of the University of Bremen), and two other members of the University of Bremen.⁵⁶⁰ The members of the Examination Committee are appointed by the Doctoral Committee, but only after the doctoral candidate also submitted some suggestions.⁵⁶¹ Only the reviewers, professors or postdoctoral researchers are entitled to vote on the degree classification awarded for the thesis.⁵⁶² The Examination Board sets the date and time for the public oral examination, in consultation with the Doctoral Committee.⁵⁶³ However, in case of suspicion of plagiarism, the oral examination shall not take place until that suspicion has been dispelled. The doctoral candidate is under an obligation to assist in dispelling that suspicion.⁵⁶⁴ The oral examination encompasses a defence of the thesis, as well as selected aspects of the respective field of investigation and related topics. The oral examination takes at least one hour and not more than one-and-a-half hours. Any issues arising in the preliminary reports are to be addressed in the oral examination.⁵⁶⁵ In general, the doctoral regulations do not stipulate how the oral examination should be structured, except for the Dr.iur. Doctoral Regulation, which distinguishes between an introductory statement of 15 minutes and the rest of the discussion. In total, it should not take more than one hour.566

Within the time limit (set by the doctoral regulations) after the oral examination, the Examination Committee submits a final report to the Doctoral Committee.⁵⁶⁷ The final report consists of the results of the oral examination, the grade to be awarded, and whether and if so to what extent the thesis

⁵⁶² Article 12(2) of the Dr.iur. Doctoral Regulation, and Articles 9(2) of the Dr.rer.pol., the Dr.rer.pol. and PhD.

⁵⁶³ Articles 9(3) of the Dr.rer.pol. and the Dr.rer.pol. and PhD Doctoral Regulations. Article 15(2) of the Dr.iur. Doctoral Regulation provides that the oral examination takes place at the earliest one week after expiration of the aforementioned inspection-period of 14 days.

⁵⁵⁷ Article 11(4) of the Dr.iur Doctoral Regulation, Article 8(5) of the Dr.rer.pol. Doctoral Regulation, Article 8(4) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁵⁸ Article 14(1) of the Dr.iur Doctoral Regulation, Article 8(6) of the Dr.rer.pol. Doctoral Regulation, Article 8(3) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁵⁹ As regards the doctoral title Doctor of Laws (Dr.iur.), Articles 14 and 15 of the Dr.iur. Doctoral Regulation provide that it is up to the Examination Committee to accept or reject the thesis, depending on the advice of the reviewers. The Examination Committee will reject the thesis if two or more reviewers grade it with *non rite*. The same applies if one reviewer grades it with *non rite* and the second does not give a better grade than *rite*. In the latter case, the applicant may apply to appoint an additional reviewer. The Examination Committee will also reject the thesis if the candidate is guilty of attempted deception. If the thesis is rejected, the doctoral procedure is terminated. The candidate must be informed and has the right of appeal. In all other cases, the Examination Committee will accept the thesis. In this case, a colloquium will take place at the earliest one week after the expiry period for interpretation. The place and time must be announced to all participants and those who have submitted a special vote.

⁵⁶⁰ Article 12(1-2) of the Dr.iur. Doctoral Regulation, Articles 9(1) of the Dr.rer.pol. and the Dr.rer.pol. and PhD Doctoral Regulations,.

⁵⁶¹ Ibidem.

⁵⁶⁴ Article 19(1) of the Dr.iur. Doctoral Regulation and Article 11(1) of the Dr.rer.pol. Doctoral Regulation. The other Doctoral Regulations do not stipulate anything on the matter.

⁵⁶⁵ Articles 9(4) of the Dr.rer.pol. and the Dr.rer.pol. and PhD Doctoral Regulations.

⁵⁶⁶ Article 16 of the Dr.iur. Doctoral Regulation.

⁵⁶⁷ Article 9(5) of the Dr.rer.pol. and the Dr.rer.pol. and PhD Doctoral Regulations. These set a time limit of four weeks, the latter sets a time limit of two weeks.

must be revised before publication.⁵⁶⁸ The recommendation to confer the doctorate requires a majority of the voting members of the Examination Committee.⁵⁶⁹ The grades to be awarded range from *non rite* or *non sufficit* (fail) and *rite* (pass) to *cum laude, magna cum laude* and *summa cum laude*.⁵⁷⁰ Concerning the calculation of the grade, this is based on a combination of the grades awarded to the written as well as oral examination. However, the exact calculation thereof is specific for each doctoral title to be awarded. Even more specific rules apply for the classification of the degree *summa cum laude*.⁵⁷¹ Again, the rules are slightly different as far as the Dr.iur. doctoral title is concerned. Indeed, the Examination Committee does not submit the final report to the Doctoral Committee, but grades the written and oral examination.⁵⁷² However, the doctoral candidate can only receive the doctoral degree if both the oral and written examinations are graded with at least *rite*.⁵⁷³

It is then up to the Doctoral Committee to decide on the conferment of the doctoral degree.⁵⁷⁴ If the Doctoral Committee has any misgivings concerning the report submitted by the Examination Committee or the procedure, and the Examination Committee is unable to dispel these, the Doctoral Committee must seek the opinion of the Appeals Committee and appoint a new Examination Committee for a new oral examination.⁵⁷⁵ The same rules apply if the Examination Committee fails to submit the final report within the prescribed time limit.⁵⁷⁶ However, this does not apply to the Dr.iur. doctoral title, because the Dr.iur. Doctoral Regulation does not confer this competence to the Doctoral Committee, as became apparent in the previous paragraph.

Before the doctoral title can actually be conferred upon the doctoral candidate, two more hurdles must be overcome. The first is the invalidity of the procedure, the second is the publication of the thesis. In case evidence appears that the doctoral candidate acted deceitfully with regard to the admission requirements or during the course of performing the doctoral work, or that requirements for admission had been assumed erroneously, the Doctoral Committee mollifies the doctoral procedure, but only after having sought the opinion of the supervisors.⁵⁷⁷ However, nothing is stated on this matter in the Dr.rer.pol and PhD Doctoral Regulation. As far as publication of the thesis is concerned, the format thereof is rather free. The doctoral thesis must be published either as a book, or a reproduced manuscript or in electronic form. The doctoral candidate must supply copies free of charge to the library of the University of Bremen. Several possibilities exist to comply with this requirement, which differ per doctoral regulation.⁵⁷⁸ The thesis may also be published in a revised or shortened version, but the author and the chairperson of the Doctoral Committee have to agree on the revision or shortening of the thesis. If the thesis is published in a revised or shortened version, it must be accompanied by a note on the extent of revision or shortening.⁵⁷⁹

⁵⁶⁸ Ibidem.

⁵⁶⁹ Article 9(6) of the Dr.rer.pol. Doctoral Regulation, Article 9(5) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁷⁰ Article 17(4) of the Dr.iur. Doctoral Regulation, Article 9(7) of the Dr.rer.pol. Doctoral Regulation, Article 9(5) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁷¹ Ibidem.

⁵⁷² Article 17(1) of the Dr.iur. Doctoral Regulation.

⁵⁷³ Article 17(3) of the Dr.iur. Doctoral Regulation.

⁵⁷⁴ Article 10(1) of the Dr.rer.pol, the Dr.rer.pol. and PhD.

⁵⁷⁵ Article 10(2-3) of the Dr.rer.pol, the Dr.rer.pol. and PhD.

⁵⁷⁶ Articld 10(4) of the Dr.rer.pol, the Dr.rer.pol. and PhD.

⁵⁷⁷ Article 19(2) of the Dr.iur. Doctoral Regulation, Article 11(2) of the Dr.rer.pol. Doctoral Regulation.

⁵⁷⁸ Article 18(1) of the Dr.iur. Doctoral Regulation, Article 12(1) of the Dr.rer.pol., and Article 11(1) of the Dr.rer.pol and PhD Doctoral Regulation.

⁵⁷⁹ Article 18(2) of the Dr.iur. Doctoral Regulation, Article 12(2) of the Dr.rer.pol, and Article 11(2) of the Dr.rer.pol and PhD Doctoral Regulation

Once all of this is taken care of, and thus having successfully completed the doctoral procedure, the doctoral candidate will receive a doctoral degree certificate signed by the Rector of the University of Bremen and the Chair of the Doctoral Committee.⁵⁸⁰ The doctoral degree certificate will only be issued if the thesis has been published, publication is assured of if the prescribed number of copies has been made available.⁵⁸¹ Only after the receipt of the degree certificate, will the doctoral candidate be allowed to use the doctoral title.⁵⁸²

However, the doctoral title may be revoked if it became evident that the degree was acquired by deceit. The decision to revoke the doctoral degree must be taken by the respective Faculty Board, following a recommendation by the Doctoral Committee. The doctoral candidate will be given the chance to state their case.⁵⁸³

Finally, and perhaps most importantly for this report, let us examine the provisions on joint and double degrees (referred to as cotutelle). Accordingly, the doctoral procedure can also be held under joint supervision of a foreign university if an agreement is made with that foreign university, which is approved by the Doctoral committee.⁵⁸⁴ The present doctoral degree regulations apply to a doctorate under joint supervision, unless other regulations have been agreed to.⁵⁸⁵ The agreement must include:⁵⁸⁶

- the supervisors at both universities,
- that the supervisors shall be appointed as reviewers/examiners,
- mutual study visits,
- where the oral examination will be held,
- the composition of the Examination Committee,
- that both supervisors as well as at least one other examiner from each of the universities belong to the Examination Committee,
- the language in which the thesis and abstract will be written,⁵⁸⁷
- which doctoral degree the universities will award.

The doctoral candidate must meet the entry requirement of both universities.⁵⁸⁸ Different rules regarding the composition of the Examination Committee apply, depending on where the oral

⁵⁸⁰ Article 21(3) of the Dr.iur. Doctoral Regulation, Article 13(3) of the Dr.rer.pol. and Article 12(3) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁸¹ Article 21(2) of the Dr.iur. Doctoral Regulation, Article 13(2) of the Dr.rer.pol. and Article 12(2) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁸² Article 21(1) of the Dr.iur. Doctoral Regulation, Article 13(1) of the Dr.rer.pol. and Article 12(1) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁸³ Article 22 of the Dr.iur. Doctoral Regulation, Article 13(4) of the Dr.rer.pol.

⁵⁸⁴ Article 20(1) of the Dr.iur. Doctoral Regulation, Article 14(1) of the Dr.rer.pol. Doctoral Regulation, Article 12a(1) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁸⁵ Article 20(2) of the Dr.iur. Doctoral Regulation, Article 14(2) of the Dr.rer.pol. Doctoral Regulation, Article 12a(2) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁸⁶ Article 20(1) of the Dr.iur. Doctoral Regulation, Article 14(2) of the Dr.rer.pol. Doctoral Regulation, Article 12a(2) of the Dr.rer.pol. and PhD Doctoral Regulation.

 ⁵⁸⁷ Article 14(3) of the Dr.rer.pol. Doctoral Regulation, Article 12a(3) of the Dr.rer.pol. and PhD Doctoral Regulation.
 ⁵⁸⁸ Article 20(3) of the Dr.iur. Doctoral Regulation, Article 14(4) of the Dr.rer.pol. Doctoral Regulation, Article 12a(4) of the Dr.rer.pol. and PhD Doctoral Regulation.

examination will take place: at the University of Bremen or at the partner university.⁵⁸⁹ Additionally, the Dr.iur. Doctoral Regulation and the Dr.rer.nat Doctoral Regulation provide that upon completion of the procedure, a certificate will be signed and issued jointly by both universities. Alternatively, each university may issue a certificate separately, explicitly stating that the doctorate was completed under joint supervision. The certificate will only be handed over once the thesis has been published.⁵⁹⁰

6.1.2 Cluster 2 – Psychology & Medicine

Cluster 2 only includes one faculty (human and health sciences), but this faculty is regulated by four different doctoral regulations. However, two of these regulations have already been examined as part of Cluster 1 (in particular, for the titles Dr.rer.pol. and Dr.phil). Therefore, this overview will only include the other two regulations. For the purposes of clarity, should there be any differences between the two regulations, only then will these differences be explicitly stipulated by indicating the specific provisions.

Each regulation starts in Article 1 with a general statement that the University of Bremen has the power to grant the doctoral degree, through the respective faculties. This is followed by an indication of the different doctoral titles to be awarded: *Doktor*in Public Health (Dr.P.H.)* (Doctor of Public Health) by Faculty 11 and *Doktor*in der Naturwissenschaften (Dr.rer.nat.)* (Doctor of Natural Sciences) by Faculty 11.

All regulations then provide for the establishment of the *Promotionsausschuss* (Doctoral Committee) for each doctoral title to be awarded, which is responsible for the implementation of the doctoral procedure.⁵⁹¹ The Doctoral Committee consists of three professors, one academic staff member and one student.⁵⁹² Further, the Dr.rer.nat. Doctoral Regulation provides that two of the professors must be professors in psychology, while the other professor must be a professor of nursing or public health. The research assistant and student must also be engaged in one of these subjects.⁵⁹³ The Doctoral Committee elects from among its members a Chair, who must be a professor.⁵⁹⁴ The Chair takes care of the daily business of the Doctoral Committee.⁵⁹⁵ The decisions of the Doctoral Committee can be appealed before the *Widerspruchausschuss* (Appeals Committee).⁵⁹⁶ The Appeals Committee is appointed by the Academic Senate.⁵⁹⁷ It consists of three professors, one academic staff member and one student.⁵⁹⁸

⁵⁸⁹ Article 20(4-5) of the Dr.iur. Doctoral Regulation, Article 14(5-6) of the Dr.rer.pol. Doctoral Regulation, Article 12a(5-6) of the Dr.rer.pol. and PhD Doctoral Regulation.

⁵⁹⁰ Article 20(6) of the Dr.iur Doctoral Regulation.

⁵⁹¹ Article 2(1) of the Promotionsordnung der Universität Bremen für den Fachbereich 11 (Human-/

Gesundheidswissenschaften) vom 22.12.2017 (Dr. Public Health, Dr.P.H.) (hereinafter: Dr.P.H. Doctoral Regulation), and Article 2(1) of the *Promotionsordnung der Universität Bremen für die Verleihung des Grades Dr.rer.nat. im Fachbereich 11* vom 06.07.2011 (hereinafter: Dr.rer.nat. Doctoral Regulation).

⁵⁹² Articles 2(2) of the Dr.P.H. Doctoral Regulation and the Dr.rer.nat. Doctoral Regulation.

⁵⁹³ Article 2(2) of the Dr.rer.nat Doctoral Regulation.

⁵⁹⁴ Article 2(2) of the Dr.P.H. Doctoral Regulation and Article 2(3) of the Dr.rer.nat. Doctoral Regulation.

⁵⁹⁵ Articles 2(3) of the Dr.P.H. Doctoral Regulation and the Dr.rer.nat. Doctoral Regulation.

⁵⁹⁶ Articles 3(1) of the Dr.P.H. Doctoral Regulation and the Dr.rer.nat. Doctoral Regulation.

⁵⁹⁷ Articles 3(2) of the Dr.P.H. Doctoral Regulation and the Dr.rer.nat. Doctoral Regulation.

⁵⁹⁸ Article 3(3) of the Dr.P.H. Doctoral Regulation and Article 3(2) of the Dr.rer.nat. Doctoral Regulation.

Any person interested in obtaining a doctoral degree, must first submit an application to become a doctoral candidate to the responsible Doctoral Committee, which will then decide on the application within six weeks.⁵⁹⁹ The application must include the following documents and evidence:

- A curriculum vitae;
- A Master's degree, or *Diplom* awarded by a German university, or a *Magistergrad*, or a *Staatsexamen* (for degrees awarded by universities of applied sciences and bachelor degrees, specific rules apply);⁶⁰⁰
- A written declaration as to whether, and if so with what result, the applicant has already been a candidate in a doctoral examination or applied for admission elsewhere;
- A presentation of the intended doctoral project ("exposé") and a positive opinion of the supervisor on the project.⁶⁰¹

Furthermore, the Dr.rer.nat. Doctoral Regulation explicitly states that the candidate is free to choose the subject of the doctoral thesis, but must describe the problem of the planned work in the application.⁶⁰²

In terms of supervision, the doctoral candidate must be supervised by a professor who is a member of the University of Bremen and both parties must agree thereto.⁶⁰³ However, the doctoral candidate can also be supervised by someone else than a professor. The supervisor might also be a professor of another university, an honorary professor of the University of Bremen, a postdoctoral researcher of the University of Bremen, or a scientist with a *Habilitation*.⁶⁰⁴ After a successful application, the applicant receives the status of doctoral candidate. The status of doctoral candidate will end after three (for the Dr.P.H. doctoral title) or four (for the Dr.rer.nat. doctoral title) years, but can be extended upon request of the doctoral candidate.⁶⁰⁵

The doctoral candidate is then required to write a thesis. That thesis must meet academic standards and contribute to the advancement of science. It should further prove the doctoral candidate's ability for independent, in-depth scientific research.⁶⁰⁶ The thesis may also consist of a number of the doctoral candidate's own published articles and other publications, but specific rules apply if this is the case.⁶⁰⁷ The thesis must be written in German or in English, but the Doctoral Committee can allow the doctoral candidate to write the thesis in another language.⁶⁰⁸ The thesis may be published in part or in full prior to the examination.⁶⁰⁹

⁶⁰⁰ Article 4(1-3) of the Dr.P.H. Doctoral Regulation and Article 7(1-2) of the Dr.rer.nat. Doctoral Regulation.

⁶⁰⁷ Article 6(4) of the Dr.P.H. Doctoral Regulation and Article 6(2) of the Dr.rer.nat. Doctoral Regulation.

⁵⁹⁹ Article 5(2) of the Dr.P.H. Doctoral Regulation and Article 4(1) of the Dr.rer.nat. Doctoral Regulation.

 ⁶⁰¹ Article 5(2) of the Dr.P.H. Doctoral Regulation and Article 4(2) of the Dr.rer.nat. Doctoral Regulation.
 ⁶⁰² Article 4(3) of the Dr.rer.nat. Doctoral Regulation.

⁶⁰³ Article 5(1) of the Dr.P.H. Doctoral Regulation and Article 4(4) of the Dr.rer.nat. Doctoral Regulation. ⁶⁰⁴ *Ibidem*.

⁶⁰⁵ Article 5(3) of the Dr.P.H. Doctoral Regulation and Article 5(6) of the Dr.rer.nat. Doctoral Regulation. ⁶⁰⁶ Articles 6(1) of the Dr.P.H. Doctoral Regulation and the Dr.rer.nat. Doctoral Regulation.

⁶⁰⁸ Article 6(3) of the Dr.P.H. Doctoral Regulation and Article 6(4) of the Dr.rer.nat. Doctoral Regulation.

⁶⁰⁹ Article 6(2) of the Dr.P.H. Doctoral Regualtion and Article 6(3) of the Dr.rer.nat. Doctoral Regulation.

When the thesis is completed, the doctoral candidate must continue the doctoral procedure by applying for the examination procedure. The doctoral candidate applies for the examination procedure by submitting the thesis.⁶¹⁰ The application must also include:

- A CV;
- A list of scientific publications;
- A written statement as to whether, and if so with what result, the applicant has already been a candidate in a doctoral examination or applied for admission elsewhere;
- The documents required for the application to becoming a doctoral candidate, if these have not been submitted already;
- A suggestion as to the composition of the Examination Committee;
- A written statement that the thesis was written without unauthorised help, that no sources other than the ones indicated were used, and that direct quotations are clearly indicated.⁶¹¹

The Dr.P.H. Doctoral Regulation further requires a written statement that the thesis may be checked for plagiarism with qualified software,⁶¹² as well as an abstract of the thesis in English which may not exceed one page in length.⁶¹³ In principle, the application for the examination procedure can only be made if the applicant has been enrolled as a doctoral candidate for more than a year already. Applicants who have not been previously enrolled as a doctoral candidate, are only admitted to the examination procedure if they fulfil additional requirements.⁶¹⁴ Furthermore, the thesis must be submitted electronically, as well as in three (for the Dr.rer.nat. doctoral title) or five (for the Dr.P.H. doctoral title) bound copies.⁶¹⁵ The thesis must then be made available for inspection university-wide up to the oral examination (for the Dr.P.H. doctoral title) or for a period of 14 days (for the Dr.rer.nat. doctoral title).⁶¹⁶ The Doctoral Committee must decide within four weeks and notify the doctoral candidate in writing of its decision.⁶¹⁷

Upon a positive decision by the Doctoral Committee, the Doctoral Committee appoints the reviewers of the thesis.⁶¹⁸ Two reviewers will be appointed and the doctoral candidate may propose suggestions as to the reviewers. The Doctoral Committee may only reject a suggested reviewer with reasons. The reviewers can be professors or experts with a *habilitation*. At least one of the reviewers must be a member of Faculty 11.⁶¹⁹ The Dr.P.H. Doctoral Regulation provides that a third reviewer may be appointed in certain situations.⁶²⁰ The D.rer.nat. Doctoral Regulation provides for additional rules for a doctoral candidate who had not been appointed as a doctoral candidate before.⁶²¹

Each reviewer must submit a report, suggesting the approval, revision or rejection of the thesis. In case of approval, they will also include one of the following grades: *summa cum laude, magna cum*

⁶¹² Article 7(1)(4) of the Dr.P.H. Doctoral Regulation.

⁶¹⁰ Article 7(1) of the Dr.P.H. Doctoral Regulation and Article 5(1) of the Dr.rer.nat. Doctoral Regulation.

⁶¹¹ *Ibidem*, and Article 7(4) of the Dr.P.H. Doctoral Regulation and Article 6(6) of the Dr.rer.nat. Doctoral Regulation.

⁶¹³ Article 7(3) of the Dr.P.H. Doctoral Regulation.

⁶¹⁴ Article 4(4) of the Dr.P.H. Doctoral Regulation and Article 4(5) of the Dr.rer.nat. Doctoral Regulation.

⁶¹⁵ Article 7(2) of the Dr.P.H. Doctoral Regulation and Article 6(5) of the Dr.rer.nat. Doctoral Regulation.

⁶¹⁶ Article 7(4) of the Dr.P.H. Doctoral Regulation and Article 6(6) of the Dr.rer.nat. Doctoral Regulation.

⁶¹⁷ Article 5(2) of the Dr.rer.nat. Doctoral Regulation. The Dr.P.H. Doctoral Regulation remains silent on the matter. ⁶¹⁸ Articles 8(1) of the Dr.P.H. and the Dr.rer.nat. Docotral Regulations.

⁶¹⁹ Article 8(2) of the Dr.P.H. Doctoral Regulation and Article 8(3) of the Dr.rer.nat. Doctoral Regulation.

⁶²⁰ Article 8(2) of the Dr.P.H. Doctoral Regulation.

⁶²¹ Article 8(4) of the Dr.rer.nat. Doctoral Regulation.

laude, cum laude or *rite*. In case of revision, the report of the reviewer will include suggestions for the improvement of the thesis.⁶²² The reports must be submitted by the reviewers within six weeks from their appointment. If a reviewer does not submit the report in a timely manner, the Doctoral Committee may, after having reminded the reviewer and with permission from the doctoral candidate, dismiss that reviewer and appoint a new reviewer.⁶²³ The reports can be made available to the members of Faculty 11 if the doctoral candidate agrees thereto according to the Dr.P.H. Doctoral Regulation, or they must be made available to them for a period of two weeks.⁶²⁴ The doctoral candidate may also request to postpone the oral examination in order to revise the thesis, but may also request to withdraw the thesis and the application for a doctoral degree altogether. The request to postpone the oral examination can only be made once. The revised version of the thesis will be rejected.⁶²⁵ If two reviewers approve the thesis, then the doctoral candidate must be admitted to the oral examination. If two reviewers reject the thesis, then the doctoral candidate may not be admitted to the oral examination. For a doctoral candidate may not be admitted to the oral examination. If two reviewers reject the thesis, then the doctoral candidate may not be admitted to the oral examination.

As soon as the reports of the reviewers become available, the Doctoral Committee appoints the Examination Committee.⁶²⁸ It consists of the reviewers, an equal number of professors or postdoctoral researchers, including at least one staff member of the University of Bremen, and two other members of the University of Bremen.⁶²⁹ The doctoral candidate may make suggestions as to the composition of the Examination Committee, which the Doctoral Committee may only reject with reasons.⁶³⁰ The Examination Committee sets the date and time for the oral examination, in consultation with the chair of the Doctoral Committee. Then, different rules apply depending on the doctoral regulation.⁶³¹

According to the Dr.P.H. Doctoral Regulation, the oral examination will take place within two weeks at the earliest and is announced university-wide. The chair of the Examination Committee opens the oral examination, which will take place in German or in English. All members of the Examination Committee must be present during the oral examination.⁶³² Further, the oral examination consists of two parts, which will each take approximately 45 minutes. In the first part, the doctoral candidate presents the most important results of the thesis for 30 minutes, followed by a commentary of 15 minutes on the critique of the reviewers in their reports. In the second part, the doctoral candidate proves being capable to evaluate the problems and results of the thesis, to defend it against critique and to classify it in the relevant discipline of public health as a multidisciplinary scientific and practical discipline.⁶³³ According to the Dr.rer.nat. Doctoral Regulation, the oral examination takes at least one hour and not more than one-and-a-half hour, covers selected problems of the subject and related

⁶²² Article 8(3) of the Dr.P.H. Doctoral Regulation and Article 8(2) of the Dr.rer.nat. Doctoral Regulation.

⁶²³ Article 8(4) of the Dr.P.H. Doctoral Regulation and Article 8(5) of the Dr.rer.nat. Doctoral Regulation.

⁶²⁴ Article 8(5) of the Dr.P.H. Doctoral Regulation and Article 8(5) of the Dr.rer.nat. Doctoral Regulation.

⁶²⁵ Articles 8(6) of the Dr.P.H. and Dr.rer.nat. Doctoral Regulations.

⁶²⁶ Articles 8(7) of the Dr.P.H. and Dr.rer.nat. Doctoral Regulations.

⁶²⁷ Articles 8(8) of the Dr.P.H. and Dr.rer.nat. Doctoral Regulations.

⁶²⁸ Articles 9(1) of the Dr.P.H. and Dr.rer.nat. Doctoral Regulations.

⁶²⁹ Articles 9(2) of the Dr.P.H. and Dr.rer.nat. Doctoral Regulations.

⁶³⁰ Ibidem.

⁶³¹ Article 9(3) of the Dr.P.H. Doctoral Regulation and Article 9(4) of the Dr.rer.nat. Doctoral Regulation.

⁶³² Article 9(3) of the Dr.P.H. Doctoral Regulation.

⁶³³ Article 9(4) of the Dr.P.H. Doctoral Regulation.

areas in addition to the defence of the thesis. The duration of each part is limited to a maximum of 30 minutes. The expert opinions must also be discussed.⁶³⁴

Immediately after the oral examination, the Examination Committee decides on the grading thereof. After a general discussion, each member of the Examination Committee gives their individual grades. The final grade is calculated on the basis of the mathematical average of the individual grades.⁶³⁵ If the oral examination is passed, the Examination Committee decides on the doctorate. If the oral examination was negatively graded twice or more, more specific rules apply. Even more specific rules apply for the designation of *magna cum laude* and *summa cum laude*.⁶³⁶ The members of the Doctoral Committee may participate in the closed deliberations of the Examination Committee.⁶³⁷ The Examination Committee submits a final report to the Doctoral Committee within two weeks. In addition to whether and with which grade the candidate will receive a doctorate degree, it also indicates whether and to which extent the thesis must be revised prior to publication. If it must be revised prior to the publication, the doctoral committee will only decide on the conferment of the doctorate after the examining board confirmed the doctorate.⁶³⁸

Additionally, the Dr.P.H. Doctoral Regulation provides for specific rules in case the oral examination failed. In such situation, the chair of the Doctoral Committee will take an appealable decision on the basis of the report of the Examination Committee, which will also draw attention to the possibility of repeating the oral examination in accordance with Article 10. If the doctoral candidate fails to appear at the oral examination, this will be deemed to be a fail, unless the doctoral candidate is not responsible for the failure. At the request of the doctoral candidate, which must be justified, the Doctoral Committee may consider the failure to attend as excused. In this case, the Doctoral Committee will set a new date in agreement with the doctoral candidate failed the oral examination, it is possible to apply for a second oral examination. If the doctoral candidate fails once more, or does not apply for the second oral examination, the doctoral procedure is terminated.⁶⁴⁰

The Dr.rer.nat. Doctoral Regulation provides for general information on what happens when the thesis must be revised. In such situation, the Doctoral Committee shall only decide in accordance with Article 10 after the Examination Committee has confirmed the revision. The Examination Committee may reappoint a reviewer or the reviewers as a whole to review and confirm the revision. In cases of doubt, the Examination Committee shall decide. The Examination Committee proposes a period for the revision of the dissertation, which should normally not be longer than six months.⁶⁴¹

The Doctoral Committee decides on the conferment of the doctoral degree.⁶⁴² If the doctoral committee has any misgivings concerning the report submitted by the examining board or the procedure, and the examining board is unable to dispel any such misgivings, the doctoral committee

⁶³⁶ Article 9(6) of the Dr.P.H. Doctoral Regulation and Article 9(7) of the Dr.rer.nat. Doctoral Regulation.

⁶³⁴ Article 9(5) of the Dr.rer.nat. Doctoral Regulation.

⁶³⁵ Article 9(5) of the Dr.P.H. Doctoral Regulation and Article 9(6) of the Dr.rer.nat. Doctoral Regulation.

⁶³⁷ Article 9(7) of the Dr.P.H. Doctoral Regulation and Article 9(8) of the Dr.rer.nat. Doctoral Regulation.

⁶³⁸ Article 9(8) of the Dr.P.H. Doctoral Regulation and Article 9(9) of the Dr.rer.nat. Doctoral Regulation.

⁶³⁹ Article 9(9) of the Dr.P.H. Doctoral Regulation.

⁶⁴⁰ Article 10 of the Dr.P.H. Doctoral Regulation.

⁶⁴¹ Article 9(10) of the Dr.rer.nat. Doctoral Regulation

⁶⁴² Article 11(1) of the Dr.P.H. Doctoral Regulation and Article 10(1) of the Dr.rer.nat. Doctoral Regulation.

shall seek the opinion of the appeals committee and appoint a new examining board for a new oral examination.⁶⁴³ The same rules apply if the examining board fails to submit the final report within the prescribed period of time.⁶⁴⁴

However, in case of suspicion of plagiarism, the oral examination will not take place until that suspicion has been dispelled. The doctoral candidate is under an obligation to assist in dispelling the suspicion.⁶⁴⁵ In case evidence appears that the doctoral candidate acted deceitfully with regard to the admission requirements or in the course of performing the doctoral work, or that requirements for admission had been assumed erroneously, the Doctoral Committee will nullify the doctoral proceedings,⁶⁴⁶ but only after having sought the opinion of the supervisors and/or the supervising committee.⁶⁴⁷

The doctoral thesis must be published as a book, a reproduced manuscript or in electronic form. The doctoral candidate must supply copies free of charge to the library of the University of Bremen. There are several possibilities to comply with this requirement.⁶⁴⁸ The thesis may also be published in a revised or shortened version. The author and the chairperson of the doctoral committee have to agree on the revision or shortening of the thesis. If the thesis is published in a revised or shortened version, it will be accompanied by a note on the extent of revision or shortening.⁶⁴⁹

After having completed the doctoral procedure successfully, the doctoral candidate receives a doctoral degree certificate signed by the Rector of the University of Bremen and the Dean of Faculty 11 for the Dr.P.H. Doctoral Regulation or the Chair of the Doctoral Committee for the Dr.rer.nat. Doctoral Regulation.⁶⁵⁰ The doctoral degree certificate will only be issued if the thesis has been published, publication is assured, or the prescribed number of copies has been made available.⁶⁵¹ Only after the receipt of the degree certificate, will the doctoral candidate be allowed to use the doctor title.⁶⁵² However, the doctoral degree can also be revoked, but only if it became evident that the degree was acquired by deceit. The decision to revoke the doctoral degree must be taken by the Faculty Board, following a recommendation by the Doctoral Committee.⁶⁵³

Finally, and maybe also most importantly, the doctoral procedure can also be held under joint supervision of a foreign university if an agreement is made with that foreign university, which is approved by the Doctoral Committee (referred to as cotutelle).⁶⁵⁴ The regular doctoral regulations apply to a doctorate under joint supervision, unless other regulations have been agreed upon.⁶⁵⁵ The joint supervision agreement will include:

 ⁶⁴³ Article 11(2 and 3) of the Dr.P.H. Doctoral Regulation and Article 10(2 and 3) of the Dr.rer.nat. Doctoral Regulation.
 ⁶⁴⁴ Article 11(4) of the Dr.P.H. Doctoral Regulation and Article 10(4) of the Dr.rer.nat. Doctoral Regulation.

⁶⁴⁵ Article 11(1) of the Dr.P.H. Doctoral Regulation and Artic

⁶⁴⁶ Article 11 of the Dr.rer.nat. Doctoral Regulation.

⁶⁴⁷ Article 11(2) of the Dr.P.H. Doctoral Regulation.

⁶⁴⁸ Article 13(1) of the Dr.P.H. Doctoral Regulation and Article 12(1) of the Dr.rer.nat. Doctoral Regulation.

⁶⁴⁹ Article 13(2) of the Dr.P.H. Doctoral Regulation and Article 12(2) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵⁰ Article 15(1) of the Dr.P.H. Doctoral Regulation and Article 13(1) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵¹ Article 15(2) of the Dr.P.H. Doctoral Regulation and Article 13(2) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵² Article 15(3) of the Dr.P.H. Doctoral Regulation and Article 13(3) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵³ Article 15(4) of the Dr.P.H. Doctoral Regulation and Article 13(4) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵⁴ Article 14(1) of the Dr.P.H. Doctoral Regulation and Article 13a(1) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵⁵ Article 14(2) of the Dr.P.H. Doctoral Regulation and Article 13a(2) of the Dr.rer.nat. Doctoral Regulation.

- the supervisors in both universities;
- mutual study visits;
- where the oral examination will be held;
- the composition of the examining board, that both supervisors as well as at least one other examiner from each of the universities belong to the board as examiner;⁶⁵⁶
- the language in which the thesis and abstract will be written;
- which doctoral degree the universities will award.⁶⁵⁷

The doctoral candidate must further meet the admission requirements of both universities.⁶⁵⁸ In case the language of the country where the partner university is based is not German, the thesis may be written in that language provided the thesis is accompanied by a summary in German. The thesis may also be written in another language than German or the language of the country of the partner university, provided the thesis is accompanied by summaries in those languages.⁶⁵⁹ After successful completion, a joint degree and certificate will be issued by the partner universities. Alternatively, they can both decide to issue their own certificate explicitly stipulating that the degree was awarded by both universities.⁶⁶⁰

6.1.3 Cluster 3 – Engineering

Cluster 3 again covers several faculties, namely that of Physics and Electrical Engineering, that of Mathematics and Computer Science, and that of Production Engineering. Each of these faculties has their own regulation to issue the title of *Doktor der Ingenieurwissen-schaften (Dr.-Ing.)*.⁶⁶¹

According to the first Article of the three regulations, the University of Bremen has the power to grant the doctoral in engineering for the three faculties. It then provides for the establishment of the *Promotionsausschuss* (Doctoral Committee) for the doctoral title to be awarded. It is composed of representatives of professors, students, academics and other staff. Staff is appointed for a period of two years, students for a period of one year.⁶⁶² A Chair, who must be a professor, is elected from among the members.

Any person interested in obtaining a doctoral degree, must first submit an application for a doctorate with the responsible Doctoral Committee. The Doctoral Committee will decide on the application within five or six weeks.⁶⁶³ In the case of production engineering, the regulation specifies that candidates must first have completed at least eight semesters of study in electrical engineering or

⁶⁵⁷ Article 14(3) of the Dr.P.H. Doctoral Regulation and Article 13a(3) of the Dr.rer.nat. Doctoral Regulation.

⁶⁵⁸ Article 14(4) of the Dr.P.H. Doctoral Regulation and Article 13a(4) of the Dr.rer.nat. Doctoral Regulation.

- ⁶⁵⁹ Article 13a(5) of the Dr.rer.nat. Doctoral Regulation. The Dr.P.H. Doctoral Regulation remains silent on the matter.
 ⁶⁶⁰ Article 14(7) of the Dr.P.H. Doctoral Regulation and Article 13a(8) of the Dr.rer.nat. Doctoral Regulation.
- ⁶⁶¹ Promotionsordnung (Dr. Ing), vom. 27.01.2015, Faculty 01 (hereinafter: Dr. ing. Doctoral Regulation Faculty 01),
 Promotionsordnung der Universität Bremen für die mathematischen, natur- und ingenieurwissenschaftlichen Fachbereiche, vom 14.03.2007 (hereinafter: Dr.ing. Doctoral Regulation Faculty 03), and Promotionsordnung (Dr. Ing) der Universität
 Bremen für den Fachbereich 4 (Produktionstechnik) vom 20.08.2020 (hereinafter: Dr.ing Doctoral Regulation Faculty 04).
 ⁶⁶² Article 2(2) Dr. Ing. Doctoral Regulation Faculty 01, Article 2(2) Dr. Ing Doctoral Regulation Faculty 03, Article 2(2) Dr.
 Ing. Doctoral Regulation Faculty 04.

⁶⁵⁶ Article 14(5) of the Dr.P.H. Doctoral Regulation and Article 13a(6) of the Dr.rer.nat. Doctoral Regulation.

⁶⁶³ Article 4(1) Dr. Ing. Doctoral Regulation Faculty 01, Article 5(2) Dr. Ing. Doctoral Regulation Faculty 04, Article 4(1) of the Dr.ing. Doctoral Regulation (Faculty 03).

other relevant fields and must have obtained a minimum grade level for their prior studies.⁶⁶⁴ Similar requirements are also made for the other faculties.⁶⁶⁵ The applicant must include the following documents and evidence in its application: ⁶⁶⁶

- a curriculum vitae and list of scientific publications;
- proof of necessary qualifications;
- a written statement whether the applicant pursued or applied for another doctorate; and
- For faculties 1 and 4, a declaration of the future supervisor.

The applicant is furthermore free to choose the subject of the doctorate. In the application, the applicant must also describe the problem of the planned work.⁶⁶⁷ During the doctorate, the doctoral candidate must also be supervised.⁶⁶⁸ In conciliation with the candidate, a professor, or someone with equivalent qualification from within or outside the University of Bremen, will be appointed as supervisor. In case the supervisor is from outside the University of Bremen, an additional supervisor will be appointed from within the University of Bremen. The status of doctoral candidate ends either four or five years after the acceptance as doctoral candidate (depending on the faculty). It may be extended upon a substantiated application by the doctoral candidate and after having taken into account the opinion of the supervisor, if the successful completion of the doctoral procedure can be expected.⁶⁶⁹

The doctoral candidate must then write a thesis. That thesis must meet academic standards and contribute to the advancement of science. It must prove the doctoral candidate's ability to conduct independent and in-depth scientific research.⁶⁷⁰ The thesis may consist of a number of the candidate's own published articles and other publications.⁶⁷¹ It may be published in part or in full prior to the oral examination.⁶⁷² The thesis must be written in German or in English, and a summary in German must be included.⁶⁷³ The thesis must be submitted in three bound copies and must be accompanied by a statement of the doctoral candidate that the work was performed without any unauthorised help, that no sources were used other than the ones indicated, and that direct quotations are clearly indicated.⁶⁷⁴ It must be made available university-wide until the oral examination.⁶⁷⁵

⁶⁶⁴ Article 4(1) Dr. Ing Doctoral Regulation (Faculty 04). Under this Article, it is also possible to access a doctorate in production engineering with a bachelor's degree, under particular conditions.

⁶⁶⁵ See Article 7 Dr. Ing Doctoral Regulation (Faculty 01) and Article 7 Dr. Ing Doctoral Regulation Faculty 03.

⁶⁶⁶ Article 5(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 5(2) of the Dr. ing Doctoral Regulation Faculty 01, and Article 4(2) Dr. Ing Doctoral Regulation Faculty 04.

⁶⁶⁷ Article 5(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 5(2) of the Dr. ing Doctoral Regulation Faculty 01, and Article 4(2) Dr. Ing Doctoral Regulation Faculty 04.

⁶⁶⁸ Article 4(3) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 4(4) of the Dr. ing Doctoral Regulation Faculty 04, and Article 5(1) Dr. Ing Doctoral Regulation Faculty 01.

⁶⁶⁹ Article 4(6) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 5(3) Dr. ing. Doctoral Regulation Faculty 01, Article 4(7) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁷⁰ Article 6(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(1) Dr.ing. Doctoral Regulation Faculty 01, Article 6(1) Dr.ing Doctoral Regulation Faculty 04.

⁶⁷¹ Article 6(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(3) Dr.ing. Doctoral Regulation Faculty 01, Article 6(2) Dr.ing Doctoral Regulation Faculty 04.

⁶⁷² Article 6(3) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(2) Dr.ing. Doctoral Regulation Faculty 01, Article 6(3) Dr.ing Doctoral Regulation Faculty 04.

⁶⁷³ Article 6(4) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(4) Dr.ing. Doctoral Regulation Faculty 01, Article 6(4) Dr.ing Doctoral Regulation Faculty 04.

⁶⁷⁴ Article 6(5) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(5) Dr.ing Doctoral Regulation Faculty 04, Article 7(2) Dr. ing. Doctoral Regulation Faculty 01.

⁶⁷⁵ Article 6(6) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 6(6) Dr.ing Doctoral Regulation Faculty 04.

When the thesis is completed, the doctoral procedure must be continued by applying for admission to the defence procedure. The doctoral candidate does so by submitting the thesis and indicating the doctoral degree they wish to obtain. In addition to that, the doctoral candidate must once more provide the same documents and evidence as required for the initial application.⁶⁷⁶ Some additional documents may be required such as a proposal containing the members of the examination committee and document agreeing to submit the thesis to a plagiarism check. The Doctoral Committee must decide on the application for admittance the examination procedure within four to six weeks.⁶⁷⁷

The next step is the review of the thesis. The Doctoral Committee only decides on the admission to the oral examination after having taken into account the advice of the reviewers of the thesis.⁶⁷⁸ Each reviewer must submit a report of the thesis, grading and suggesting the approval or rejection thereof. In case of rejection of the thesis, the report must also contain recommendations as to how to improve the thesis.⁶⁷⁹ Different procedures exist for the appointment of reviewers, depending on the faculty regulation one is looking at. For example, in the case of the Faculty of mathematics and computer science, a second reviewer be appointed if the first reviewer accepts the thesis.⁶⁸⁰ The reviewers must thereby be sufficiently independent. One of the reviewers must also be the supervisor of the doctoral candidate. At least one of the reviewers must be a member of the Faculty. In case one of the reviewers rejects the thesis, a new reviewer will be appointed.⁶⁸¹

The reports of the reviewers must be made available to the doctoral candidate, the Doctoral Committee and the members of the Examination Committee after six weeks.⁶⁸² The reports must also be made available for 14 days at the administration of the faculty, where they can be examined by members of the University of Bremen. After having consulted the reports of the reviewers, the doctoral candidate may request for a one-time interruption of the procedure for revising the thesis, or may withdraw the thesis altogether. The revised version of the thesis must again be presented to the same reviewers.⁶⁸³ If two reviewers accept the thesis, the doctoral candidate must be admitted to the oral examination. If two reviewers reject the thesis, the doctoral candidate will not be admitted to the oral examination and the Doctoral Committee will decide on the procedure with "nicht bestanden".⁶⁸⁴

⁶⁷⁶ Article 5(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 7 Dr.ing. Doctoral Regulation Faculty 01, Article 7(1) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁷⁷ Article 5(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 5(2) Dr.ing. Doctoral Regulation Faculty 04, Article 5(2) Dr.ing. Doctoral Regulation Faculty 01.

⁶⁷⁸ Article 8(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 8(1) Dr.ing. Doctoral Regulation Faculty 04, Article 8(1) Dr.ing. Doctoral Regulation Faculty 01.

⁶⁷⁹ Article 8(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 8(5) Dr.ing. Doctoral Regulation Faculty 01, Article 8(2) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸⁰ Article 8(4) of the Dr.ing. Doctoral Regulation (Faculty 03).

⁶⁸¹ Article 8(3) of the Dr.ing. Doctoral Regulation (Faculty 03).

⁶⁸² Article 8 Dr.ing. Doctoral Regulation Faculty 03, Article 8(6) Dr.ing. Doctoral Regulation Faculty 01, Article 8(4) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸³ Article 8(6) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 8(7) Dr.ing. Doctoral Regulation Faculty 01, Article 8(5) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸⁴ Article 8(7) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 8(7) Dr.ing. Doctoral Regulation Faculty 01, Article 8(5) Dr.ing. Doctoral Regulation Faculty 04.

If the Doctoral Committee decides to allow the doctoral candidate to defend the thesis, it will appoint the Examination Committee (also understood as the Defence Committee).⁶⁸⁵ The Examination Committee consists of the reviewers, an equal number of professors or experts holding a doctorate and, in the case of Faculties 03 and 04, two other members of the University of Bremen, including a student. Only the reviewers, the professors and the experts have a right to vote on the conferment of the doctoral degree.⁶⁸⁶ In addition to the defence of the doctoral thesis, the oral examination may also cover related subjects, as well as the reports of the reviewers and the additional remark to the extent that a member of the Examination Committee or the doctoral candidate makes them the subject of discussion.⁶⁸⁷ Within two weeks after the defence, the Examination Committee delvers a report thereof to the Doctoral Committee. The report includes the statement whether and with which degree the doctoral candidate will receive the doctoral degree. This requires a plurality of votes. It will also indicate whether the thesis must be revised before publication.⁶⁸⁸ In case of revision, the Doctoral Committee on the conferment of the doctoral degree after the Examination Committee will only decide on the conferment of the doctoral degree after the Examination.

On the basis of the report by the Examination Committee, the Doctoral Committee will decide on the conferral of the degree.⁶⁹⁰ If the Doctoral Committee has doubts about the report, it may request the Examination Committee to review the report.⁶⁹¹ If the Doctoral Committee has doubts about the procedure and the Examination Committee cannot take away these doubts, the Doctoral Committee may appoint a new Examination Committee and schedule a new oral examination, but only after having heard the Appeals Committee.⁶⁹² Ultimately, the doctoral procedure is graded with the distinctions: summa cum laude, magna cum laude, cum laude or rite. The distinction summa cum laude is only possible if at least one of the reports of the reviewers contains the grade summa cum laude and the Examination Committee unanimously agrees thereto.⁶⁹³

The thesis must then be published as a book, in a journal or electronically. The doctoral candidate must provide copies free of charge with the library of the University of Bremen, in addition to the copies required for the defence. There are several possibilities to comply with this requirement.⁶⁹⁴ The thesis may also be published in a revised or shortened version, but the doctoral candidate and the chair of the Doctoral Committee have to agree on the revision or shortening of the thesis. If the thesis is published in a revised or shortened version, it will be accompanied by a note on the extent of

⁶⁸⁵ Article 9(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 9 Dr.ing. Doctoral Regulation Faculty 01, Article 9 Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸⁶ Article 9(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 9(3) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸⁷ Article 9(4) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 9(5) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁸⁸ Article 9(5) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 9(6) Dr.ing. Doctoral Regulation Faculty 04, Article 9(9) Dr.ing. Doctoral Regulation Faculty 01.

⁶⁸⁹ Article 9(6) of the Dr.ing. Doctoral Regulation (Faculty 03), Artcle 9(7) Dr.ing. Doctoral Regulation Faculty 04. The Regulation of Faculty 01 provides for a separate procedure in the event that the defence is not successfully completed, see Article 9(7) and 10 Dr.ing. Doctoral Regulation Faculty 01.

⁶⁹⁰ Article 10(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 11(1) Dr.ing. Doctoral Regulation Faculty 01, Article 10(1) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹¹ Article 10(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 11(2) Dr.ing. Doctoral Regulation Faculty 01, Article 10(2) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹² Article 10(3) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 11(3) Dr.ing. Doctoral Regulation Faculty 01, Article 10(3) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹³ Article 10(5) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 10(5) Dr.ing. Doctoral Regulation Faculty 04, Article 9(5) Dr.ing. Doctoral Regulation Faculty 01.

⁶⁹⁴ Article 11(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 12(1) Dr.ing. Doctoral Regulation Faculty 01, Article 12(1) Dr.ing. Doctoral Regulation Faculty 04.

revision or shortening.⁶⁹⁵ Finally, after passing the doctoral procedure, the Rector and Faculty Dean sign and issue a certificate to the doctoral candidate.⁶⁹⁶ The doctoral title can only be used after receipt of the certificate.⁶⁹⁷ The certificate is issued after publication of the thesis, or after confirmation that the thesis will be published.⁶⁹⁸ The doctoral title can then only be revoked if it became evident that the doctoral candidate received that title by means of deception.⁶⁹⁹

Of course, the doctoral procedure can also be held under joint supervision of a foreign university if an agreement is made with that foreign university, which is to be approved by the Doctoral Committee (referred to as cotutelle).⁷⁰⁰ The present doctoral degree regulations apply to a doctorate under joint supervision, unless other regulations have been agreed upon.⁷⁰¹ The agreement will include:⁷⁰²

- the supervisors in the two universities;
- mutual study visits;
- where the oral examination will be held;
- the evaluation criteria and grading scheme if applicable;
- the composition of the Examination Committee, which must have at least one member from each of the universities;
- the language(s) in which the thesis and summaries will be written;
- the type of doctoral degree the universities will award.

The doctoral candidate must meet the requirements for admission to the examination procedure at both universities.⁷⁰³ The Examination Committee will consist of the two supervisors and a professor from both universities. The members of the Examination Committee of the University of Bremen will be appointed by the Doctoral Committee. The members must be sufficiently fluent in the language of the thesis and of the examination in order to be able to participate in the examination and deliberations.⁷⁰⁴ Upon successful completion, the universities shall issue a joint certificate, signed by both universities. Alternatively, each university may issue its own certificate, in which the doctoral

⁶⁹⁵ Article 11(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 12(2) Dr.ing. Doctoral Regulation Faculty 01, Article 12(2) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹⁶ Article 12(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 13(1) Dr.ing. Doctoral Regulation Faculty 01, Article 13(1) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹⁷ Article 12(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 13(2) Dr.ing. Doctoral Regulation Faculty 01, Article 13(2) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹⁸ Article 12(3) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 13(3) Dr.ing. Doctoral Regulation Faculty 01, Article 13(3) Dr.ing. Doctoral Regulation Faculty 04.

⁶⁹⁹ Article 12(4) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 13(4) Dr.ing. Doctoral Regulation Faculty 01, Article 13(4) Dr.ing. Doctoral Regulation Faculty 04.

⁷⁰⁰ Article 13(1) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 14(1) Dr.ing. Doctoral Regulation Faculty 01, Article 15(1) Dr.ing. Doctoral Regulation Faculty 04.

⁷⁰¹ Article 13(2) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 14(2) Dr.ing. Doctoral Regulation Faculty 01, Article 15(2) Dr.ing. Doctoral Regulation Faculty 04.

⁷⁰² Article 13(3) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 14(3) Dr.ing. Doctoral Regulation Faculty 01, Article 15(3) Dr.ing. Doctoral Regulation Faculty 04.

⁷⁰³ Article 13(4) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 14(4) Dr.ing. Doctoral Regulation Faculty 01, Article 15(4) Dr.ing. Doctoral Regulation Faculty 04.

⁷⁰⁴ Article 13(5) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 15(5) Dr.ing. Doctoral Regulation Faculty 04. The regulation of Faculty 01 sets additional requirements related to where the defence takes place; see Article 14(5-7) Dr.ing. Doctoral Regulation Faculty 01.

procedure with joint supervision will be clearly indicated. The certificate is used to the doctoral candidate once there is proof that the thesis has been published.⁷⁰⁵

6.2 University of Konstanz

As mentioned in Section 6, higher education (and accordingly doctoral education) is largely within the competences of the German Federal States. The University of Konstanz is located in Baden Würtemberg where provisions on higher education are laid down in the *Gesetz über die Hochschulen in Baden-Württemberg* (Law on Higher Education in Baden-Württemberg - hereinafter LHG). According to Article 22 of the LHG, doctoral candidates who are enrolled at a university are considered faculty members.⁷⁰⁶ Further provisions on doctoral education are found in Article 38 which confirms that universities have the right to award the title of doctor (*Promotionsrecht*). The objective of a doctoral degree is to attest to having acquired deepened scientific knowledge through independent research (i.e. the thesis) and having passed an oral examination. During their doctorates, candidates must then follow training that helps them acquire essential qualifications to be successful in academia. If successful, the university awards a doctoral degree with a subject/discipline-specific addition.⁷⁰⁷

In order to be admitted to a doctorate, candidates must either possess a master's degree, have completed education at a higher education institution consisting of four years of study, or have completed a *einen auf einem grundständigen Studiengang aufbauenden Studiengang* at a higher education institution who has the right to awarde doctorate titles (*Promotionsrecht*).⁷⁰⁸ Persons with other qualificaitons may also be admitted to a doctorate if such is expressly provided in the University's doctoral regulation (*Promotionsordnung*). Each of the universities holding the right to issue doctoral degrees shall adopt such a doctoral regulation describing the procedures for the attainment of the degree (i.a. admission, examination procedure, supervision).⁷⁰⁹

In principle, all doctoral candidates must be enrolled at the university at which they undertake their doctorate.⁷¹⁰ If a candidate's application is assessed positively and admission is granted, a doctoral agreement shall be concluded which sets out the frequency of supervision meetings and progress reports, details of the training programme, a mutual commitment to observe rules of good scientific practices, regulations for the resolution of disputes, and review periods valid after submission of the dissertation.⁷¹¹

⁷⁰⁵ Article 13(6) of the Dr.ing. Doctoral Regulation (Faculty 03), Article 14(8) Dr.ing. Doctoral Regulation Faculty 01, Article 15(6) Dr.ing. Doctoral Regulation Faculty 04

⁷⁰⁶ Most candidates will be enrolled and pursue a doctoral study programme. Nevertheless, it is possible for doctoral candidates not toe enrol if they are also employed by the university (and therefore do not have sufficient time capacity to attend a doctoral study programme in addition to their research; § 38(5) BW LHG and information received from a representative of UKonstanz.

⁷⁰⁷ § 38(2) Gesetz über die Hochschulen in Baden-Württemberg (BW LHG).

^{708 § 38(3)(1-3)} BW LHG.

^{709 § 38(4)} BW LHG.

⁷¹⁰ § 38(5) BW LHG and § 60(1)(b) BW LHG. Nevertheless, an exception applies for candidates who are employed at least 50% of their time by the university if they have declared to not wanting to be enrolled. ⁷¹¹ § 38(5) BW LHG.

The University of Konstanz has a university-wide doctoral regulation consisting of a general part and a department-specific part supplemented by different regulations depending on the doctoral title and programme. The University of Konstanz provides for the following doctoral titles:⁷¹²

- Doctor rerum naturalium (Dr.rer.nat.) Doctor of Natural Sciences
- *Doctor rerum socialium (Dr.rer.soc.)* Doctor of Social Science
- *Doctor rerum politicarum (Dr.rer.pol.)* Doctor of Economics / Doctor of Politicals and Public Administration
- Doctor juris (Dr.jur.) Doctor of Law
- Doctor philosophiae (Dr.phil.) Doctor of Philosophy
- Doctor of Engineering Sciences (Dr.ing.)
- Doctor of Philosophy (Ph.D.)

According to the general doctoral regulation, the objective of doctoral studies is to establish the candidate's ability to carry out independent scientific work.⁷¹³ The regulation also confirms the requirement for enrolment which applies to the full duration of the doctorate. However, prior to enrolment, the candidate needs to be admitted to a doctorate. The requirements needing to be fulfilled follow those set by the LHG (master's degree, four-years university study programme or advanced study programme).⁷¹⁴ However, additional requirements may be set in the department-specific regulations regarding examination results, subject-specific examinations, aptitude tests, admission to a doctorate, a doctoral supervision agreement must be concluded with the supervisor.⁷¹⁶

Once admitted, candidates can have different status: on the one hand, they may be admitted and enrolled in a doctoral study programme. In this case, they will be considered as doctoral students. On the other hand, candidates may also be admitted and employed by the university (employment instead of enrolment). These candidates have the status of employee.⁷¹⁷ Whereas around 80% the UKonstanz doctoral candidates are enrolled as students, around 70% of them also have a (part-time) employment as research assistants.⁷¹⁸ Furthermore, around 65% of all candidates pursue a structured doctoral programme. In terms of funding, most doctoral researchers are also partly employed as research assistants. A minority of candidates is funded through scholarships or other modes of funding.⁷¹⁹

After meeting the admission requirements, the prospective candidate must still apply to the head of the relevant department to be accepted as a doctoral candidate. Apart from demonstrating the fulfilment of the admission criteria, the prospective candidate must also provide information on the topic and supervisor, a CV, a declaration concerning ongoing applications for other doctoral

⁷¹² See § 1(2) General Provisions of Doctoral Regulations University of Konstanz.

⁷¹³ § 1(1) General Provisions of Doctoral Regulations University of Konstanz.

⁷¹⁴ Should a candidate not possess the relevant qualifications required to access doctoral training, he or she may undergo an examination to demonstrate their suitability for the doctorate; see § 3 and 4 General Provisions of Doctoral Regulations University of Konstanz.

⁷¹⁵ § 3(2)(1-4) General Provisions of Doctoral Regulations University of Konstanz.

⁷¹⁶ § 1(9) General Provisions of Doctoral Regulations University of Konstanz.

⁷¹⁷ Based on information received by a representative of UKonstanz.

⁷¹⁸ Ibid.

⁷¹⁹ Ibid.

programmes, a declaration on whether the candidate has previously submitted a written paper in the context of an academic examination on the same topic as the prospective thesis, and the doctoral supervision agreement.⁷²⁰ A candidate may furthermore – depending on the departmental requirements – need to provide proof of their German language knowledge.

Acceptance and other essential matters related to the doctorate are decided by the Doctoral Committee which is in principle made up of full-time professors at the University of Konstanz as well as teachers and lecturers from a particular department.⁷²¹ Ultimately, it is this Committee that decides whether admission shall be granted and assigns at least one supervisor.⁷²²

Acceptance to the doctorate may be rescinded in a number of cases such as a failure to fulfil the course work and performance requirements of the doctoral programme within five years and a failure to fulfil requirements on the commencement of the doctoral examination process.⁷²³

In the event that a candidate has completed their dissertation, he or she must initiate the Doctoral Examination Procedure by applying to the Central Examination Office (*Zentrales Prüfungsamt*) of the University by submitting a number of documents including the thesis.⁷²⁴ When it has been established that all administrative requirements have been fulfilled, an Examination Committee shall be appointed by the department head.⁷²⁵ The Committee itself consists of a minimum of three professors, university lecturers, *Privatdozenten*, or junior professors of which the majority must be member of the University of Konstanz.⁷²⁶ Out of these Committee members, one person is the chair, at least two members take up the role of thesis referees, and at least three members shall take up the role of examiner for the oral examination.⁷²⁷ The supervisor cannot act as chair but shall as a rule be appointed as. The referees subsequently play a core role in evaluating the thesis by establishing detailed reports written by referees independently and submitted to the Central Examination Office (CEO) no later than three months following their appointment.⁷²⁸ Acceptance of the thesis depends on the majority opinion among the referees. (from 0.5 excellent to 3.51 onwards unsatisfactory).⁷³⁰ In case of an

⁷²⁰ § 5(2)(1-6) General Provisions of Doctoral Regulations University of Konstanz.

⁷²¹ Although differences may occur depending on the departmental regulations. Furthermore, joint Doctoral Committees spanning across different departments may also be established; See § 2(2)(3) General Provisions of Doctoral Regulations University of Konstanz.

⁷²² § 5(4) General Provisions of Doctoral Regulations University of Konstanz.

⁷²³ § 5(6)(7) General Provisions of Doctoral Regulations University of Konstanz. Acceptance may furthermore be denied in designated cases. To this end, see § 5(3) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁴ § 6(2)(1-11) General Provisions of Doctoral Regulations University of Konstanz. Departments may furthermore require candidates to provide proof of their German language knowledge, a statement from the department head regarding a presentation given by the candidate on their research results, documentation of the coursework and performance assessment in the doctoral programme, and documentation of additional course work; see § 6(2)(12-15) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁵ § 7(1) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁶ § 7(2) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁷ § 7(3) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁸ § 8(4)(5) General Provisions of Doctoral Regulations University of Konstanz.

⁷²⁹ If no majority is reached, the Doctoral Committee appoints an additional referee. See § 8(7) General Provisions of Doctoral Regulations University of Konstanz.

⁷³⁰ For more information on the grading system maintained by the University of Konstanz see § 15 General Provisions of Doctoral Regulations University of Konstanz.

unsatisfactory grade, the thesis is rejected after which the Examination Committee decides whether the candidate can re-work and re-submit the thesis.⁷³¹

When it comes to the thesis, essential is that it is the candidate's own work forming a scientifically noteworthy contribution to scientific research. In principle, the thesis must be written in German although the different department-specific provisions may permit submission of a thesis in another modern foreign language.⁷³² In terms of content, the thesis must have a title page, table of contents, brief summary and detailed bibliography. The thesis itself may take the form of a manuscript or collection of papers and may also be the result of a cumulative work.⁷³³

The oral examination concluding the doctorate is in principle an individual defence or extended colloquium on the thesis and a maximum of three hypotheses or special areas.⁷³⁴ In light of COVID-19 defences can take place online. These regulations will remain in place until the end of 2021.⁷³⁵ If the inspection period has passed, the examination is to take place between two and eight weeks following the end of that period. The examination itself lasts between one and two hours and use may be made of electronic communications media in the event of external examiners.⁷³⁶ The defence is led by the Examination Committee chair and questions may be asked by Doctoral Committee members. Other members of the University of Konstanz academic staff and student body can be admitted as audience subject to the availability of places.⁷³⁷ Whereas the oral examinations are generally held in German, they may be held in English if the candidate has attended an English doctoral programme or in another modern foreign language if approval is obtained. It is possible to fail the oral examination which means the examination must be repeated (maximum one more time) between six months and one year after the first examination.⁷³⁸

When candidates have successfully passed their examination and have obtained the document certifying their successful completion of the doctorate they may carry the title of Dr.⁷³⁹ The degree certificate and accompanying document will show which grades have been obtained for the doctoral studies, the title of the thesis, grade awarded to the thesis and scientific fields addressed in the oral examination, the date of the oral examination, university seal, and signatures of the rector and head of the department. ⁷⁴⁰ Whereas the degree is typically drafted in German, it may also be translated into English. Within two years after completion of the doctorate, the thesis must be published.⁷⁴¹ As

⁷³¹ § 8(9) General Provisions of Doctoral Regulations University of Konstanz. It is also possible that the doctorate is revoked if evidence is found of deceit. In that case the Doctoral Committee must decide on whether there has been deceit and the degree must be revoked. See § 19 General Provisions of Doctoral Regulations University of Konstanz.

⁷³² In this case, a German summary must be submitted with the thesis; see § 8(1) General Provisions of Doctoral Regulations University of Konstanz.

⁷³³ See § 8(3) General Provisions. Furthermore, specific provisions to this end are established in the departmental regulations.

⁷³⁴ § 9(1) i.o. § 12-14 General Provisions of Doctoral Regulations University of Konstanz.

⁷³⁵ Based on information received by a representative of UKonstanz.

⁷³⁶ § 9(2) General Provisions of Doctoral Regulations University of Konstanz.

⁷³⁷ § 9(3)(4) General Provisions of Doctoral Regulations University of Konstanz.

⁷³⁸ § 10(1) General Provisions of Doctoral Regulations University of Konstanz. The examination is considered to have been failed if the candidate does not appear before the Examination Committee at the set date and time; see § 11 General Provisions of Doctoral Regulations University of Konstanz.

⁷³⁹ § 16(1) General Provisions of Doctoral Regulations University of Konstanz.

⁷⁴⁰ § 16(2) General Provisions of Doctoral Regulations University of Konstanz.

⁷⁴¹ See § 17 General Provisions of Doctoral Regulations University of Konstanz.

far as the intellectual property is concerned, this is determined depending on the candidate's relationship with the university.⁷⁴²

As far as international cooperation is concerned, UKonstanz does not establish particular regulations on this topic. Instead, all contract details are established on an individual basis and must be supported by the prospective candidate's supervisor(s), the UKonstanz international office, UKonstanz Division of Legal Affairs, and the university's Examinations Office.⁷⁴³

6.2.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

The University of Konstanz has different departments where doctorates falling under cluster 1 can be found. In particular, this concerns philosophy, history and sociology, literature, linguistics, law, economics, and politics and public administration. For these departments, the following titles may be obtained:⁷⁴⁴

- Philosophy Doctor of Philosophy
- History, Sociology, Empirical Educational Research and Sport Science depending on the subject: Doctor of Philosophy, Doctor of Social Science, or Doctor of Natural Sciences
- Literature Doctor of Philosophy
- Linguistics Doctor of Philosophy
- Law Doctor of Law
- Economics Doctor of Economics
- Politics and Public Administration Doctor of Social Science/Doctor of Politics and Public Administration

Each of the abovementioned departments sets its own additional admission criteria for prospective doctoral candidates.⁷⁴⁵ Whereas in most cases these additional requirements are aimed at ensuring the candidate has suitable pre-existing knowledge to undertake the doctoral research,⁷⁴⁶ in some cases (e.g. philosophy, history and sociology, literature, linguistics, and politics and public administration), admission to a doctorate is dependent on acceptance to a doctoral study

 ⁷⁴² See Universität Konstanz, IP-Policy – Leitlinie zum Umgang mit Geistigem Eigentum an der Universität Konstanz.
 ⁷⁴³ Based on information received by a representative of UKonstanz.

 ⁷⁴⁴ Art. 2 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 2 VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 2 IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 2 X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 1 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft; Art. 2 XIII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 2 XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁴⁵ Art. 2 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 2 VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 2 IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 2 X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 1 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft; Art. 2 XIII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 2 XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁴⁶ Furthermore, most department specific regulations also allow graduates with qualified three-years bachelor's degrees from universities or with diploma degrees from Universities of Applied Sciences (*Hoschschulen*) in the same field to qualify for a doctoral position if additional requirements are fulfilled; see § 3(4-5 General Provisions and department-specific provisions.

programme.⁷⁴⁷ The Department of Economics does not require acceptance into a doctoral study programme and instead provides for most alternatives to access a doctorate.⁷⁴⁸ Similar to the Department of Economics, the Department of Law also does not require acceptance to a doctoral study programme. Instead, successful completion of the first or second State Examination (*erste/zweite juristische (Staats)prüfung)* together with a paper (*Seminararbeit*) is required to access the doctorate.⁷⁴⁹

Since most of the departments in the area of social sciences provide for more than one way to access a doctorate, each of the department-specific regulations also provides for provisions on preliminary examinations (taken via a colloquium).⁷⁵⁰ In the case of law, the preliminary examination is preceded by fulfilment of several criteria ranging from having completed a course of study consisting primarily of law subjects to having completed a written examination focused on civil law, criminal law, and administrative law.⁷⁵¹ A preliminary examination (generally via colloquium) may then be required for those who do not fulfil the admission criteria for a doctorate in law.⁷⁵² In the event that German is not the native language of a prospective doctoral candidate, he or she must provide proof of their language knowledge in order to be accepted as a candidate in law.⁷⁵³ The Department of Economics generally requires a minimum grade to have been obtained for prior studies to be able to take the preliminary examination which consists of their performance in particular courses in economics (e.g. in maths and statistics).⁷⁵⁴

Different minimum time periods are maintained for the doctorate depending on the department (i.e. the time between the acceptance as a doctoral candidate and the application to access the examination procedure). In general, these range between three months and eighteen months.⁷⁵⁵

In order to access the Doctoral Examination Procedure candidates must apply to the Central Examination Office (*Zentrales Prüfungsamt*) of the University by submitting a number of documents.⁷⁵⁶ For most departments within cluster 1, documentation includes proof of their German

⁷⁴⁷ Art. 2(2) VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 2(3) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 2(2) IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 2

⁷⁴⁸ See Art. 2(3-5) XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften

⁷⁴⁹ Art. 1 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft.

⁷⁵⁰ Art. 3 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 3 VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 3 IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 3 X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 3 XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁵¹ Art. 2(1)(a-d) XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft.

⁷⁵² Art. 3 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft.

⁷⁵³ Art. 4 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft.

⁷⁵⁴ Art. 3 XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften.

⁷⁵⁵ Art. 4(3) VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 4(3) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung – the German language requirement for this department applies only to those candidates pursuing a Doctor of Philosophy; Art. 4(2) IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 4(2) X. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 4(2) X. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 4(2) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁵⁶ § 6(2)(1-11) General Provisions of Doctoral Regulations University of Konstanz. Departments may furthermore require candidates to provide proof of their German language knowledge, a statement from the department head regarding a presentation given by the candidate on their research results, documentation of the coursework and performance assessment in the doctoral programme, and documentation of additional course work; see § 6(2)(12-15) General Provisions of Doctoral Regulations University of Konstanz.

language knowledge (for non-native speakers) and/or proof of the successful completion of their training in the context of the doctoral programme.⁷⁵⁷ Doctoral candidates in economics must furthermore prove to have presented in at least two seminars or colloquia in the area of economics.⁷⁵⁸ The thesis itself may generally be written in a modern foreign language (in most cases an extensive German summary must be provided).⁷⁵⁹ For economics and politics and public administration, the thesis may be written either in English or in German.⁷⁶⁰

In the Department of History, Sociology, Empirical Educational Research and Sport Science, a dissertation may be in need of a third review (as opposed to the regular two reviews) in the event that the average note is below 0,5 (i.e. if the dissertation is considered excellent).⁷⁶¹ A third reviewer is also necessary for doctorates in literature, linguistics, and politics and public administration.⁷⁶² In designated areas within this the Departments of Department of History, Sociology, Empirical Educational Research and Sport Science, Economics, and Politics and Public Administration, a dissertation may consist of several articles, some of which should be accepted for publication.⁷⁶³

Whereas all doctoral candidates must undergo an oral examination for the conclusion of their doctorate, the exact form in which this takes place may differ per Department (and per sub-specialty per Department).⁷⁶⁴ It may be recalled that candidates may either undergo a thesis defence, an extended colloquium on the thesis and hypotheses, or an extended colloquium on the thesis and special areas.⁷⁶⁵ Most areas furthermore allow for electronic media to be used for the final examination.⁷⁶⁶ The Departments Department of History, Sociology, Empirical Educational Research

⁷⁵⁷ Art. 4(1)(2) VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 4(1)(2) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung – the German language requirement for this department applies only to those candidates pursuing a Doctor of Philosophy; Art. 4(1)(2) IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 4(1) X. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 4(1) X. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 4(1) XIII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 4(1) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁵⁸ Art. 4(2) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁵⁹ Art. 5 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 5(1) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art.5(1) IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 5(1) X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 6 XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft.

⁷⁶⁰ Art. 5(1) XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 5(1) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶¹ Art. 5(2) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung.

⁷⁶² Art.5(2) IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 5(2) X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 5(2) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶³ Art. 5(3) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 5(2) XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 5(3) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶⁴ Art. 6 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 6(1)(2) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 6 IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 7(1) X. Fachspezifische Regelungen des Fachbereichs Linguistik; Art. 7(1)(2) XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft; Art. 6(1) XIII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 6(1) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶⁵ See § 12-14 General Provisions of Doctoral Regulations University of Konstanz.

⁷⁶⁶ Art. 6 VII. Fachspezifische Regelungen des Fachbereichs Philosophie; Art. 6(3) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 6 IX. Fachspezifische Regelungen des Fachbereichs Literaturwissenschaft; Art. 7(2) X. Fachspezifische Regelungen des Fachbereichs Linguistik;

and Sport Science, Law, Economics, and Politics and Public Administration furthermore maintain specific provisions for the calculation of the grades issued to the doctorate.⁷⁶⁷

Apart from the general and subject-specific/departmental provisions on doctorates at the University of Konstanz, the University also has another six regulations applicable to several of its training programmes.⁷⁶⁸ The following training programmes are applicable to the specialisations of cluster 1:

- Humanities G2.0
- Graduate School of the Social and Behavioural Sciences(GSBS) G7.0 (discussed in Section 6.2.2 below)

The regulation on Humanities establishes provisions for access to doctoral training at the University of Konstanz. Each of the candidates who undertakes a doctorate related to humanities falls within the scope of that regulation.⁷⁶⁹ To be admitted to the programme, candidates must fulfil designated conditions.⁷⁷⁰ Requirements accordingly cover having fulfilled the requirements set in the department-specific regulations and having a supervisor who has agreed to supervise the doctorate. The programme regulation also sets out different requirements regarding the duration of training. In general, a doctorate lasts six semesters and leads to 180 ECTS credits (120 of which concern drafting the thesis and 60 ECTS training and the defence).⁷⁷¹

In terms of supervision, the programme regulation requires that each doctoral candidate is supervised by two supervisors. Additional provisions are also set on level of qualification a supervisor must have and the possibility to have supervisors who are expert in another discipline.⁷⁷² The Humanities regulation furthermore also establishes the need for a thesis concept to be developed in the first year and an intermediary report to be submitted to the supervisors after the second year.⁷⁷³

When it comes to measuring progress within a certain doctoral programme, the Humanities regulation establishes requirements regarding the number of ECTS credits that need to be obtained to fulfil the

Art. 6(2) XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 6(2) XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶⁷ Art. 6(4) VIII. Fachspezifische Regelungen des Fachbereichs Geschichte, Soziologie, Sportwissenschaft und empirische Bildungsforschung; Art. 7(4) XI. Fachspezifische Regelungen des Fachbereichs Rechtswissenschaft; Art. 6(3)(4) XII. Fachspezifische Regelungen des Fachbereichs Wirtschaftswissenschaften; Art. 7 XIII. Fachspezifische Regelungen des Fachbereichs Politik- und Verwaltungswissenschaft.

⁷⁶⁸ However, several of these are due to be discontinued, meaning no new doctoral candidates will be admitted to these programmes. For the specialisations of cluster 1 this mainly concerns the following regulations: Studien- und Prüfungsordnung für den Promotionsstudiengang Politik und Verwaltungswissenschaft/Politics and Public Administration G 3.0; Studien- und Prüfungsordnung für das Promotionsprogramm "Quantitative Ökonomik und Finanzwirtschaft" (Doctoral Programme in Quantitative Economics and Finance) am Fachbereich Wirtschaftswissenschaften G 4.0; Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Graduiertenschule Entscheidungswissenschaften ("Graduate School of Decision Sciences") an der Universität Konstanz G 6.0. Accordingly, these are not discussed in-depth in the present report.

 ⁷⁶⁹ § 1(2) Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.
 ⁷⁷⁰ § 2 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷¹ § 3 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

^{772 § 4(1)} Studien- und Pr
üfungsordnung f
ür die Promotionsstudieng
änge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷³ § 4(2)(3) Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0. These terms may be extended depending on parental leave and illness (see § 4(5)).

doctoral training programme which may only be awarded following proof of training achievements.⁷⁷⁴ Candidates undertaking their doctorate in the humanities can generally undertake training at other faculties of the University of Konstanz or even at other universities, but study results must be recognised by the Graduate School's doctoral committees.⁷⁷⁵

In terms of the language of the thesis and the doctoral programmes, the Graduate School for Humanities allows for both German and English to be maintained.⁷⁷⁶

In order to access the defence procedure, candidates must have completed their thesis and fulfilled the necessary programme requirements.⁷⁷⁷ Candidates are subsequently admitted to an oral examination and ultimately receive a grade for their doctorate.⁷⁷⁸ Candidates having completed their doctorates at the Graduate School for Humanities receive an additional certificate concerning the completion of doctoral training.⁷⁷⁹

6.2.2 Cluster 2 – Psychology & Medicine

As is the case for cluster 1 on social sciences, specifications are made for psychology. It is possible to acquire one of three titles in the context of a doctorate in psychology: Doctor of Social Science, Doctor of Philosophy, or Doctor of Natural Sciences. In order to access the doctorate, additional requirements are made to the "regular" admissions requirements.⁷⁸⁰ Should a candidate have to follow a preliminary examination to be admitted to the doctorate, a prospective candidate in psychology must two modules of the master's programme in psychology (8 ECTS) during two semesters determined by the Doctoral Committee on the proposal of the supervisor.⁷⁸¹ In order to access the doctorate, an examination is conducted by two examiners specialised in the area of the doctorate.⁷⁸²

In order to conclude the doctorate, a candidate must have fulfilled all study and examination requirements.⁷⁸³ The thesis itself may be either a book or articles and can be written in German or English (other languages are also possible but must be approved by the Doctoral Committee).⁷⁸⁴ The oral examination will be a colloquium on the dissertation.⁷⁸⁵

⁷⁷⁴ § 5 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0. The exact way in which the ECTS can be obtained is again specified for each of the areas covered by the programme regulation in the humanities (i.e. philosophy, history, sociology, ethnology, literature, and languages) and can be found in § 12 through 17 of the aforementioned regulation.

⁷⁷⁵ For more information see § 5(3)(4) Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷⁶ § 6 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷⁷ § 7 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷⁸ § 8-9 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0.

⁷⁷⁹ § 10 Studien- und Prüfungsordnung für die Promotionsstudiengänge der Geisteswissenschaftlichen Sektion G 2.0. ⁷⁸⁰ Art. 2(1) VI. Fachspezifische Regelungen des Fachbereichs Psychologie. Mostly these additional requirements attest to the excellence of the candidate. In designated cases, the Doctoral Committee can decide to admit a person with a lower grade average. Furthermore, it is also possible for candidates to be admitted holding only a three-year bachelor's degree in psychology when designated conditions are fulfilled. See Art. 2(2)(4)(5) VI. Fachspezifische Regelungen des Fachbereichs Psychologie.

⁷⁸¹ Art. 3 VI. Fachspezifische Regelungen des Fachbereichs Psychologie.

⁷⁸² Art. 4 VI. Fachspezifische Regelungen des Fachbereichs Psychologie.

⁷⁸³ Art. 5(2) VI. Fachspezifische Regelungen des Fachbereichs Psychologie.

⁷⁸⁴ Art. 5(3)(4) VI. Fachspezifische Regelungen des Fachbereichs Psychologie.

⁷⁸⁵ Art. 7(1) VI. Fachspezifische Regelungen des Fachbereichs Psychologie io. § 12, 13 and 15 General Provisions of Doctoral Regulations University of Konstanz.

Apart from the general and subject-specific/departmental provisions on doctorates at the University of Konstanz, the University also has other regulations applicable to several of its training programmes. The following programmes are applicable to the specialisations of cluster 2:

- Study and examination regulations for the doctoral training programme in clinical psychology, neuro psychology and psychotherapy G.5
- Graduate School of Social and Behavioural Sciences G.7 (also applicable to areas of study within cluster 1)

The training programme in clinical psychology, neuro psychology and psychotherapy bridges academic research with practice since it enables candidates to obtain the licence to practice as a psychotherapist in a state-recognised training institution (*staatlich anerkannten Ausbildungsintitution*).⁷⁸⁶ Specific requirements must be met to access training in this field which lasts a minimum of eight semesters paired with 180 credits⁷⁸⁷ of which the first two semesters (i.e. the first year) encompass a Master's programme.⁷⁸⁸ The training is structured as such to ensure that a qualification as a psychotherapist can be achieved after one year of additional work in practice. During their doctorate, candidates are supervised by at least two supervisors (primary and secondary).⁷⁸⁹

Much like in the disciplines under cluster 1, candidates in psychology and psychotherapy may write their thesis in German or English. In terms of training, candidates are to present the progress of their thesis annually, attend a seminar on methodology, and attend doctoral seminars in their field.⁷⁹⁰ They must furthermore fulfil certain criteria to access the second to fourth years of the doctorate.⁷⁹¹ In order to access the oral examination serving as defence, the dissertation must be concluded and training programme completed.⁷⁹² Contrary to other Graduate Schools, the defence is evaluated by the supervisors and may either be passed or failed (i.e. no specific grades appear to be obtained).⁷⁹³ Apart from the doctoral diploma, the candidate also receives a certificate a certificate concerning the completion of training.⁷⁹⁴

The programme regulation of the Graduate School of Social and Behavioural Sciences provides training programmes in eight different disciplines ranging from biology to economic sciences as well as interdisciplinary programmes in collective behaviour, decision sciences, and inequality. To complete a doctorate in behavioural sciences, 180 ECTS credits must be acquired (120 of which concern the thesis

⁷⁸⁶ § 1 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁸⁷ 100 credits of which are designated for training and 80 credits for the thesis.

⁷⁸⁸ Those who already have completed a master's degree shall receive an exemption of 60 ECTS credits from doctoral training; § 4(2) Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁸⁹ § 4(3) Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁹⁰ § 4(4) & 5 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁹¹ § 7 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁹² § 8-11 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁹³ § 10 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

⁷⁹⁴ § 12 Studien- und Prüfungsordnung für de Promotionsstudiengang Klinische Psychologie, Neuropsychologie und Psychotherapie G 5.0.

and 60 ECTS concern training and the defence).⁷⁹⁵ The training thereby constitutes 52 ECTS and encompasses specific courses, seminars, and colloquia. Candidates must furthermore also complete three milestones over the course of their doctorate (i.e. complete a thesis concept, take part in courses/seminars/progress in writing the thesis, and finishing the thesis and defending it).⁷⁹⁶ Training achievements generally follow on the completion of written examinations (for courses) and presentations (for seminars and colloquia).⁷⁹⁷ As is the case under cluster 1, training achievements from other disciplines or universities can be recognised for doctoral training at the Graduate School of Social and Behavioural Sciences.⁷⁹⁸

In principle, the training is followed in English, but the dissertation and defence may be in German if requested by the candidate.⁷⁹⁹ During their doctorates, candidates are supervised by a thesis committee consisting of two members of the Graduate School supplemented by one supervisor external to the university or discipline.⁸⁰⁰ Regular meetings should take place between the candidate and at least one member of the thesis committee to discuss the progress made regarding the thesis and training. Specifics on these meetings and on the composition of the thesis committee are laid down in the agreement signed by the candidate and the supervisors at the start of the doctorate. Apart from regular meetings with the supervisor, the candidate must submit regular progress reports and provide presentations at seminars/colloquia of the research school.⁸⁰¹

In order to access the defence, the candidate must have finished the thesis and have commenced the defence procedure with the Central Examination Office of the University of Konstanz.⁸⁰² Regarding the thesis, the Graduate School of the Social and Behavioural Sciences follows the discipline-specific requirements set in the general doctoral regulation of the University of Konstanz.⁸⁰³ The defence generally takes place via colloquium and if completed successfully leads to the completion of the doctorate (in combination with completion of the training programme and acceptance of the thesis).⁸⁰⁴ After completion of the defence, the candidate receives the doctoral diploma and certificate from the Graduate School.⁸⁰⁵

⁷⁹⁵ § 3 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁷⁹⁶ § 3(5) & 10 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozialund Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁷⁹⁷ § 5(1) Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁷⁹⁸ § 5(5-7) Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozialund Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁷⁹⁹ § 7 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁸⁰⁰ § 8(1) Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁸⁰¹ § 9 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁸⁰² § 11 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁸⁰³ See § 12 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozialund Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0 and General Provisions of Doctoral Regulations University of Konstanz (containing also discpline-specific regulations).

Provisions of Doctoral Regulations University of Konstanz (containing also discpline-specific regulations). ⁸⁰⁴ § 13-14 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial-

und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

⁸⁰⁵ § 15 Studien- und Prüfungsordnung für den Promotionsstudiengang im Rahmen der Gaduiertenschule der Sozial- und Verhaltenswissenschaften ("Graduate School of the Social and Behavioural Sciences (GSBS))" G 7.0.

6.3 Ulm University

Similar to the University of Konstanz, Ulm University is subject to the *Gesetz über die Hochschulen in Baden-Württemberg* (Law on Higher Education in Baden-Württemberg – hereinafter LHG) regarding general provisions on doctoral education. For more on the provisions in the LHG, see Section 3.3.2.

Ulm University maintains both a general doctoral regulation as well as discipline-specific regulations. The general provisions are laid down in the *Rahmenpromotionsordnung der Universität Ulm* (hereinafter: General Doctoral Regulation of the University of Ulm).⁸⁰⁶ The discipline-specific regulations particularly add provisions concerning the maximum duration of the doctorate,⁸⁰⁷ discipline-specific admission criteria, the composition of the doctoral committee, and more specific provisions on the candidate.⁸⁰⁸ These regulations are anyway in line with the General Doctoral Regulation of the University and may only deviate from that regulation where expressly permitted.

At UIm University, it is possible to acquire different titles at the different faculties. In particular, the following titles may be obtained:⁸⁰⁹

| 1. | Faculty of engineering, informatics and psychology | - - | Doctor of Philosophy (Dr.phil) Doctor of Engineering (Dr.Ing.) |
|----|--|--------|--|
| 2. | Medical faculty | - | Doctor of Natural Sciences (Dr.rer.nat.) Doctor of Medicine (Dr.med.) |
| ۷. | | - | Doctor of Dentistry (Dr.med.dent.) |
| | | - | Doctor of Human Biology (Dr.biol.Hum.) |
| 3. | Faculty of Natural Sciences | - | Doctor of Natural Sciences (Dr.rer.nat.) |
| 4. | Faculty for mathematics and | - | Doctor of Natural Sciences (Dr.rer.nat.) |
| | Economics | - | Doctor of economics (Dr.rer.pol.) |
| 5. | International Graduate School in | - | Doctor of Natural Sciences (Dr. rer.nat.) |
| | Molecular Medicine | - | Doctror of Philosophy (Ph.D.) |

Despite most of the titles being German titles, it is possible for the faculties to provide for the alternative degree of Doctor of Philosophy (Ph.D.) in line with the LHG. During their time at Ulm University, candidates will generally be enrolled in the university in line with the LHG. Nevertheless, an exception applies to those doctoral candidates who work full-time at Ulm University if they have declared to the University Board that they do not want to be enrolled.⁸¹⁰ External candidates may also be connected to Ulm University.⁸¹¹ In this case, candidates work on their dissertation at the University without being employed there and/or without having a direct affiliation to any institution connected to the University. The faculty-specific regulations nevertheless may provide for additional rules on how these external candidates may nevertheless be integrated into the university structures.

⁸⁰⁶ Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸⁰⁷ The doctorate may nevertheless be extended by the doctoral committee at the request of the candidate; § 3(2) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸⁰⁸ § 1 a Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸⁰⁹ § 2(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹⁰ § 3 Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹¹ § 7 a Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

Conducting a doctorate at UIm University means a candidate has demonstrated the ability to conduct independent, in-depth research in a designated area that is based on a written dissertation and completion of a defence procedure.⁸¹² In order to be admitted to the doctorate, a candidate must possess a degree from a master, four-year study at a university, *Pädagogischen Hochschule* or *Kunsthochschule*, or a degree based on an undergraduate degree programme at one of the aforementioned universities with the right to award doctorates.⁸¹³ In addition to possessing the relevant prior qualifications, the candidate must also have the approval of a prospective supervisor in writing. Additional categories of prospective doctoral candidates may be admitted in line with the regulations if additional requirements are fulfilled.⁸¹⁴ After fulfilling the access criteria, the candidate needs to apply in writing (supplemented by relevant documentation) to the relevant doctoral committee at their prospective faculty.⁸¹⁵ The prospective candidate is to receive a reply to their application within three months in writing/orally/electronically.⁸¹⁶ Admission may furthermore be made subject to conditions in the form of supplementary achievements based on the requirements of the specific doctorate.⁸¹⁷

During the doctorate, the candidate will be supervised by at least one supervisor.⁸¹⁸ Specific agreements on the supervision are laid down in an agreement that is considered to constitute the start of the doctorate. Towards the end of the doctorate, the thesis is to be evaluated for the candidate to access the defence. This evaluation will be conducted by at least two evaluators, one of which is affiliated to Ulm University.⁸¹⁹ Nevertheless, when it comes to both the appointment of supervisors as well as that of evaluators an important role is foreseen for the doctoral committee. This committee decides on the access criteria for doctorates of a certain faculty, approval of evaluators, assembly of the defence committee and other managerial matters related to the provision of doctorates.⁸²⁰

In relation to the dissertation, the text should – as a rule – be drafted in English or German and must be the result of independent work.⁸²¹ Nevertheless, faculty regulations may allow for published work or several scientific works to be combined as a cumulative dissertation. When a candidate has completed the dissertation, the defence procedure may be accessed. This procedure consists of the evaluation of the thesis and the defence. The procedure is initiated by submitting an application to the relevant body at the faculty at which the dissertation was prepared and should be accompanied

⁸¹² § 3(2) and §10(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹³ § 6(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹⁴ § 6(2)(4)(5)(6) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019. Additional routes of access are, for example, available to those who have a degree in medicine or dentistry in accordance with the faculty regulations. Similarly, persons who have an excellent bachelor's degree may also be admitted (e.g. if they belonged to the top 5 of their class). Holders of foreign qualifications will need to get their prior qualifications recognized by the doctoral committee. Some of the candidates seeking access from these additional categories may need to complete an examination procedure before being able to access a doctorate.

⁸¹⁵ § 7(1)(2) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹⁶ § 7(3)(6) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹⁷ § 7(4) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸¹⁸ § 5(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019. Specific provisions are furthermore set regarding the qualifications and function of the supervisors. Academics at other German or foreign universities may nevertheless act as supervisor if they have the right to supervise doctorates. Under certain conditions, a person who is not a member of Ulm University may even supervise the dissertation. The doctoral committee may decide whether to admit other supervisors; see § 5(2)(3) of the aforementioned regulation.

⁸¹⁹ § 5(7) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²⁰ § 4(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²¹ § 10(2-4) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

by extensive documentation.⁸²² Providing the relevant documentation is important since not doing so means the application may be rejected.⁸²³ Ultimately, it is the doctoral committee that decides on the access to the defence procedure.

When it comes to the evaluation of the dissertation, the doctoral committee appoints at least two evaluators.⁸²⁴ Faculty regulations should designate further whether an additional evaluator is to be appointed in case of a summa cum laude thesis or in case one of the evaluators considers the dissertation to be insufficient. Evaluators must submit independent, reasoned and written opinions to the doctoral committee within three months after being appointed.⁸²⁵ After all reviews have been received, the dissertation and reviews are made available for inspection for at least 10 days. If all the examiners have unanimously proposed the acceptance of the dissertation, the doctoral committee shall accept the thesis and determine the grade.⁸²⁶ Similarly, if all the evaluators agree the thesis should be rejected, the doctoral committee will follow this verdict. In case of disagreement on whether or not the thesis should be accepted, an additional evaluator shall be appointed to support the doctoral committee in its decision-making. Candidates may need to make revisions to their dissertation in the event that a reviewer has established that there are deficiencies but has not considered the thesis insufficient overall.⁸²⁷ The candidate will have to resubmit the thesis within a defined period of time. In the event that a thesis is rejected, the candidate receives a notice containing reasons for the rejection from the doctoral committee.⁸²⁸

Once the thesis has been positively assessed, the oral examination (i.e. the public defence) may be accessed.⁸²⁹ Again, the doctoral committee decides on the composition of the defence committee that will conduct the oral examination.⁸³⁰ As a rule, the defence committee is composed of the evaluators, at least one member of the doctoral committee and at least one additional examiner present at the defence. From these members, a chair and a secretary are designated. This committee will, after the public part of the defence has been completed, decide whether the oral examination was successful – the candidate nevertheless needs to have obtained at least a 3.0 grade to have passed the oral examination.⁸³¹ The grade given to the defence is added to that given for the dissertation after which the doctoral committee establishes the grade for the doctorate.⁸³² After successful completion of this procedure, the thesis will be published⁸³³ and the degree of doctor may be obtained.⁸³⁴

⁸³⁴ § 15 Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²² § 8(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²³ § 8(3) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²⁴ § 11(1) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

^{825 § 11(2)} Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

^{826 § 11(6)} Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²⁷ § 11(7) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

^{828 § 11(9)} Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸²⁹ § 12(1)(4) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸³⁰ § 9 Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019. In case the defence is not passed, it may be repeated within one year. To this end, see § 13 of the regulation.

 ⁸³¹ § 12(5)(6) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019. See § 17 and 18 for additional provisions on when the defence is not passed. In case of deception, it is even possible that the doctorate is revoked (see § 19).
 ⁸³² § 14 Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸³³ To this end see § 3 and 16 Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019. In particular, the candidate has to publish the approved dissertation within one year after the defence. Not doing so may result in loss of all rights acquired through the defence procedure. The thesis may be published in different ways, two of which also result in publication in the German National Library being mandatory.

In terms of international cooperation, a doctorate may be organised jointly with another German or foreign university that has the right to award doctorates. In that case, an agreement must be concluded between the Ulm University and the other university which may deviate from the general doctoral regulations of Ulm University.⁸³⁵ More specific provisions concerning such cooperation are nevertheless designated in the faculty regulations.

6.3.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

Ulm University can be said to specialise in beta sciences. In fact, the only discipline that falls within the scope of cluster 1 is that in economy. For this field the title of Doctor of Economics (Dr.rer.pol.) may be obtained. The maximum duration of a doctorate in this field constitutes 6 years.⁸³⁶ A doctoral committee is established carrying out the role set out in the general regulations consisting of six members.⁸³⁷

In terms of access criteria, the regulations each specify what constitutes an excellent bachelor's degree in accordance with the general regulation thereby permitting access to a doctorate (i.e. when the candidate belongs to the top 5% of their year).⁸³⁸ In order to access the doctorate, the candidate nevertheless needs to prove that the degree mainly concerns economics or a related field. The candidate may furthermore need to undergo some additional training above bachelor level before starting the doctorate. Ultimately, the doctoral committee of the faculty of mathematics and economic sciences decides on the application of the candidate.⁸³⁹

In relation to the thesis, the doctoral committee may allow published articles to form part of the dissertation.⁸⁴⁰ Candidates may, furthermore, obtain their doctorate with a dissertation based on articles (as opposed to a monograph).⁸⁴¹

When the candidate has completed the thesis, it is to be assessed following the regular procedures of Ulm University. Nevertheless, an additional evaluator may be necessary when one of the previous ones proposes to award the distinction "summa cum laude", when one of the evaluators believes the dissertation to be insufficient, or when the grade difference between evaluators is two or more.⁸⁴² After the thesis has been approved the oral examination (i.e. the defence) can be accessed. This defence takes the form of a colloquium where the candidate presents the thesis for 30 minutes after

⁸³⁵ § 23(1)(2) Rahmenpromotionsordnung der Universität Ulm vom 25.07.2019.

⁸³⁶ § 3 Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸³⁷ § 4(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸³⁸ § 6 Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸³⁹ § 8(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁰ § 10(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴¹ § 10(2) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴² § 11(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016. The regulations also set out specific provisions on grading (see paragraphs 2 through 4 of the aforementioned article).

which the defence takes place.⁸⁴³ During the defence the candidate's knowledge is assessed after which the candidate must also defend an economic proposition not directly related to the dissertation. During the defence, the defence committee takes a leading role. This committee consists of three members encompassing, among others, the supervisor (who is also one of the thesis evaluators), another evaluator, and at least one other person holding the ius promovendi who is not an evaluator.⁸⁴⁴ At least one of the defence committee members should furthermore be part of the faculty's doctoral committee and the majority of members should be a part of UIm University. When the doctoral committee furthermore assembles the defence committee, proposals of the doctoral candidate should be taken into account. Whereas the members of the defence committee take a leading role, other professors nevertheless also have a right to pose questions during the defence.⁸⁴⁵ After the defence, the same grading scale is maintained as for the assessment of the dissertation.⁸⁴⁶ The final grade received for the doctorate is composed of the average of the two grades obtained for the dissertation and defence.⁸⁴⁷

In relation to international cooperation, the Faculty for Mathematics and Economic Sciences provides additional provisions. In particular, Ulm University requires that in the case of a joint doctorate the candidate fulfils the access criteria of Ulm University and that the foreign university is competent to issue doctorates (in accordance with national law).⁸⁴⁸ Furthermore, the foreign title granted must be recognised in accordance with § 37 of the LHG. In the agreement to be concluded between the two cooperating universities it should furthermore be specified which university is in charge of the doctorate and must specify how many copies of the thesis must be submitted. Determining the university in charge is of importance, since the thesis is to be submitted there.⁸⁴⁹ In case of a joint doctorate, supervision (and simultaneously evaluation of the dissertation) should be divided between the two participating universities whereby more specific provisions should be set in the cooperation agreement.⁸⁵⁰ Each of the two supervisors' evaluations as well as the thesis should be submitted to the two cooperating universities which must each of them decide independently on the evaluation and acceptance of the dissertation. Determination of the grades awarded is to take place following the rules of the two universities. If one of the universities does not approve the thesis, the procedure ends.⁸⁵¹ When the thesis is accepted, the defence will take place at the university in charge.⁸⁵² In

⁸⁴³ § 12(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁴ § 9(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁵ § 12(4) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁶ § 12(6) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁷ § 14 Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016. It is furthermore possible for the doctorate tob e completed with distinction (cum laude or summa cum laude).

⁸⁴⁸ § 23(1) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁴⁹ § 23(3)) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁵⁰ § 23(4)) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁵¹ However, if only the foreign university does not approve the regulation, Ulm University may still continue the procedure.

⁸⁵² § 23(5)) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

relation to the defence committee, each of the universities should be represented equally in the committee. After successful completion of the dissertation and defence, the cooperating universities will issue a jointly signed degree which shows that the degree was obtained following a joint doctorate.⁸⁵³ The cooperation agreement should furthermore designate that any foreign certificate awarded will also include a reference to the fact that the candidate completed a joint doctorate in cooperation with Ulm University.

6.3.2 Cluster 2 – Psychology & Medicine

Section 6.3 has shown that the Medical Faculty of Ulm University provides for several degrees. Furthermore, psychology is placed within the scope of a different Faculty, namely that of Engineering, Informatics, and Psychology. In this Section, the focus is placed on the title of Doctor of Medicine (Dr.med.) and Doctor of Philosophy (Dr.phil.) – relevant to those undertaking a doctorate in psychology.

Starting with psychology, the maximum duration of the doctorate is set at six years.⁸⁵⁴ Admission to the doctorate is – as is the case of the other faculties and titles – up to the doctoral committee that consists of seven members appointed for a two-year period.⁸⁵⁵ The present regulation sets additional criteria to admit candidates holding a bachelor. In particular, the candidate should belong to the top 5% of their class and have a final grade of at least 1,3.⁸⁵⁶ Furthermore, all candidates should hold a prior degree in psychology, social sciences, educational sciences, cognitive sciences, philosophy or history.⁸⁵⁷

In the area of psychology, the thesis may be based on articles (as opposed to a monograph).⁸⁵⁸ As a rule, the candidate should produce at least three scientific publications that interrelate and together constitute a substantial individual contribution of the candidate. The publications should be published in top peer-reviewed journals or be accepted for publication. For the dissertation, the candidate should foresee the articles with a summary and make sure the articles form a coherent whole. Once the dissertation is completed, the candidate should request access in writing (supplemented by extensive documentation) to the defence procedure at the doctoral committee for the title of Doctor of Philosophy at the Faculty of Engineering, Informatics, and Psychology.⁸⁵⁹

To evaluate the thesis and the defence, a defence committee is assembled. As a rule, this committee consists of 4 members comprising the supervisor (who also evaluates the thesis), another evaluator,

855 § 4 Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften,

- ⁸⁵⁶ § 6(1) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften,
- Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁵³ § 23(6)) Promotionsordnung der Universität Ulm für die Fakultät für Mathematik und Wirtschaftswissenschaften zur Erlangung des Doktorgrades Dr.rer.pol. vom 09.03.2016.

⁸⁵⁴ § 3 Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁵⁷ § 6(2) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁵⁸ § 10(1) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁵⁹ § 8(1)(2) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

at least one member of the doctoral committee, and at least one other person with the ius promovendi who is not an evaluator.⁸⁶⁰ At least half of the members must be connected to UIm University. When evaluating the dissertation, each of the evaluators is to award a grade following a pre-determined scheme.⁸⁶¹ Once the thesis is approved, the defence may be planned. The defence itself lasts at least 90 minutes, 30 of which are reserved for a presentation by the candidate after which questions by the defence committee are posed (although certain other persons present may also ask questions).⁸⁶² The defence takes place in English or German and is foreseen with a grade determined following the same grade scheme as applicable to the dissertation.⁸⁶³ In some cases, one of the members of the defence committee may take part in the defence via online means (if all members of the committee and the candidate agree). After having passed the defence, the total grade for the doctorate is calculated.⁸⁶⁴

When it comes to international cooperation, the regulation for psychology sets extensive additional provisions.⁸⁶⁵ When it comes to the candidate, he or she must fulfil the requirements of Ulm University and the foreign university must be competent to issue doctorates (in accordance with national law). Furthermore, the foreign title granted must be recognised in accordance with § 37 of the LHG. An agreement must furthermore be concluded between the two universities designating which of the universities is in charge of the doctorate and the number of copies of the dissertation to be submitted. The thesis must accordingly be submitted to the university in charge. During the doctorate, the candidate is supervised by one supervisor from each of the universities part in the joint doctorate. Both of the supervisors will also act as evaluator. Both evaluations together with the thesis will be presented to both universities which must each individually decide on whether the dissertation may be accepted. The determination of grades takes place following the internal procedures of each of the universities. If the universities reject the thesis, the defence procedure has ended. If the foreign university alone has rejected the thesis, the defence may be continued at Ulm University. In the event that the dissertation is accepted, the defence will take place at the university in charge. The defence committee must accordingly be composed of members from each of the two universities. After successful completion of the joint doctorate, the candidate will receive a degree signed by both universities demonstrating the candidate completed a joint doctorate. The cooperation agreement will determine further that a possible foreign certificate includes mention of the doctorate being completed jointly with Ulm University.

⁸⁶⁰ § 9(1) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁶¹ § 11 Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017. The distinction of summa cum laude may be given to a dissertation. In this case another (external) evaluator must be appointed. The same applies in the event that the thesis is considered insufficient or when the grade difference between two evaluators is two points or more.

⁸⁶² § 12(3) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁶³ § 12(3)(4) Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁶⁴ § 14 Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017.

⁸⁶⁵ See § 23 Änderung in der Promotionsordnung der Universität Ulm für die Fakultät für die Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades der Philosophie (DR. phil.) vom 21.12.2017 for all provisions concerning cooperation in the context of a joint doctorate.

Turning to medicine, applicants wishing to access a doctorate in medicine must have completed a basic medical degree, have passed the medical examination set by German law in accordance with the *Approbationsordnung für Ärzte*, and have found a supervisor.⁸⁶⁶ A person holding a foreign degree may also be admitted to a doctorate as long as the equivalence of the foreign degree has been confirmed by the *Zentralstelle für ausländisches Bildungswesen – ZAB* (Central Office for Foreign Education).⁸⁶⁷ If the access criteria are fulfilled, the candidate must apply for the doctorate with the doctoral committee of the Medical Faculty.⁸⁶⁸ As a rule, the candidate will be accepted by the doctoral committee (in accordance with the supervisor) if all requirements are fulfilled. ⁸⁶⁹ Contrary to other fields at Ulm University, a doctorate at the medical faculty lasts a maximum of three years.⁸⁷⁰

The two achievements needing to be fulfilled to obtain the doctorate are the completion of the dissertation and the defence (via colloquium).⁸⁷¹ Once the dissertation has been prepared, the candidate must submit an application to the Dean of the Medical Faculty to commence the defence procedure.⁸⁷² The doctoral committee of the Medical Faculty accordingly decides on the opening of the defence procedure and on the thesis evaluators and inspectors (*Wahlprüfer*).⁸⁷³ At least two evaluators must assess the thesis independently (the first of which should be affiliated to Ulm University, the second should be external).⁸⁷⁴ The evaluators produce reasoned evaluations on the dissertation and should suggest a grade connected to the work.⁸⁷⁵ The Medical Faculty has its own document designating how dissertations should be graded and – like the other faculties – also provides for the possibility to issue the distinction "summa cum laude". In the event that one of the evaluators issues a negative evaluation, an additional evaluator is appointed.⁸⁷⁶ It is also possible that the evaluator accepts the thesis but under the condition that the candidate make corrections to it.⁸⁷⁷

Once the thesis is approved, the defence may be accessed. The public defence takes the form of a colloquium and takes place in German or English before a defence committee

⁸⁶⁶ § 3(1)(a)(b) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009. Candidates may nevertheless already apply for a doctorate if they have not yet completed their basic doctoral training and final examinations. Admission to the doctorate may nevertheless be revoked if the candidate does not pass that examination.

⁸⁶⁷ § 3(2) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁶⁸ § 4.(1) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁶⁹ By contrast, access to the doctorate may also be refused in designated cases. See § 4(2)(3) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷⁰ § 4(4) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷¹ § 1(3) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷² § 5 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷³ § 6 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷⁴ § 7(1) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷⁵ § 8(1-3)(4)(6) & § 14(3) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁷⁶ See § 9 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009 for the procedure to be followed in the event of a negative evaluation.

⁸⁷⁷ § 9(5) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

(*Promotionskommission*).⁸⁷⁸ This committee consists of three members of the doctoral committee, the evaluators, and two further inspectors. The colloquium takes 60 minutes (including a presentation by the candidate) and aims to establish that the candidate has mastered the field in which the dissertation was written.⁸⁷⁹ Provisions on the grading of the defence are also found in the regulation of the Medical Faculty.⁸⁸⁰ The two grades obtained for the dissertation and the defence are subsequently combined to determine the grade for the doctorate.⁸⁸¹ After completion of the academic achievements, the defence must be published through the library of Ulm University which marks the full conclusion of the doctorate, meaning the diploma can be issued to the candidate who may then carry the title of Doctor of Medicine (Dr. med.).⁸⁸²

Special provisions on joint doctorates may also be found in the regulation of the Medical Faculty.⁸⁸³ In particular, a cooperation agreement must be drawn up with a foreign university on the cross-border joint supervision of a doctorate (approved by the doctoral committee) and the admission to the doctorate should depend on the conditions of both Ulm University and the foreign university. The dissertation may subsequently be submitted to either of the two universities. A different procedure applies depending on whether the dissertation is submitted to Ulm University or to the foreign university.⁸⁸⁴ If the thesis is submitted to UIm University, the candidate is supervised by a member of either of the universities involved in the cooperation that also take up a role as evaluator. If the thesis is approved in Ulm, it is forwarded to the foreign university. Upon approval of the foreign university, the defence can take place in Ulm. If the foreign university rejects the thesis, the defence procedure ends and can only be continued following the regulations of Ulm University. In the event of a thesis submitted to the foreign university, supervision again takes place by a member of each of the two universities involved who are also evaluators of the thesis. If the thesis is accepted by the foreign university, it is forwarded to Ulm University. Upon approval, the defence may take place at which the supervisor (and possibly also other members, depending on the agreement) from Ulm University should be present. If Ulm University rejects the dissertation, the defence procedure ends (although it may be continued at the foreign university). Determination of the grade awarded to the doctorate takes place following the provisions of the university to which the thesis is submitted. Upon successful completion of the doctorate, the candidate receives a joint diploma from both universities expressing that the doctorate follows on joint supervision of both universities (including signatures and seals from both universities). If individual certificates are drawn up, they must clearly establish that both certificates together constitute a joint diploma. The candidate must furthermore be able to

⁸⁷⁸ § 10(1)(2)(6) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009. Nevertheless, other academics from Ulm University or other universities may also be present during the defence and ask questions.

⁸⁷⁹ § 11(2) Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁸⁰ See § 12 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009. Should the candidate have failed the defence, it may be repeated once after six months have passed (see § 13 of the aforementioned regulation).

⁸⁸¹ § 14 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁸² § 16 & § 17 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁸³ See § 22-26 Promotionsordnung der Universität Ulm für die Medizinische Fakultät zur Erlangung des Doktorgrades der Medizin (Dr. med.) oder der Zahnmedizin (Dr. med. dent) vom 22 Juli 2009.

⁸⁸⁴ § 23 for a thesis submitted to Ulm University and § 24 for a thesis submitted to a foreign university. § 26 establishes provisions on the submission of copies of the dissertation depending on where the doctorate is primarily pursued.

demonstrate that he/she has an academic title that may be used in both countries in which the universities are located.

6.3.2 Cluster 3 – Engineering

Engineering at UIm University falls under the Faculty of Engineering, Informatics, and Psychology. After completing a doctorate in this area, a successful candidate may carry the title of Doctor in Engineering (Dr. -Ing.). The maximum duration of a doctorate at UIm University for engineering is six years.⁸⁸⁵ Like the other faculties of UIm University, engineering has its own doctoral committee composed of 6 members appointed for two years.⁸⁸⁶

In order to be admitted to a doctorate, the candidate must have above average knowledge in engineering attested by a degree.⁸⁸⁷ As is the case for the other faculties of Ulm University, this may be a bachelor's degree as long as the candidate belongs to the top 5% of their class. During their doctorate, candidates will prepare a thesis that must be written in the form of a monograph and which may partly or in full be published before the completion of the doctorate.⁸⁸⁸ Contrary to other regulations of Ulm University, the regulation on engineering sets specific requirements regarding who can and cannot act as supervisor/evaluator (including on occasion names of grant programmes candidates of which may supervise theses in engineering).⁸⁸⁹ in general, fewer categories of academics qualify to act as supervisor than set out in the general doctoral regulation of Ulm University.

When a candidate has completed the dissertation, candidates must apply to the doctoral committee in engineering providing the necessary documentation to commence the defence procedure.⁸⁹⁰ Upon approval of the application, a defence committee is assembled in which at least four members take part (the majority of which stems from Ulm University).⁸⁹¹ The supervisors/evaluators play an essential role in evaluating the thesis. Each individual evaluation is foreseen by a grade, the average of which constitutes the grade for the dissertation.⁸⁹² Upon passing the dissertation, the candidate may progress to the defence (via colloquium). The public defence (to be held in German or English) consists of a 20-minute presentation, 20-minute discussion, and 40-minute oral examination to take place

⁸⁸⁵ § 3 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁸⁶ § 4(1)(2) Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁸⁷ § 6 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁸⁸ § 10 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁸⁹ See § 5 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020 for more specific information.

⁸⁹⁰ § 8 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁹¹ § 9(1) Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁹² § 11 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020. Again, the distinction "summa cum laude" may be awarded. In this case, another evaluator must be consulted when one of the evaluators has suggested this distinction. The same applies when one evaluator does not believe the dissertation merits a passing grade.

before the defence committee.⁸⁹³ A grade is awarded to the defence and calculated in a similar way as the grade for the dissertation.⁸⁹⁴ Ultimately, the grades of the dissertation and defence are combined to ultimately determine the grade for the doctorate.⁸⁹⁵

As is the case for the other faculties, specific provisions may be found regarding international doctoral cooperation.⁸⁹⁶ Apart from fulfilling the criteria to access a doctorate at UIm University, the foreign university must be able to issue doctoral degrees (in accordance with national law). Furthermore, the foreign title granted must be recognised in accordance with § 37 of the LHG. The cooperation agreement designates which of the universities will be in charge of the doctorate and also lays down provisions on the role of different bodies during the doctorate as well as the defence, evaluation and grading of the dissertation and defence. It is also possible that the cooperating universities agree on a joint defence committee (and necessary exceptions to the relevant doctoral regulations of the respective universities concerning i.a. the evaluation, approval, and defence). One of the universities must be designated as the university in charge of the defence and is also where the dissertation will be submitted. Whereas the dissertation is submitted to one university, the candidate is supervised by a supervisor from each of the two universities (who also act as thesis evaluators). After approval of the supervisors/evaluators, the dissertation will be forwarded to the universities that decide on whether or not to accept the work. If the foreign university refused the work, the procedure is continued following the rules of Ulm University. If accepted, the defence is to take place at the leading university whereby the defence committee must consist of equal parts of academics from both participating universities. After the doctorate has been successfully completed, both universities will issue a signed joint diploma attesting to the candidate having obtained the degree of doctor at both universities. The joint nature of the degree must also be reflected in any other possible certificates provided to the candidate as a consequence of the successful completion of the doctorate.

7. Ireland

At the national level in Ireland, regulations on higher education are laid down in the Universities Act 1997 and the Qualifications and Quality Assurance (Education and Training) Act 2021. Provisions on doctoral training can be found in the National Framework for Doctoral Education. Furthermore, doctoral education follows national guidelines and best practices.

The Universities Act applies to Irish universities, including Dublin City University.⁸⁹⁷ The objective of the universities is to advance knowledge by teaching, research, and scientific investigation, and to promote learning and highest standards in quality of research, among others.⁸⁹⁸ The universities may

⁸⁹³ § 12(1)(2)(3)(5)(7) Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020. Neverthless, other academic staff may also be present at the defence, some of which have the right to ask questions. Similarly, a member of the defence committee may exceptionally take part in the defence via video conferende if agreed upon by the defence committee and candidate.
⁸⁹⁴ § 12(6) Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁹⁵ § 14 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁹⁶ In particular, see § 23 Promotionsordnung der Universität Ulm für die Fakultät für Ingenieurswissenschaften, Informatik und Psychologie zur Erlangung des Doktorgrades Dr. -Ing. vom 18.06.2020.

⁸⁹⁷ Section 4(1)b Universities Act.

⁸⁹⁸ Section 12 Universities Act.

collaborate inside and outside of Ireland to further the objects of the university.⁸⁹⁹ The universities may have a charter laying out the objects and functions of their academic affairs.⁹⁰⁰

The National Framework provides a set of principles for doctoral education that are in line with the Salzburg Principles, Salzburg II Recommendations, and Principles for Innovative Doctoral Training.⁹⁰¹ The objective of the framework is, among others to facilitate excellence in postgraduate education and to maximise the employability of doctoral graduates. According to the first principle, 'the core of doctoral education is deep engagement with a question, problem or hypothesis at the frontier of knowledge, and advancement of this frontier under the guidance of expert committed supervision. To be awarded a doctoral degree, the candidate must have made an original contribution to knowledge.'⁹⁰² Key skills connected to the completion of a doctorate include research skills and awareness, ethics and social understanding, communication skills, personal effectiveness and development, team-working and leadership, career management, and entrepreneurship and innovation.⁹⁰³

In order for an applicant to be admitted to doctoral education, account needs to be taken of the preparedness of the applicant, the availability of supervision (usually a principal supervisor together with a panel), and resources necessary to conduct research.⁹⁰⁴ Institutions must moreover create procedures for the formal monitoring of the progress of candidates and for the examination of their work.⁹⁰⁵ The successful completion of a doctorate is based on the completion and examination of the thesis, which may be presented in a variety of formats.⁹⁰⁶ Furthermore, training is an inherent part of the pursuit of a doctorate.⁹⁰⁷

Each of the principles of the National Framework is elaborated in Ireland's Framework of Good Practices for Research Degree Programmes (hereinafter: the Framework of Good Practice). Ireland distinguishes between different research degree programmes. On the one hand, these are research master's (not considered further for the purpose of this research), doctorates (either traditional PhD's or professional doctorates), and higher doctorates.⁹⁰⁸ These latter doctorates are awarded only in specific disciplines to those who already have a doctorate and do not derive from planned education programmes thereby falling outside the scope of the Framework for Good Practice.

In order to access a doctorate, candidates must have completed either a bachelor's or master's degree (EQF level 6 or 7). As a result of their studies, candidates should have the ability to process knowledge employ critical thinking to come to innovative solutions.⁹⁰⁹ Normally, entering a doctoral-level programme requires and Irish upper second class honours grade (a 2.1 grade or an overall mark of 60%) in a suitable honours bachelor degree or equivalent. On an evaluation made case-by-case basis,

⁸⁹⁹ Section 13(2)(d) Universities Act.

⁹⁰⁰ Section 31(1) Universities Act.

⁹⁰¹ National Framework for Doctoral Education 2015, p. 3.

⁹⁰² Ibid., p. 4.

⁹⁰³ Ibid., p. 5.

⁹⁰⁴ Principle 7 and 8 National Framework for Doctoral Education 2015.

⁹⁰⁵ Principle 8 National Framework for Doctoral Education 2015.

⁹⁰⁶ Principle 2 National Framework for Doctoral Education 2015.

⁹⁰⁷ See Principles 3 and 4 National Framework for Doctoral Education 2015.

⁹⁰⁸ Ireland's Framework of Good Practice for Research Degree Programmes 2020, p. 8-10.

⁹⁰⁹ Ibid., p. 11.

applicants with other qualifications may be accepted to doctoral programmes.⁹¹⁰ In addition, minimum requirements for language competences can be imposed.⁹¹¹ For professional doctorates, the entrance requirement is usually a master's degree (EQF level 7). Ultimately, professional doctorates should be able to advance professional practice or use it as a research method.⁹¹²

Apart from being encouraged to realise these results upon completion of a doctorate, higher education institutions are also encouraged to place the development of research competence at the heart of doctorates by both learning and conducting research.⁹¹³ Candidates should furthermore be evaluated individually through personal examination procedures.⁹¹⁴ This should lead to sufficient flexibility thereby adhering to the Salzburg Principles and Salzburg II Recommendations which lay down the highly individualised character of doctoral education. In terms of admission procedures, these should include an assessment of the project that should be at the frontier of knowledge.⁹¹⁵

In order to proceed to the assessment of the thesis, a candidate must produce a substantive written document which demonstrates the research conducted and may include additional documentation such as a portfolio of publications or practice.⁹¹⁶ Apart from requirements made to the research, approval of the award of doctor should also attest to the candidate being able to plan, manage and deliver projects, exercise professional standards in research (integrity) and ethics, recognise and minimise risks related to research projects, and undertake impactful research.⁹¹⁷ In order to assess the research, higher education institutes are recommended to base their assessments on peer review.⁹¹⁸ The assessment should consider the depth of understanding of the relevant field of study, the expertise gained of basic and advanced methodologies. The thesis should make a substantial contribution to knowledge or be suitable for publication.⁹¹⁹ The assessment of doctoral degree always includes an oral examination.⁹²⁰ The educational institution provides normally open access to the final thesis, with the consideration of copyrights and public interest among others.⁹²¹

In terms of supervision, the Framework of Good Practice recommends that higher education institutions maintain a strong supervision culture where supervisors are an essential partner in the candidate's education.⁹²² The supervisors are active researchers holding relevant scholarly expertise and meeting the eligibility criteria for their specific supervisory role.⁹²³ The role of supervisors must be clearly defined and responsibilities and eligibility criteria must be set in advance.⁹²⁴ A principal supervisor, who is a member of the academic staff at the institution, is responsible for the overall management of the student's progress.⁹²⁵ The role of principal supervisor can be shared jointly if

⁹¹⁰ Point 7.17 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹¹ Points 7.23-7.25 Ireland's Framework of Good Practice for Research Degree Programmes 2020.
⁹¹² Ibid.

⁹¹³ Points 1.2 -1.4 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁴ Point 1.7 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁵ Point 1.8 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁶ Point 2.2 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁷ Point 2.6 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁸ Point 3.5 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹¹⁹ Point 8.68 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

 ⁹²⁰ Point 8.96 Ireland's Framework of Good Practice for Research Degree Programmes 2020.
 ⁹²¹ Point 8.122 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²² Point 3.32 and 3.33 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²³ Point 7.42 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²⁴ Point 3.36 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²⁵ Point 8.7 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

found necessary.⁹²⁶ The supervision can be complemented by secondary or co-supervisors, who are qualified to provide input.⁹²⁷ The supervisors guide the students in their research project and the development of their other skills relevant to the discipline.⁹²⁸ The supervision is supported by a panel or a committee.⁹²⁹

The progress of the student is monitored through informal and formal meetings with the supervisor.⁹³⁰ At the start of their doctorates, candidates and their supervisors will hold an advisory meeting at which a checklist is completed laying down which induction activities a candidate will participate in.⁹³¹ For those undertaking professional doctorates, this meeting may take place at a later stage, when the candidate embarks on the substantive research project. During their research, candidates take also part in training for the development of non-research specific skill sets which also include transferrable skills and career planning.⁹³² In order to realise this training, the candidate together with his or her supervisor (for both professional and "regular" doctorates) establish a personal development plan.⁹³³ Skills development through national and international collaboration is also encouraged.⁹³⁴

Where a degree is pursued in collaboration with other institution(s), the institutions sign a clear written agreement establishing which policies and procedures applies to the programme. The agreement includes a supervision mechanism ensuring the quality of supervision.⁹³⁵ The supervisory panel appoints a principal supervisor at the awarding institution who takes an overall responsibility of the doctoral candidate and his/her research project.⁹³⁶ Programmes leading to a joint award are subject to an award agreement, which stipulates the specific contexts in which each institutions' policies and procedures apply, and on the responsibilities on registering the student's record. The agreement is drafted in advance before the student is admitted and ensures the legal status of the joint award.⁹³⁷

As stated by the Universities Act, an authority is responsible for organising periodic review of the effectiveness of the quality assurance system in place in the Irish Universities. The Irish Universities Quality Board, having this responsibility from 2002 until 2012, provided national guidelines of good practices. One of these is the Good practice in the organisation of Phd programmes in Irish higher education.⁹³⁸ In regards to joint doctorates, the document states that these degrees should be formed with appropriate arrangements that facilitate student's mobility and the recognition of credits and other assessment modules.⁹³⁹ The partnerships should be covered by policies, regulations, processes,

⁹²⁶ Point 8.8 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²⁷ Points 8.9-8.10 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²⁸ Point 8.17 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹²⁹ Point 8.12 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁰ Points 8.21-8.37 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³¹ Point 4.5 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³² See Points 5.1, 5.3, 5.7, 5.9, 5.10, 5.12, 5.13, 5.15 and 5.18ß Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³³ Point 5.4 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁴ Points 5.19 -5.23 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁵ Points 7.37-7.38 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁶ Point 7.39 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁷ Point 7.40 Ireland's Framework of Good Practice for Research Degree Programmes 2020.

⁹³⁸ Irish Universities Quality Board, 'Good Practice in the Organisation of PhD Programmes in Irish Higher Education' (2009).

⁹³⁹ Point 1.4.2 Good Practice in the Organisation of PhD Programmes in Irish Higher Education.

and interinstitutional agreements regulating the cross-institutional research education, training and awarding of the joint research degrees.⁹⁴⁰

From 2012, the functions of the Board were transferred to the Quality and Qualifications Ireland (QQI). As established by the Qualifications and Quality Assurance Act, this authority is responsible for validating programmes of education and training and establishing the standards of knowledge and skills before a degree can be awarded.⁹⁴¹ For joint programmes, the authority can enter into a joint awarding arrangement, where a joint degree can be awarded to the student who completes education and training satisfactorily and meets the required standard of knowledge and skills.⁹⁴²

7.1 Dublin City University

The institutional regulations of Dublin City University can be found from the Academic Regulations for Postgraduate Degrees by research and thesis (2020). These regulations apply to the Doctor of Philosophy (PhD) and to professional doctorate degrees. A separate regulation governs the higher doctorates (DSc, Deng, DLitt and LLD). The regulations are applicable to all students registered in DCU, irrespective of the institution in which the studies are commenced.⁹⁴³ Next to these documents, further regulations can be found from the University's Marks and Standards.

The Academic Council is responsible for all matters relating to graduate research degrees. The Graduate Research Studies Board (hereinafter, "the Board") is responsible for the policies and procedures relating to graduate research. Students registered to these programmes are subject to the Code of Discipline and must comply with the University's Code of Good Research Practice, research ethic guidelines, the DCU Code of Practice on Authorship and the Academic Integrity and Plagiarism Policy. Normally, students are registered for one degree only, but the Board may approve a dual registration.⁹⁴⁴

In order to be admissible for the doctoral degrees, the person must have obtained a Master's degree or a primary degree in appropriate discipline with first- or second-class honours. The candidates will undergo a confirmation procedure evaluating the student's research progress after the registration. Candidates for Professional Doctorate degrees may exceptionally be admitted on the basis of exceptional ability or aptitude for academic research. Candidates with foreign academical qualifications will be assessed by the NARIC guidelines and the European Framework of Qualifications.⁹⁴⁵

The doctoral studies can be formed either on a full-time or part-time basis. For a full-time Doctor in Philosophy, the typical registration period is 4 years, whereas for Professional doctorates, the registration period is 4-5 years. The University imposes minimum and maximum registration periods.⁹⁴⁶ The progress of the candidate is assessed annually, where in case of a negative

⁹⁴⁰ Point 1.8 Good Practice in the Organisation of PhD Programmes in Irish Higher Education.

⁹⁴¹ Section 9 Qualifications and Quality Assurance Act.

⁹⁴² Section 51(1) Qualifications and Quality Assurance Act.

 $^{^{\}rm 943}$ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 4.

⁹⁴⁴ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 7.

⁹⁴⁵ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 8.

 $^{^{\}rm 946}$ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 10.

recommendation, the student is not permitted to continue as a registered graduate research student.⁹⁴⁷ During their time at DCU, doctoral candidates hold the status of student.⁹⁴⁸ DCU has doctoral candidates in five different disciplines whereby most candidates are undertaking their doctorate in the areas of science and health, followed by humanities and social sciences, education, engineering and computing, and finally engineering.⁹⁴⁹ In terms of funding, candidates are generally self-funded or on scholarship by a national agency, school or other organisation.⁹⁵⁰

The final thesis of Doctor of Philosophy (PhD) can be completed in multiple formats that are subject to the same academic standards: the research must make a significant and coherent contribution to knowledge.⁹⁵¹ The thesis (270 ECTS) can be completed in a form of a monograph, published work, artefact or through creative of performance practice.⁹⁵² Next to the thesis, the candidate must perform high-quality research, training and outputs consistent with international norms. With the permission of the supervisor, the candidates may take additional courses enhancing their generic and transferable skills. Structured PhD programmes include discipline-specific modules and other courses as agreed either in the personal development plan or in partnership agreement, of the value of 20-90 ECTS.⁹⁵³ When it comes to training, this may differ per each of the different Graduate Schools of DCU.⁹⁵⁴ When looking at law and governance, for example, one may see that training consists of 30 ECTS although this may be extended up to 60 ECTS (20 ECTS mandatory courses and the others optional).⁹⁵⁵ Depending on the programme, some courses are furthermore compulsory whereas others are optional. Candidates must discuss with their supervisor which courses to take.⁹⁵⁶

Professional Doctorate can be awarded in various disciplines. The university awards currently Professional Doctorates on Doctor of Education (EdD), Doctor of Business Administration (DBA), Doctor of Psychotherapy (DPsych), Doctor of Music Performance (DMUSPerf) and Doctor of Elite Performance in Sport (DProfElite). The aim of these doctorates is that the candidate contributes to knowledge of professional practice through research. The programme consists of 240-270 ECTS of thesis and other written work.⁹⁵⁷

A supervisory panel appointed to each student provides advice and formal decision-making with respect to the student's progress. The panel consists of the supervisors and of an independent member from the academic staff.⁹⁵⁸ Each student is guided on a regular and frequent basis by a principal supervisor. The supervisors mut be appropriately qualified with a doctoral qualification or a professorship and have relevant experience in the field of research. Supervisors without these qualifications may act as a joint principal or a secondary supervisor.⁹⁵⁹ The supervisors are responsible

⁹⁴⁷ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 16.

⁹⁴⁸ Based on information received by a representative of DCU.

⁹⁴⁹ Ibid.

⁹⁵⁰ Ibid.

⁹⁵¹ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 4.

⁹⁵² DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 5.

⁹⁵³ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 5.

 ⁹⁵⁴ DCU, 'PhD Training', <u>https://www.dcu.ie/humanities-and-social-sciences/doctoral-studies-hub#paragraph--id--111421</u>.
 ⁹⁵⁵ DCU School of Law and Government, PhD Programme in Law, Politics & International Relations,

https://www.dcu.ie/sites/default/files/inline-files/phd-handbook-lg-dcu-20-21.pdf.

⁹⁵⁶ DCU, 'PhD Training', <u>https://www.dcu.ie/humanities-and-social-sciences/doctoral-studies-hub#paragraph--id--111421</u>.

⁹⁵⁷ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 6.

⁹⁵⁸ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 11.

⁹⁵⁹ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 13.

to advice the students in their research, ensuring that the student acquires all necessary skills needed for the completion of the programme.⁹⁶⁰

Doctoral degree is awarded to candidates who successfully complete their thesis following an oral examination (*viva voce*). The candidate must present original work in accordance with international academic standards.⁹⁶¹ All doctoral theses are evaluated with the common requirements. The thesis must consist of the candidate's own work, demonstrate knowledge and understanding of the field of study, constitute significant contribution to existing professional or academic knowledge, and be based on work that has been conducted during the student's registration at the University.⁹⁶² The thesis should be written in English or Irish, or with the approval of the Graduate Research Studies Board, in another language.⁹⁶³ The copies of the thesis provided by the candidate are placed in the University Library, and are the property of the University. The candidate signs a declaration form providing access right to their thesis. Matters relating to copyrights are agreed between the candidate and the University.⁹⁶⁴

When the candidate wishes to submit the thesis for final examination, he/she must notify the Registry three months in advance. The research will be examined by at least one internal examiner and one external examiner.⁹⁶⁵ The internal examiner must be a member of academic staff, a professor, researcher, adjunct faculty member or either hold a doctoral qualification.⁹⁶⁶ The external examiner is either recognised expert in the relevant field of research, who has experience in supervising doctoral candidates and holds academic qualifications forming a suitable background for the examiner's role.⁹⁶⁷ The proceeding is supervised by an Independent Chairperson appointed by the Head of School or nominee in consultation with the supervisor. The *viva voce* is held in private at the University. When necessary, the examination can be conducted via videoconferencing.⁹⁶⁸ During COVID-19, online vivas were, for example, conducted.⁹⁶⁹ After the examination, the examiners submit report to the Registry on the outcome of the examination. After considering the reports, the Registry submits the list of candidates recommended for the award to the Academic Council, who takes a final decision on the graduation.⁹⁷⁰

Higher Doctorates are subject to a separate regulation. The University awards these doctorates for Doctor of Letters (DLitt), Doctor of Laws (LLD), Doctor of Science (DSc) and for Doctor of Engineering (DEng). These degrees are awarded as a recognition of published work or other material making a substantial, sustained and original contribution that is ground-breaking and influential work within a field of specialisation, where the candidate has achieved internationally an outstanding distinction.⁹⁷¹ Applicants with a Master's degree that has been granted from at least twelve years ago, or applicants

⁹⁶⁰ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 14.

⁹⁶¹ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 4.

⁹⁶² DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 19.

⁹⁶³ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 24.

⁹⁶⁴ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 23.

⁹⁶⁵ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 29.

⁹⁶⁶ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 26.

 $^{^{967}}$ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 27.

 $^{^{968}}$ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 17.

⁹⁶⁹ DCU has indicated to adapt their regulations in light of the changing government guidelines; information received by a representative of DCU.

⁹⁷⁰ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 18.

⁹⁷¹ DCU Higher Doctorates Revised Provisions and Regulations, p. 2.

with Doctor of Philosophy that has been granted at least ten years ago, are admissible to the programme. Alternatively, applicants who are not graduates of a University but have been a member of academic or research staff of the University for a period of at least eight years are admissible.⁹⁷²

Following a similar procedure as with the other doctoral degrees, the completion of Higher Doctorate is assessed by an internal examiner and by two external examiners.⁹⁷³ The degree will be awarded to candidates who demonstrate a contribution of originality and merit to their field of study, sustained, consistent and substantial contribution to the advancement of knowledge over the years, and have authoritative standing in their field of study. The examiners submit their reports assessing the work to the Dean of Faculty with the recommendation whether the doctorate should be awarded. The report is forwarded to the Registry to be presented at the Faculty Awards Board for Research Degrees. After, the recommendation is approved by the Academic Council.⁹⁷⁴

The University encourages collaboration with other institutions.⁹⁷⁵ The collaboration agreements are governed by the University's Policy on Research Supervision and Awards in Collaboration with Other Institutions. Joint or multiple doctorate degrees are agreed between the institutions by a Memorandum of Understanding, including provisions on the credit transfer, recognition, and regulatory matters.⁹⁷⁶ As stated in the Policy, the University has a preference for joint research awards, but agreement on double award can be entered into in exceptional cases. Joint degrees are only formed where the student registers at least one year in the DCU and spends a minimum 6 months at the other institution.⁹⁷⁷ The formal agreement is signed by the DCU Vice president of Academic Affairs. The agreement should specify the subject of the research, enrolment, a time schedule of the candidate's stay at each institution, supervisory and review arrangements, evaluation of the doctoral thesis, funding, and costs.⁹⁷⁸

7.2 University of Limerick

Regulations for doctoral programmes at the University of Limerick are laid down in the Academic Regulations, Marks and Standards, Programme-Specific Regulations, Supporting Procedures and in Research Postgraduate Academic Regulations. In the University, the Academic Council is responsible for academic policy and standards, and Faculty Boards are responsible for the academic affairs of their faculty. The Academic Council Examination board makes recommendations on final awards of degrees.⁹⁷⁹

The University provides postgraduate education in form of PhD degrees, Professional doctorates, Structured PhD programmes (SPhD) and Joint research degrees.⁹⁸⁰ The minimum requirements of entry for these programmes are a master's degree, an honour primary bachelor's degree, or a degree

⁹⁷² Section 1 DCU Higher Doctorates Revised Provisions and Regulations.

⁹⁷³ Section 4 DCU Higher Doctorates Revised Provisions and Regulations.

⁹⁷⁴ Section 6 DCU Higher Doctorates Revised Provisions and Regulations.

⁹⁷⁵ DCU Academic Regulations for Postgraduate Degrees by research and thesis, p. 7.

⁹⁷⁶ Section 2.3.1 DCU Marks and Standards.

⁹⁷⁷ DCU Policy on Research Supervision and Awards in Collaboration with Other Institutions, p. 5.

⁹⁷⁸ DCU Policy on Research Supervision and Awards in Collaboration with Other Institutions, p. 3.

⁹⁷⁹ Section 1.1 Handbook of Academic Regulations and Procedures.

⁹⁸⁰ Section 5.2 Handbook of Academic Regulations and Procedures.

of equivalent qualification and a minimum of four years of relevant professional experience.⁹⁸¹ In order to pursue the doctorate, candidates should be enrolled. During their time at UL they will be considered students.⁹⁸² In terms of funding, this may take place via the faculty, department, primary investigator or externally funded via various organisations such as the Irish Research Council, Science Foundation, Ireland, and Health Research Board. Candidates may, however, also be self-funded. The programme-specific regulations may impose additional requirements.

Next to the educational requirements, the applicants to these programmes should present a suitable project and supervisor(s). The candidates may be required to participate in an interview to establish whether they are suitable to carry out the proposed research. They may be also required to demonstrate competence of English language, and certificates of education completed in English or alternatively English proficiency tests.⁹⁸³ Applicants to joint research degree are required to apply for the programme at the coordinating institution.⁹⁸⁴

Each candidate will be appointed a primary supervisor, and when appropriate, joint supervisor(s).⁹⁸⁵ The primary supervisor is a member of academic staff of the University, whereas the joint supervisors may be employed by another institution.⁹⁸⁶ The primary supervisor must be either a professor, academic staff member who has supervisory experience, or hold a PhD degree.⁹⁸⁷ The joint supervisors should hold at least the same level of qualification as the supervised candidate.⁹⁸⁸ In case of a joint degree, the supervisors are appointed based on the terms of the Memorandum of Understanding (MoA), and the requirements of the coordinating institution.⁹⁸⁹ The role of the supervisors are to consult and advice the candidate on a regular basis and assist with the access to the material, equipment and resources essential to the research.⁹⁹⁰

Overall, postgraduate students are expected to develop a personal development plan, setting out goals and targets of generic and transferable skills programmes to be completed. The plan is agreed and signed by the student and supervisor(s).⁹⁹¹ The progress of the student is reviewed on annual basis or at the request of the student or supervisor by the Research Review Panels.⁹⁹² Those undertaking a joint research degree is subject to the research progression requirements of the coordinating institution.⁹⁹³ Candidates of structured PhD programmes are appointed a Structured PhD Supervisory Panel, that will support and advice the student and the supervisor(s) throughout the structured programme.⁹⁹⁴

⁹⁸¹ Section 5.4.1 Handbook of Academic Regulations and Procedures.

⁹⁸² Based on information received by a representative of UL.

⁹⁸³ Section 5.3 Handbook of Academic Regulations and Procedures.

⁹⁸⁴ Section 5.3.5 Handbook of Academic Regulations and Procedures.

⁹⁸⁵ Section 5.5.1 Handbook of Academic Regulations and Procedures.

⁹⁸⁶ Section 5.5.2 Handbook of Academic Regulations and Procedures.

⁹⁸⁷ Section 5.5.3 Handbook of Academic Regulations and Procedures.

⁹⁸⁸ Section 5.5.6 Handbook of Academic Regulations and Procedures.

⁹⁸⁹ Section 5.5.1 Handbook of Academic Regulations and Procedures.

⁹⁹⁰ Section 5.5.9 Handbook of Academic Regulations and Procedures.

⁹⁹¹ Section 5.1.8 Handbook of Academic Regulations and Procedures.

⁹⁹² Section 5.6.1 Handbook of Academic Regulations and Procedures.

⁹⁹³ Section 5.6.1 Handbook of Academic Regulations and Procedures.

⁹⁹⁴ Handbook of Academic Regulations and Procedures, Appendix 4: Structured PhD programmes

Professional doctorates have a nominal value of 270 ECTS and are awarded to a candidate who has completed the required programme of study and research that may include an experiential and/or professional placement element.⁹⁹⁵ A Doctor of Philosophy (PhD) is awarded to candidates who demonstrate a body of original work and presents it in accordance with internationally accepted standards in the form of a doctoral thesis. The programme has a value of 270 ECTS.⁹⁹⁶ Candidates enrolled in a Structured PhD will follow a combination of taught and research elements between 300-360 ECTS.⁹⁹⁷ The minimum period of registration for PhD degrees and professional doctorate programmes (for full-time) is three years.⁹⁹⁸ Research may also be conducted on a part-time basis.⁹⁹⁹

The maximum length for a PhD thesis is 100,000 words. It must be written either in English, Irish or another language¹⁰⁰⁰, and it must follow requirements on format.¹⁰⁰¹ It may be article-based or written in a form of a monograph.¹⁰⁰² Publication of the research is encouraged.¹⁰⁰³ Whereas in the case of an article-based doctorate certain contributions are already published prior to the defence, candidates may also submit their thesis for examination in pre-publication formats that facilitate the publication once they complete their defence. The thesis must show "evidence of independent enquiry, originality in the methods used and/or in the conclusions drawn and must make an appreciable new contribution to knowledge or thinking in the candidate's field."¹⁰⁰⁴ The copyright of the thesis remains with the candidate, whereas all other intellectual property conceived or invented during the research are the property of the University.¹⁰⁰⁵ Candidates enrolled in a joint degree will produce a thesis complying with the requirements of the coordinating institution and terms of the MoA.¹⁰⁰⁶

Before submitting the thesis for examination, the candidate must obtain agreement from his/her supervisor.¹⁰⁰⁷ In case the supervisor does not agree, the supervisor must substantiate this decision in writing to both to the candidate and the Head of the Department. The candidate has the right to appeal where an independent arbitration panel will consider whether the thesis can be submitted to the examination.¹⁰⁰⁸ Candidates pursuing a joint degree will follow the examination requirements of the coordinating institution and the terms of the MoA.¹⁰⁰⁹

The thesis is assessed by an Examination Panel (which can be considered a Defence Committee in line with the terminology used in this report). The Panel consists of internal examiner, external examiner and the Head of the Department or Faculty Dean.¹⁰¹⁰ The internal examiner is a member of the

⁹⁹⁵ Section 2.9 Handbook of Academic Regulations and Procedures.

⁹⁹⁶ Section 2.10 Handbook of Academic Regulations and Procedures.

⁹⁹⁷ Section 2.11 Handbook of Academic Regulations and Procedures.

⁹⁹⁸ Sections 5.8.1 and 5.8.2 Handbook of Academic Regulations and Procedures.

⁹⁹⁹ Section 5.8.3 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁰ Section 5.12.2-5.12.3 Handbook of Academic Regulations and Procedures., see also Appendix 1: Presentation of Master's and Doctoral Theses in a Language Other than English.

¹⁰⁰¹ Handbook of Academic Regulations and Procedures, Appendix 2: Requirements for the Preparation and Submission of Master's and Doctoral Theses.

¹⁰⁰² Handbook of Academic Regulations and Procedures, Appendix 2: Requirements for the Preparation and Submission of Master's and Doctoral Theses.

¹⁰⁰³ Based on information received by a representative of UL.

¹⁰⁰⁴ Section 5.13.1 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁵ Section 5.13.1 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁶ Section 5.12.1 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁷ Section 5.14.2 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁸ Section 5.14.3 Handbook of Academic Regulations and Procedures.

¹⁰⁰⁹ Section 5.14.39 Handbook of Academic Regulations and Procedures.

¹⁰¹⁰ Section 5.14.8 Handbook of Academic Regulations and Procedures.

academic staff of the University, and is a professor or holds a PhD degree.¹⁰¹¹ The external examiner is an academic staff member of a recognised institution, having formal academic and/or professional qualifications as well as expertise in the subject area required for the specific field of the PhD research.¹⁰¹² Normally, the oral examination will take place at the University, however, in exceptional circumstances the *viva voce* may be conducted remotely.¹⁰¹³ During COVID-19, viva examinations were conducted online. In light of positive experiences, online examinations may be considered to be maintained in the future (although no definitive agreements have been reached yet).¹⁰¹⁴

After the oral examination, within five working days the examiners submit a report to the Graduate School. When the examiners agree, a single report will be sent whereas in the event of disagreement, the examiners submit separate reports.¹⁰¹⁵ The examiners will assess the overall quality of the research, its original contribution, writing style and presentation (both written and oral).¹⁰¹⁶ The report also makes a recommendation whether the degree should be awarded or not, or if the award is subject to corrections or amendments.¹⁰¹⁷

The University supports joint research degrees in collaboration with other higher education institutions or industry partners. Joint research degrees are defined in Appendix 6 of the Academic Regulations as "an award at NFQ level 9 or 10 or equivalent jointly made by UL and one or more partner institutions to a student who has studied for his/her higher research degree at UL and at one or more of these partner institutions."¹⁰¹⁸ Further regulations can be found from the Joint Degree and Dual Degree Awards Policy, that also stipulates the award of dual degrees, defining it as: "Two separate awards at NFQ level 8 or 9 or equivalent conferred by UL and one partner institution. The student who has studied for his/her higher degree award at UL and at the partner institution. The student will receive two awards, one from UL and one from the partner institution, through agreed pathways outlined by a formal agreement." The Policy excludes multiple (three or more) awards.¹⁰¹⁹

The cooperation will be based on an individual or cohort agreement. Each application to engage in joint research degrees are approved by the Standing Panel on Collaborations (SPC) by way of a Memorandum of Understanding (MoU) and/or Memorandum of Agreement (MoA) between the partner institutions.¹⁰²⁰ The MoU forms a non-legally binding agreement expressing the intention to cooperate, whereas the MoA legally binds the institutions to a specific activity.¹⁰²¹ The agreement should formulate for instance the research project title, aims and objectives of the project, the duties and responsibilities of the participating institutions, supervisory arrangements, financial responsibilities, issues of intellectual property, time limits of the agreement and termination and dispute resolution processes.¹⁰²²

¹⁰¹¹ Section 5.14.10 Handbook of Academic Regulations and Procedures.

¹⁰¹² Section 5.14.9 Handbook of Academic Regulations and Procedures.

¹⁰¹³ Section 5.14.8 Handbook of Academic Regulations and Procedures. See also Guidelines for conducting *viva voce* examinations remotely.

¹⁰¹⁴ Based on information received by a representative of UL.

¹⁰¹⁵ Sections 5.14.16 and 5.14.17 Handbook of Academic Regulations and Procedures.

 $^{^{\}rm 1016}$ Section 5.14.19 Handbook of Academic Regulations and Procedures.

¹⁰¹⁷ Section 5.14.22 Handbook of Academic Regulations and Procedures.

¹⁰¹⁸ Section 1, Appendix 6: Joint Research Degrees, Handbook of Academic Regulations and Procedures.

¹⁰¹⁹ Section 1, Joint Degree and Dual Degree Awards Policy.

¹⁰²⁰ Appendix 6: Joint Research Degrees, Handbook of Academic Regulations and Procedures.

¹⁰²¹ Section 1, Appendix 6: Joint Research Degrees, Handbook of Academic Regulations and Procedures.

¹⁰²² Section 2, Appendix 6: Joint Research Degrees, Handbook of Academic Regulations and Procedures.

Applicants for joint award programmes will apply through the usual process at the University, where the agreement (MoU and/or Moa) will be attached to the application. When the University of Limerick takes the role as a lead institution in the joint degrees, the student can spend a maximum of two years at the partner institution(s). The student will then follow the UL's progression regulations. When another institution is the lead institution, the student is required to spend a minimum of one feepaying year the University of Limerick and will follow the progression regulations of the lead institution.¹⁰²³

7.2.1 Cluster 2 – Psychology & Medicine

Next to these above-mentioned regulations, the Academic Regulations lay down programme specific regulations, that are mostly focused on the awarding criteria and rules on repeating a failed module.

Applications to Doctor of Medicine (MD) or Master of Surgery (MChir) are considered from the medical graduates within the University and those with equivalent medical qualifications. The applicants mut have three years of relevant post-qualification experience, and ideally are working at the hospital or a clinic affiliated with the university. Other applicants may be accepted by the endorsement of the Head or Director of Research at the School of Medicine.¹⁰²⁴

For a professional Doctoral degree in Clinical Psychology to be awarded, the candidate must have achieved a Quality Credit Average (QCA)¹⁰²⁵ of 3.00 or higher. The research component (thesis proposal, thesis and journal article) is evaluated on a pass/fail basis.¹⁰²⁶

8. Italy

At the national level in Italy, provisions are established across several regulations containing requirements for doctoral training. The objective of the doctorate is to acquire the necessary competences to conduct highly qualified research at universities, public entities, or private entities.¹⁰²⁷ In order for doctoral candidates to be selected, they must undergo an annual public selection process which is open to anyone who is in possession of an Italian master's degree or similar foreign title.¹⁰²⁸ Ultimately the doctorate results in the title of PhD or *dottore di ricerca – Dott. Ric.*¹⁰²⁹ Candidates receive this award upon positive evaluation of a thesis contributing to the advancement of knowledge or methodologies in their field of study.¹⁰³⁰ In addition, the thesis must be written in Italian or English (including a summary in these languages), although exemptions may be possible if expressly approved.

¹⁰²³ Sections 2.3, 2.4 and 4, Appendix 6: Joint Research Degrees, Handbook of Academic Regulations and Procedures. ¹⁰²⁴ Section 5.4.3 Handbook of Academic Regulations and Procedures.

¹⁰²⁵ Specific formula used in assessing the quality of a student's performance, see Section 4.3.1 Handbook of Academic Regulations and Procedures.

¹⁰²⁶ Section 3.7.5 Handbook of Academic Regulations and Procedures.

¹⁰²⁷ Article 4(1)(4) Legge 3 luglio 1998, n. 210 Norme per il reclutamento dei ricercatori e dei professori universitari di ruolo; Article 1(3) Decreto Ministeriale 8 febbraio 2013 n. 45 Regolamento recante modalità di accreditamento delle sedi e dei corsi di dottorato e criteri per la istituzione dei corsi di dottorato da parte degli enti accreditati.

¹⁰²⁸ Article 8(1) Decreto Ministeriale 8 febbraio 2013, n. 45. It is possible for universities to reserve a certain number of scholarships for applicants with degrees from foreign universities. At the same time, alternative selection criteria may be maintained for EU-funded or internationally funded research projects; see Article 8(4)(5) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰²⁹ Article 4(8-bis) Legge 3 luglio 1998, n. 210.

¹⁰³⁰ Article 8(6) Decreto Ministeriale 8 febbraio 2013, n. 45.

The thesis must be accompanied by an overview of activities and publications to be assessed by at least two professors serving as evaluators. Their role is to produce an opinion on the thesis serving as the basis for the public defence. If additions or corrections are necessary, the procedure is stayed for a maximum of six months after which the public defence will take place. During this time, the evaluators issue a new opinion made in light of the changes instituted by the candidate. The public defence takes place before a committee that is to approve or reject the thesis.¹⁰³¹ After successful conclusion of the defence, the thesis is made available (in full or in part) in a database operated by the Italian Ministry of Education, Universities, and Research and will be made available at the national libraries in Rome and Florence.¹⁰³²

Doctoral candidates undertake their doctorates on a full-time basis, although they may also undertake teaching duties (as long as these do not compromise the doctoral research).¹⁰³³ Furthermore, special provision is made for doctoral candidates in medicine. In Italy, there is a general prohibition to undertake two courses of study simultaneously. As a derogation to this principle, those attending training in a medical specialty may pair it with a doctorate.¹⁰³⁴ In such cases, the duration of doctoral training is reduced to a minimum of two years (as opposed to the regular minimum duration of three years) and made subject to specific access conditions.¹⁰³⁵

Doctoral courses must be accredited by the Minister for Education, Universities, and Research with approval of the Italian accrediting body *l'Agenzia nazionale di valutazione del Sistema Universitario e della ricerca* (ANVUR).¹⁰³⁶ Institutions must hand in an application after which the accreditation process commences.¹⁰³⁷ This process consists of a primary accreditation to activate the doctoral course and a periodical check to verify if all requirements for accreditation are fulfilled.¹⁰³⁸ Inter-university consortia having the objective of issuing joint degrees may also acquire such accreditation.¹⁰³⁹ In such cases, agreements must be made as to the contributions of the participating partners in terms of scholarships.¹⁰⁴⁰ Such consortia providing joint doctorates may consist of a maximum number of four partners that must ensure doctoral candidates can divide their time between research and teaching.¹⁰⁴¹ In order to obtain accreditation, universities must fulfil the following conditions:¹⁰⁴²

¹⁰³¹ This committee may also decide to award praise to results carrying particular scientific importance; Article 8(6) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰³² Article 14(1)(3) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰³³ Article 4(8) Legge 3 luglio 1998, n. 210; Article 12(1)(2) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰³⁴ Article 4(6-bis) Legge 3 luglio 1998, n. 210.

¹⁰³⁵ Article 6(1) and 7(1)(a-d) Decreto Ministeriale 8 febbraio 2013 n. 45; ADI, Guida al dottorato ADI – Associazione dottorandi e dottori di ricerca in Italia, p. 9.

¹⁰³⁶ Article 4(2) Legge 3 luglio 1998, n. 210; Article 2(1) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰³⁷ Article 3(2) Decreto Ministeriale 8 febbraio 2013 n. 45

¹⁰³⁸ Article 3(1) Decreto Ministeriale 8 febbraio 2013 n. 45

¹⁰³⁹ See Article 2(2)(c) Decreto Ministeriale 8 febbraio 2013, n. 45. Other research consortia consisting of foreign universities (or even foreign companies) may also obtain accreditation as long as the Italian university involved in the consosrtium awards the academic title. See Article 2(2)(d)(e) of the abovementioned decree.

¹⁰⁴⁰ Article 4(2) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴¹ Article 4(3) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴² Article 4(1)(a-f) Decreto Ministeriale 8 febbraio 2013, n. 45.

- Have a doctoral board composed of professors and researchers;
- show that they conduct high-level international research in the doctoral course's disciplinary areas;
- make available a certain number of scholarships;
- have financial means available to sustain the doctoral course as well as the scientific research;
- have the facilities necessary for candidates to conduct their research activities (e.g. libraries, laboratories, and databases);
- provide for training that is both within the candidate's discipline as well as interdisciplinary.

Despite this accreditation, universities still establish additional provisions on subjects such as access requirements, grant of the title, training objectives etc.¹⁰⁴³ These university-specific decrees, called Rectorial decrees (*Decreti rettorali*), also establish the number of candidates admitted to doctoral training, the number of candidates exempted from having to fulfil access contributions, and the number of scholarships and apprenticeships awarded.¹⁰⁴⁴

When it comes to individual doctoral programmes, any doctorate and corresponding title must be proposed by the institution wishing to provide the doctoral training and is to be evaluated by ANVUR.¹⁰⁴⁵ Doctoral training may be organised in doctoral schools and must be overseen by a coordinator and a doctoral board (*collegio dei docenti*) consisting of, among others, professors and researchers.¹⁰⁴⁶ More specifically, the board is responsible for designing and implementing the doctoral training.

In order to fund doctorates, candidates can receive an annual scholarship,¹⁰⁴⁷ to be renewed depending on the fulfilment of certain conditions related to their doctoral programme.¹⁰⁴⁸ Additional funding may be made available if the candidate is to spend time abroad in the context of the doctorate.¹⁰⁴⁹ The grant of a doctoral scholarship furthermore means payment of social security contributions which means that candidates enjoy related rights.¹⁰⁵⁰ International cooperation is furthermore promoted. In particular, universities can set up doctorates with other higher education institutions abroad on the basis of agreements that provide for an effective sharing of training and research activities, sharing of burdens, regulating financial support, modalities of exchange for doctoral candidates, and the issue of joint, double or multiple degrees.¹⁰⁵¹

¹⁰⁴³ Article 4(2) Legge 3 luglio 1998, n. 210; Article 5 Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴⁴ Article 4(5) Legge 3 luglio 1998, n. 210. According to paragraph 6 of the same article, scholarship costs may be covered by parties outside the university administration although the procedure for this is to be decided by the relevant bodies at the universities.

¹⁰⁴⁵ Article 6(2) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴⁶ Article 6(3-5) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴⁷ Scholarships are composed of funding made available by the institutions providing the doctoral training and by the Italian Ministry of Education, Universities and Research. In the case of cooperation among institutions, each shall contribute financially to the scholarship; see Article 13 Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴⁸ Article 9(1) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁴⁹ Article 9(2)(3) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁵⁰ Article 12(3) Decreto Ministeriale 8 febbraio 2013, n. 45.

¹⁰⁵¹ Article 10(1) Decreto Ministeriale 8 febbraio 2013, n. 45.

8.1 The University of Rome 'Tor Vergata'

For the University of Rome 'Tor Vergata', additional regulations are set in the *Regolamento per I corsi di dottorato di ricerca* (Regulation for PhD courses) set by the university rector in 2016.

The University Regulation confirms that a doctorate provides candidates with the competences necessary to exercise highly qualified research activities within both public and private entities thereby contributing to the European Research Area.¹⁰⁵² Apart from research, the doctorate also consists of discplinary and interdisciplinary training and training on topics such as research management, valorisation of research results, and intellectual property.¹⁰⁵³

Doctorates can be proposed by one or more departments of the University and must be accredited in accordance with the procedure set in national law.¹⁰⁵⁴ Two organs play a central role in the organisaiton of doctorates namely, the Coordinator and the Doctoral Board (*Collegio dei docenti*), consisting of professors and researchers.¹⁰⁵⁵ The latter plays a core role in supervising the teaching and research activities of the doctoral programmes.¹⁰⁵⁶ One of their activities is to decide on whether to admit candidates to the following year of the course or to the final examination on the basis of their activity reports. The Coordinator, by contrast, supervises the functioning of the doctoral training programme and coordinates activities.¹⁰⁵⁷

At the University of Rome 'Tor Vergata' a maximum duration of three years is maintained for doctorates, only in exceptional situations may a six-month extension be granted by the Rector.¹⁰⁵⁸ The number of available places is determined annually by the Doctoral Board and the Department of reference.¹⁰⁵⁹ In order to access the doctorate, candidates must have a master's degree (or equivalent) and have successfully completed a public selection procedure that may include tests.¹⁰⁶⁰ Furthermore, certain places may be reserved for candidates with a degree from a foreign university. Ultimately, a commission decides on the admission of candidates.¹⁰⁶¹ For doctorates that are the result of cooperation among national or foreign universities, separate agreements lay down the conditions for admission.¹⁰⁶²

In order to take part in doctoral training, candidates must enrol and pay related fees.¹⁰⁶³ Whereas scholarship holders are exempt of the payment of enrolment fees, all candidates enrolled in doctoral training must pay insurance premiums. When it comes to the grant of scholarships, these are awarded on the basis of a ranking established during the selection procedure.¹⁰⁶⁴ In order to maintain their

¹⁰⁵² Article 2(1) Regolamento per i corsi di dottorato di ricerca, Decreto n. 1127/16 del 15 maggio 2016. The regulation is hereinafter cited as Regulation University of Rome 'Tor Vergata'.

¹⁰⁵³ Article 2(3) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁴ Articlde 1(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁵ Article 3(1)(3) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁶ Article 3(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁷ Article 3(4) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁸ Article 4(1)(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁵⁹ Article 9(1) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁰ Article 5(1)(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶¹ Article 5(4) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶² Article 5(6) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶³ Article 8(1)(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁴ Article 9(4) Regulation University of Rome 'Tor Vergata'.

scholarship, candidates must show sufficient progress in order to receive a scholarship for the subsequent year.¹⁰⁶⁵ The Doctoral Board therefore assesses annually whether each of the candidates has fulfilled their planned programme of activities of a certain year before granting admission to the subsequent year. If a candidate does not realise sufficient progress or ceases their research activities without justification, he or she may be excluded from the doctorate and related scholarship.¹⁰⁶⁶ Nevertheless, candidates may exceptionally suspend their doctorate for a period up to two years.¹⁰⁶⁷ Additional funding may be made available throughout the PhD to fund research activities in Italy and abroad.¹⁰⁶⁸ In the case of scholarships from foreign countries or under specific mobility programmes, the regulations designated in those agreements shall prevail.¹⁰⁶⁹ Furthermore, doctoral scholarships are incompatible with other research grants¹⁰⁷⁰ and may only be supplemented with other funding unless that funding is intended to supplement doctoral research and training with stays abroad.¹⁰⁷¹

During their doctorates, candidates must take part in doctoral training and must obtain permission to undertake additional work assignments beyond their research and training.¹⁰⁷² In particular, they must gain express authorisation by the Doctoral Board to undertake remunerated activities.¹⁰⁷³ Apart from work activities, candidates may also undertake additional teaching duties or, in the case of medical doctoral candidates, undertake clinical assistance duties.¹⁰⁷⁴ Whereas candidates can undertake training at other universities or research institutes during their doctorate, they are prohibited from following two doctorates at once or from undertaking other university courses such as bachelor's and master's simultaneously.¹⁰⁷⁵

Upon successful completion of the doctorate, the candidate will receive the title of doctor via rectorial decree.¹⁰⁷⁶ Interestingly, the issue of the doctorate is made dependent to the thesis being deposited in the university's open-access archive.¹⁰⁷⁷ Nevertheless, before candidates reach this stage, they must undergo a final examination which consists of the discussion of the thesis. Candidates can gain access to the final examination upon approval from the Doctoral Board, which bases its decision on possible exams and/or detailed reports of their research and training activities.¹⁰⁷⁸ In a next step, candidates are admitted to the thesis discussion by their evaluators. There must be at least two evaluators originating from national or foreign institutions who draft a written opinion on the thesis in which they either propose its admission to the public discussion or propose postponement for a maximum of six months in case of necessary corrections.¹⁰⁷⁹ In case of postponement, the thesis is in any case admitted for the public discussion after six months and accompanied by a new written report made by the evaluators in light of the corrections made. During the public discussion, the candidate

¹⁰⁶⁵ Article 9(2) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁶ Article 9(9) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁷ Article9(11-13) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁸ Article 9(3) Regulation University of Rome 'Tor Vergata'.

¹⁰⁶⁹ Article 9(16) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷⁰ However, doctoral candidates who were selected but did not obtain a scholarship may acquire a research grant

instead; Article14 Regulation University of Rome 'Tor Vergata'.

¹⁰⁷¹ Article 9(17)(19) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷² Article 9(7)(8) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷³ Article9(15) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷⁴ Article 10(1) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷⁵ Article 11 Regulation University of Rome 'Tor Vergata'.

¹⁰⁷⁶ Article 6(1) Regulation University of Rome 'Tor Vergata'.

¹⁰⁷⁷ Article 6(7) Regulation University of Rome 'Tor Vergata'.

 ¹⁰⁷⁸ Article 6(2) Regulation University of Rome 'Tor Vergata'.
 ¹⁰⁷⁹ Article 6(3) Regulation University of Rome 'Tor Vergata'.

discusses the thesis with a commission appointed by the Rector on the recommendation of the Doctoral Board.¹⁰⁸⁰ Upon conclusion of the discussion, the thesis is approved or rejected by the commission.¹⁰⁸¹ In the event of approval, the thesis is evaluated as adequate, appreciable, relevant or excellent. The commission may, however, also award the degree with distinction in case of particular scientific importance.

Apart from acquiring a doctorate with distinction, candidates may also acquire the label of European PhD.¹⁰⁸² In order for them to acquire this mark, candidates must fulfil a number of conditions:

- The thesis discussion must be preceded by the presentation of two correlations with the work of two professors coming from other European (non-Italian) universities;
- At least one member of the examination commission must be connected to a European institution located in a European country other than where the doctorate was based;
- Part of the thesis must be written in an official European language other than the language spoken in the country where the thesis is discussed;
- Candidates must have passed at least three months in another European country (other than Italy *and* other than the candidate's home country).

9. The Netherlands

Provisions on the organisation of doctorates in the Netherlands are found in the *Wet op het hoger onderwijs en wetenschappelijk onderzoek* (Law on higher education and scientific research). Within this piece of legislation, Chapter 7 particularly contains provisions on the grant of doctorates.

Starting with the basics, a doctorate is granted by an authorised university, open university or philosophical university¹⁰⁸³.¹⁰⁸⁴ The grant of the doctorate is dependent on a person possessing a master's degree, having written a PhD thesis independently, and having fulfilled the requirements made in the relevant university's institutional doctoral regulation.¹⁰⁸⁵ In exceptional circumstances, a person who does not possess a master's degree can also obtain a doctorate.¹⁰⁸⁶ After a person has successfully obtained the doctorate, they are allowed to use the title of Doctor or Doctor of Philosophy.¹⁰⁸⁷ The candidate is allowed to choose how to use the title. In particular, this amounts to choosing whether to maintain the abbreviation dr. for the title of doctor (before the name), or the abbreviation PhD which is used for a Doctor of Philosophy (after the name).¹⁰⁸⁸

¹⁰⁸⁰ Article 6(4) Regulation University of Rome 'Tor Vergata'. For doctorates established through international cooperation, rules on the composition of the committee are designated in the agreements governing the cooperation; See Article 6(5) of the regulation cited above.

¹⁰⁸¹ Article 6(5) Regulation University of Rome 'Tor Vergata'.

¹⁰⁸² Article 6(8)(a-d) Regulation University of Rome 'Tor Vergata'.

¹⁰⁸³ In the Netherlands, three types of institutions are therefore allowed to grant doctorates. Open universities provide scientific education aimed at professional practice. Education is provided in the form of distance learning. Philosophical universities (*levensbeschouwelijke universiteiten*) are aimed at providing scientific research in an ideological sense; see Article 1.3(2)(4) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁸⁴ Article 7.17(1) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁸⁵ Article 7.18(2) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁸⁶ Article 7.18(3) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁸⁷ Article 7.22(1) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁸⁸ Article 7.22(2-4) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

It is important to note that in the Netherlands, doctoral candidates may be grouped in categories. These were determined by the Association of Universities in the Netherlands (VSNU) on the basis of the capacity in which doctoral candidates work on their doctoral research. In 2019, the VSNU distinguished the following five categories: employee doctoral candidates, university employees who are working on a doctoral thesis, doctoral candidates who do not have an employment contract with the university and whose research is funded from a party granting doctoral scholarships (*beurspromovendi*), externally financed doctoral candidates, and doctoral candidates conducting research on the basis of their own means.¹⁰⁸⁹ Whereas the first two categories consist of doctoral candidates employed by the university, the other three categories concern candidates that are not employed by the university. The VSNU maintains various indicators to decide how to categorise certain doctoral candidate at first registration.¹⁰⁹⁰

In terms of supervision, a supervisor is appointed by the doctoral degree board (*college voor promoties*). Anyone who has a doctorate or who is a Doctor of Philosophy or who works at a university and is considered suitable for the role can be appointed as supervisor by the board.¹⁰⁹¹ Ultimately, a doctoral thesis will have to be defended before the doctoral degree board or before a commission that is to be assembled by the board in line with the institutional regulation.¹⁰⁹² The commission consists of professors and other persons that are considered sufficiently capable to take part in the commission.

Apart from playing a central role in the conferral of the degree of Doctor, the doctoral degree board is obliged to establish institutional regulations to lay down (1) how the defence is prepared including tasks of those involved, (2) procedures to overcome issues or differences occurring during the doctorate, and (3) matters related to joint/double degrees with other national or international institutions.¹⁰⁹³ Indeed, an institution can grant the degrees of Doctor or Doctor of Philosophy (PhD) together with one or more Dutch or foreign institutions.¹⁰⁹⁴ In order to set up such a cooperation, it is necessary to adhere to the provisions in Article 7.18(1-5) of the Law on higher education and scientific research described above. However, cooperating institutions are not prevented from making their own arrangements, as this is expressly permitted under Article 7.18(6) of the Law.

9.1 Maastricht University

Maastricht University maintains one general regulation for its six faculties. Provisions on obtaining a doctorate degree are laid down in the Regulations for obtaining the doctoral degree – Maastricht University (version 1 October 2020). UM has various categories of doctoral candidates, although those employed by the university are the most prevalent, followed by those on scholarship.

¹⁰⁸⁹ VSNU, 'Typen promovendi',

https://www.vsnu.nl/files/documenten/Feiten_en_Cijfers/Typering_promovendi_2019.pdf, 9 april 2019. 1090 Ibid.

¹⁰⁹¹ Article 7.18(4) Wet op het hoger onderwijs en wetenschappelijk onderzoek.¹⁰⁹² Ibid.

¹⁰⁹³ Article 7.19(1) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

¹⁰⁹⁴ Article 7.18(6) Wet op het hoger onderwijs en wetenschappelijk onderzoek.

When it comes to the doctoral candidate, he/she is the person who is admitted to the degree ceremony and has thereby obtained permission from the Board of Deans (i.e. the doctoral degree board of Maastricht University) to prepare for the ceremony.¹⁰⁹⁵ In order to qualify as a candidate, there is a need for the individual concerned to fulfil the requirements laid down in the Dutch Law on higher education and scientific research (i.e. have a master's degree or a corresponding examination, wrote a PhD thesis independently and fulfils the provisions in the university regulation).¹⁰⁹⁶ At the start of the research, the candidate should search for at least two supervisors or one supervisor and one co-supervisor.¹⁰⁹⁷ The supervisors should consent to supervision of the doctoral research and must be appointed by the Board of Deans.¹⁰⁹⁸

In order to access the degree ceremony, the candidate should also ask the Board of Deans to approve his/her admission to the ceremony.¹⁰⁹⁹ This request should be accompanied by personal information on the candidate, details on when the master's degree was obtained, a statement indicating that the thesis was the result of academic work was either undertaken independently or that the candidate made an essential contribution, and a statement declaring that the research has not been used to obtain a doctorate before.¹¹⁰⁰ Core values when conducting the doctoral research are laid down in Article 6 of the Maastricht University regulation. In particular, it is essential that the candidate has undertaken research independently, has had regard for relevant scientific codes of conduct and ethical codes, in case of test subjects – has obtained express consent and under review of an ethical review committee, in case of test animals – has respected regulations of the Animal Experiments Committee, and that the candidate has undertaken research without any restrictions in conflict with academic freedom.¹¹⁰¹ At Maastricht University, there is a possibility to conduct joint research resulting in a joint doctoral thesis by a maximum of two candidates. In this case, it is of particular importance that the work of each of the candidates was conducted independently and that the contributions of each of the candidates can be clearly distinguished.¹¹⁰²

Training programmes and courses are organised at the level of the faculties at Maastricht University.¹¹⁰³ It is the responsibility of the candidate to draw up a training (and supervision) plan in consultation with his or her supervisor(s).¹¹⁰⁴ Indeed, the training programmes at Maastricht University are offered through the seven Graduate Schools of Maastricht University and may include the payment of fees (varying per programme).¹¹⁰⁵ Access to those training programmes is often dependent on admission to a PhD at the relevant graduate school. Accordingly, each of the Graduate Schools sets its own criteria to access doctorates. The Law Faculty, for example, offers a flexible

¹⁰⁹⁵ Article 1(i) Regulations for obtaining the doctoral degree – Maastricht University (version 11 December 2019). The regulation will henceforth be cited as UM doctoral regulation.

¹⁰⁹⁶ Article 1(I) io. Article 2(1) UM doctoral regulation.

¹⁰⁹⁷ Article 4(1) UM doctoral regulation.

¹⁰⁹⁸ Article 4(2)(3) UM doctoral regulation.

¹⁰⁹⁹ Article 4(1) io. 5 UM doctoral regulation.

¹¹⁰⁰ Article 5(2)(3) UM doctoral regulation.

¹¹⁰¹ Article 1.6 of the Law on higher education and scientific research specifies: "aan de instellingen voor hoger onderwijs en aan de academische ziekenhuizen wordt de academische vrijheid in acht genomen." Translation: Academic freedom is respected in higher education institutions and teaching hospitals.

¹¹⁰² Article 7 UM doctoral regulation.

¹¹⁰³ Maastricht University, 'PhD training programmes', <u>https://www.maastrichtuniversity.nl/research/phd/phd-training-programmes</u>.

¹¹⁰⁴ Article 10(2) UM doctoral regulation.

¹¹⁰⁵ See Maastricht University, 'PhD training programmes', <u>https://www.maastrichtuniversity.nl/research/phd/phd-training-programmes</u>.

training programme including one mandatory basic course and additional optional courses that may be taken based on the candidate's needs.¹¹⁰⁶ Funding for the course is dependent on funding available for the PhD.¹¹⁰⁷ In order to access a PhD, prospective candidates must apply for a position with the Maastricht Graduate School of Law by submitting an application containing documentary proof of, among others, their academic transcripts (Bachelor's and Master's), their motivation, and their proposed research.¹¹⁰⁸ The United Nations University (UNU-MERIT) requires a master's degree, basic knowledge in mathematics and statistics, economics, social sciences, political sciences and/or law, and proficiency in English along with documentary evidence to access its training programme in Innovation, Economics and Governance for Development.¹¹⁰⁹ The programme accordingly focuses on the research skills and methods consisting of elective courses to be followed by doctoral candidates followed by three years of doctoral research.¹¹¹⁰ When it comes to medicine and psychology, internal and external candidates can follow a programme at Faculty of Health, Medicine and Life Sciences (FHML) and the Maastricht University Medical Centre (MUMC+). The programme is again flexible (to be adapted to a candidate's personal education plan) and includes primarily (but not exclusively) courses on methodology and statistics, biomedical and clinical research skills, and academic writing courses in English.¹¹¹¹ At Maastricht University, programmes are also offered to train doctoral candidates who combine their doctoral research with their profession.¹¹¹²

Concluding a doctorate at Maastricht University signifies that the candidate has conducted academic research documented in a doctoral thesis which is considered 'an academic treatise in the form of a book, article or electronic document or a draft version' under the Law on higher education and scientific research.¹¹¹³ The thesis can take one of two forms being either an academic treatise in the form of a book or a number of separate papers on a particular topic that demonstrate sufficient coherence.¹¹¹⁴ Apart from the substantive core of the research, it should also contain a summary, an

¹¹⁰⁶ See Maastricht University, 'Maastricht Graduate School of Law – Training Programme', <u>https://www.maastrichtuniversity.nl/research/mgsl/phd-programme/training-programme</u>.

¹¹⁰⁷ Maastricht University, 'Maastricht Graduate School of Law – Fee & Funding', https://www.maastrichtuniversity.nl/research/mgsl/phd-programme/fee-funding.

¹¹⁰⁸ Maastricht University, 'Maastricht Graduate School of Law – How to apply',

https://www.maastrichtuniversity.nl/research/mgsl/phd-programme/how-apply.

¹¹⁰⁹ UNU-MERIT, 'Application & admission', <u>https://www.merit.unu.edu/training/training-overview/iegd/application-admission/</u>.

¹¹¹⁰ UNU-MERIT, 'PhD Programme on Innovation, Economics and Governance for Development (IEGD)',

https://unu.edu/admissions/doctoral/phd-programme-on-innovation-economics-and-governance-for-developmentiegd.html.

¹¹¹¹ Maastricht University, 'PhD training programmes at FHML/MUMC+', <u>https://www.maastrichtuniversity.nl/about-um/faculties/health-medicine-and-life-sciences/phd-fhmlmumc/phd-training-programmes-fhmlmumc</u>.

¹¹¹² This is especially the case for the UNU-MERIT Dual Career Training Programme to obtain a PhD in Governance and Policy Analysis and the Part-time PhD Programme in European Studies. See UNU-MERIT, 'Dual Career Training Programme to obtain a PhD in Governance and Policy Analysis', <u>https://www.merit.unu.edu/training/dual-career-training-programmeto-obtain-a-phd-in-governance-and-policy-analysis-gpac2/</u> and Maastricht University, 'Part-time PhD programmes', <u>https://www.maastrichtuniversity.nl/about-um/other-offices/campus-brussels/education/part-time-phd-programmes</u>. ¹¹¹³ Article 1(q)(s) UM doctoral regulation.

¹¹¹⁴ Article 22(1) UM doctoral regulation.

impact paragraph,¹¹¹⁵ and between eight to 11 propositions.¹¹¹⁶ Doctoral theses are – as a rule – written in Dutch or English.¹¹¹⁷ As an alternative, the thesis may also be written in another language. However, this requires explicit approval of the Board of Deans.

Apart from these general requirements, a list of specific requirements is also made. These must be fulfilled for the thesis to be submitted for assessment¹¹¹⁸ and can be found in Article 24 and 25 of the regulation and contain:

- a title page bearing the sur- name and forenames of the doctoral candidate;
- a table of contents;
- the necessary indexes or a detailed table of contents
- an introduction, that indicates the position of the research in comparison to other related research in a national or international context;
- the academic treatise on a specific subject or a number of separate academic papers demonstrating sufficient coherence;
- a general discussion which includes a reasoned representation of the doctoral candidate's point of view in relation to the main topic or the most important topics of his thesis;
- a summary of the thesis;
- the impact paragraph (i.e. description in layman's terms on the scientific and social impact anticipated or achieved;
- on the reverse page of the title page an overview is to be taken up of the supervisor(s), the co-supervisor(s) (if relevant), the members of the Assessment Committee, and the bodies which have contributed financially to completion of the thesis;
- a curriculum vitae.

The thesis shall, in principle, be printed and delivered to the Office of Academic Ceremonies and members of the Defence Committee.¹¹¹⁹ Furthermore, the thesis must be forwarded in digital format to the University Library at the latest three weeks before the date of the degree ceremony.¹¹²⁰ The supervisor must decide whether it is necessary to place the thesis (or parts of it) under embargo.

Over the course of the doctorate, the candidate conducts research under the expert guidance of a supervisor and possible co-supervisors. Whereas the supervisor is a person (professor, associate professor or other member of staff) who has a doctoral degree and who holds the right to supervise doctoral candidates (i.e. the *ius promovendi*).¹¹²¹ Co-supervisors are either holders of a doctoral

¹¹¹⁵ Additional provisions on the impact paragraph are provided in Annex 4 to the UM doctoral regulation. The impact paragraph consists of a 'reflection, in layman's terms (for a wide target group), on the scientific impact of the results of the research described in the thesis, as well as, if applicable, the social impact anticipated or already achieved'. The impact paragraph is included in the thesis and is a formal part of the thesis assessment. The impact paragraph establishes the scientific and societal impact of the research.

¹¹¹⁶ Article 22(4-6) UM doctoral regulation. As far as the propositions go, four should be related to the thesis, three to the candidate's discipline (excluding the topic of the thesis), and one proposition should be related to the societal and scientific impact of the thesis. Additional propositions may be added that do not concern the thesis nor the candidate's field. The propositions should be approved by the supervisor.

¹¹¹⁷ Article 23(1) UM doctoral regulation.

¹¹¹⁸ Article 20(1) UM doctoral regulation.

¹¹¹⁹ Article 26(1) and 27(3)(4) UM doctoral regulation.

¹¹²⁰ Article 27 UM doctoral regulation.

¹¹²¹ Article 1(m) and 8(1)(2)UM doctoral regulation.

degree who are not professors or professors who do not have the *ius promovendi*.¹¹²² Where the research is carried out under supervision of a professor, that professor will be appointed as supervisor.¹¹²³ In both cases, however, there is a need for the supervisor and possible co-supervisors to be approved by the Board of Deans before commencing their supervisory duties.

During the doctorate, the candidate is guided by a at least two (co-)supervisors including one supervisor.¹¹²⁴ A maximum of three (co-)supervisors applies, although derogations are possible. Furthermore, it is possible for co-supervisors to join in the supervision at a later stage of the doctorate.¹¹²⁵ In terms of a division of tasks, the supervisor and possible co-supervisor(s) are to mutually agree on this and must also jointly decide on the submission of the thesis for assessment.¹¹²⁶

When a doctoral candidate has multiple supervisors, the principal supervisor is the one responsible for the supervision and assessment.¹¹²⁷ It is important to note that the duty to draw up a training and supervision plan applies only to doctoral candidates who are either employed at the university or have a scholarship. Looking back at the different types of doctoral candidates in the Netherlands, this requirement therefore only applies to the first three categories of doctoral candidates (i.e. employee doctoral candidates, university employees who are working on a doctoral thesis, and *beurspromovendi* – doctoral candidates who do not have an employment contract with the university and whose research is funded from a party granting doctoral scholarships).

Towards the end of the doctorate, it is up to the candidate to request the submission of the doctoral thesis to the Assessment Committee from the supervisor.¹¹²⁸ The latter may only do so once he/she is sure that all necessary requirements have been included in the doctoral thesis in accordance with Article 6 of the regulation. The supervisor, however, is also responsible for assessing a thesis and must do so on the basis of all necessary provisions found in Chapter 6 of the regulation (and described above) as well as several additional assessment criteria, including:¹¹²⁹

- contribution to the body of academic knowledge and the impact of the research;
- the importance of and a clear definition of the problem statement;
- the originality of the approach;
- the academic standard of the University, analysis and processing of the material;
- the soundness of the methodology used in the analysis of the material;
- the drawing of new insights and new ideas from the analysis of the material;
- a critical confrontation between the candidate's conclusions and existing theories or views;
- a creative approach to the academic field covered in the thesis;
- balance in the structure of the thesis and clarity of style;
- self-imposed restriction in the volume of the text.

¹¹²² Article 1(n) and 16 UM doctoral regulation.

¹¹²³ Article 9 UM doctoral regulation.

¹¹²⁴ Article 8(1) and 15(1) UM doctoral regulation.

¹¹²⁵ Article 15(2) UM doctoral regulation.

¹¹²⁶ Article 14 and 17 UM doctoral regulation.

¹¹²⁷ Article 10(1)(3) UM doctoral regulation.

¹¹²⁸ Article 11(1) UM doctoral regulation.

¹¹²⁹ Article 11(2)(a-j) UM doctoral regulation.

Upon submission, the supervisor has two months to decide whether the thesis can be submitted to the Assessment Committee.¹¹³⁰ If a negative decision is reached, the candidate must be provided with reasons as to why in accordance with Article 12(1). If a positive verdict is given as concerns the thesis, the doctoral candidate is to be informed of this and the thesis should also be sent to the co-supervisor(s) and to the Assessment Committee (as soon as its composition has been determined by the Board of Deans).¹¹³¹ The Board also plays a role as regards potential complexities regarding the assessment of the thesis. For example, if the two-month time limit is exceeded, the Board may instruct the supervisor to take a decision at the request of the candidate.¹¹³² In line with Article 13 of the regulation, the Board may appoint a new supervisor if the existing one refuses to assess a candidate's thesis.

In order for a candidate to obtain the ultimate approval of the doctoral thesis, a decision must be taken by the Assessment Committee. This Committee is again appointed by the Board of Deans and decides 'whether the doctoral candidate has provided such proof of competence that he may be admitted to the degree ceremony'.¹¹³³ The ceremony itself is the public defence of the thesis that serves as a basis for the doctoral degree.¹¹³⁴ At the defence, a different committee will assess the efforts of the candidate, namely the Defence Committee.¹¹³⁵

Starting with the Assessment Committee, it is up to the supervisor to suggest a chair for the Committee to the Board of Deans.¹¹³⁶ After this, the chair together with the supervisor should jointly propose the other members of the Committee to the Board.¹¹³⁷ The Committee itself will consist of a minimum of four and maximum of five professors, including at least two professors who are attached to a Dutch university, a foreign university, another foreign university education institution, or are emeritus professors who maintain their right to supervise doctoral candidates.¹¹³⁸ Of the Committee members, at least two should be attached to a university other than Maastricht University.¹¹³⁹ Apart from the members being professors, it is also possible for experts to take part in the Assessment Committee as long as there are at maximum two experts who each hold a doctorate and possess sufficient expertise.¹¹⁴⁰ Supervisors, co-supervisors and possible co-authors of core publications (in the case of an article-based doctoral thesis), and family members may not be part of the Assessment Committee.¹¹⁴¹

The Assessment Committee in principle has four weeks to assess the thesis, meaning that all members must issue a reasoned opinion to the chair.¹¹⁴² The Assessment Committee may either approve¹¹⁴³ or

¹¹³⁰ Article 12(1) UM doctoral regulation.

¹¹³¹ Article 12(4)(5) UM doctoral regulation.

¹¹³² Article 12(3) UM doctoral regulation.

¹¹³³ Article 1(o) UM doctoral regulation.

¹¹³⁴ Article 1(r) UM doctoral regulation.

¹¹³⁵ Article 1(p) UM doctoral regulation.

¹¹³⁶ Article 18(1) UM doctoral regulation.

¹¹³⁷ Article 18(2) UM doctoral regulation.

¹¹³⁸ Article 19(1)(a)(i-iv) UM doctoral regulation.

¹¹³⁹ Article 19(2) UM doctoral regulation.

¹¹⁴⁰ Article 19(1)(b) UM doctoral regulation.

¹¹⁴¹ Article 19(4-6) UM doctoral regulation.

¹¹⁴² Article 20(2) UM doctoral regulation.

¹¹⁴³ Approval of the thesis gives access to the degree ceremony. A decision to admit the candidate to the ceremony if a majority of the Committee approves the thesis. See Article 20(3) UM doctoral regulation.

reject¹¹⁴⁴ the thesis and should issue their reasoned opinion by means of an assessment form. This assessment is to take place independently, meaning that Committee members are not allowed to interact on the assessment. In their assessment, Committee members must take specific account of the criteria mentioned in Article 24 (cited above).¹¹⁴⁵ When a positive verdict has been given, it is to be communicated through the supervisor to the candidate who may then consult the Office of Academic Ceremonies to set a date for the ceremony.¹¹⁴⁶ During the COVID-19 pandemic, online defences were conducted. These are expected to be maintained afterwards.¹¹⁴⁷

During the assessment of the thesis, it is also possible for one of the members of the Committee to suggest that the thesis may obtain the distinction of *cum laude*. Provisions to this end are found in Article 21 of the regulation. In particular, the decision is to be taken by unanimous vote. However, before the distinction can be granted, two external experts in the candidate's field must be consulted to also unanimously confirm the grant of the distinction. Additional criteria are set in order to decide on the *cum laude* distinction. The actual grant of the *cum laude* distinction depends on the candidate's defence. Indeed, it is up to the Defence Committee to decide unanimously on the *cum laude* proposal via secret vote.

Apart from playing a role in the *cum laude* distinction, the Defence Committee is the body before which the degree ceremony takes place. This ceremony is to take place publicly in the University's auditorium in either Dutch or English.¹¹⁴⁸ The composition of the Defence Committee is established in Article 28(2)(a-c) of the regulation and particularly concerns:

- the members of the Assessment Committee;
- the supervisor and co-supervisor(s);
- potential other professors and holders of a doctoral degree appointed as members of the Defence Committee and possible recognized experts who do not hold a doctoral degree.

Of the Defence Committee, in principle at least half of the members must originate from Maastricht University and half of them must be professors.¹¹⁴⁹ If one of the members of the Assessment Committee cannot attend the defence, it is necessary to arrange a replacement.¹¹⁵⁰ Furthermore, the Rector should chair the Defence Committee, although he/she may be replaced by a predecessor, faculty dean, former dean, or (emeritus) professor at Maastricht University.¹¹⁵¹

During the degree ceremony, it is the role of the Defence Committee (excluding the supervisors) to oppose the thesis.¹¹⁵² This opposition follows on the candidate's 10 to 15 minute summary of the thesis.¹¹⁵³ The full duration of the defence is one hour after which the Defence Committee retreats for

¹¹⁴⁴ In case of a rejection, the Committee chair consults with the supervisor to ask for the improvement of the thesis. The composition of the Committee is maintained also for the revised version of the thesis. See Article 20(4) UM doctoral regulation.

 $^{^{\}rm 1145}$ See also Article 20(3) UM doctoral regulation.

¹¹⁴⁶ Article 20(7)(8) UM doctoral regulation.

¹¹⁴⁷ Based on the information received by a representative of UM.

¹¹⁴⁸ Article 30(1)(2) UM doctoral regulation.

¹¹⁴⁹ Article 28(3) UM doctoral regulation.

¹¹⁵⁰ Article 28(4) UM doctoral regulation.

¹¹⁵¹ Article 28(7) UM doctoral regulation.

¹¹⁵² Article 29(1) UM doctoral regulation.

¹¹⁵³ Article 31(1) UM doctoral regulation.

private deliberation.¹¹⁵⁴ In this deliberation, the Defence Committee must give its judgment. In principle, this must be unanimous – in absence thereof the verdict of the Assessment Committee is considered most important.¹¹⁵⁵ If a positive decision has been reached, this shall be announced in the Defence Committee's session (which is to be re-opened).¹¹⁵⁶ The honour of the doctoral degree is ultimately awarded by the supervisor followed by an address directed at the candidate.¹¹⁵⁷ The candidate receives the degree of Doctor, which is equivalent to that of Doctor of philosophy.¹¹⁵⁸

Whereas the previous paragraphs have all focused on the practice of doctoral education at Maastricht University, a topic that is at the core of this study has not yet been assessed (i.e. provisions on joint and double doctoral degrees). It may be recalled that the Law on higher education and scientific research stipulated that it is up to universities to lay down any provisions for possible joint or double doctorates. Maastricht University has indeed specified several such provisions which may be found in Article 34 of the regulation.

Starting with definitions, a joint doctoral degree is considered a degree ceremony where one single degree is conferred jointly by one or more Dutch or foreign scientific education institutions for one doctoral thesis.¹¹⁵⁹ By contrast, a double doctoral degree is a degree ceremony where the candidate obtains a doctorate at scientific education institutions (i.e. obtains two diplomas) with the same doctoral thesis.¹¹⁶⁰ Although joint and double doctorates clearly differ from one another, they are awarded a similar status in Maastricht University's doctoral regulation. Indeed, both forms of cooperation regarding doctoral education are allowed according to paragraph 1 of Article 34 if the conditions in paragraph 2 are fulfilled. Only one differences applies in respect to the degree ceremony for a double doctorate. In that case, it may be deduced from Article 34(1)(I) that there shall be two ceremonies of which the first is to take place at Maastricht University. Apart from this, the provisions for joint and double doctorates are the same and particularly concern the following requirements:

- the candidate should have fulfilled all necessary conditions to access the degree ceremony;
- the joint or double doctorate should be based on a cooperation agreement between the cooperating universities that was approved by the Rector;¹¹⁶¹
- any request for such a cooperation agreement should be submitted in the first two years of the doctorate;
- each university should have substantial input in the doctorate;
- different from a doctorate completed fully at Maastricht university, a joint/double doctorate is to have a maximum of four supervisors;

¹¹⁵⁴ Article 31(3) UM doctoral regulation.

¹¹⁵⁵ Article 32(1) UM doctoral regulation.

¹¹⁵⁶ Article 33(1) UM doctoral regulation.

¹¹⁵⁷ Article 33(3) UM doctoral regulation.

¹¹⁵⁸ Article 32(4) and Annex 4 Explanatory note on Article 32 UM doctoral regulation. As of 1 October 2020, the Maastricht University's Board of Deans has decided to introduce and recognise doctoral degrees in artistic research. The exact conditions for the grant of such a title are found in Annex 5 to the UM doctoral regulation.

¹¹⁵⁹ Article 1(t) UM doctoral regulation.

¹¹⁶⁰ Article 1(u) UM doctoral regulation.

¹¹⁶¹ It is important to note that degree ceremonies should in principle take place at Maastricht University. To this end, see also Article 34(1)(j) of the UM doctoral regulation. Nevertheless, if a decision is made to hold the ceremony at the foreign university, the Board of Deans is to assess the quality requirements regarding the degree ceremony maintained by the foreign university. If the standards are not considered to be met, there is a need to include additional provisions in the cooperation agreement so that the ceremony held abroad also fulfils the conditions maintained by Maastricht University; Article 34(1)(b) UM doctoral regulation.

- if a professor at the foreign university acts as supervisor, a professor from Maastricht University is to act as co-supervisor (although his/her tasks are the same as that of a principle supervisor in case of a doctorate followed at Maastricht University);
- different from a doctorate completed fully at Maastricht university, the Assessment Committee shall comprise four to six members of which one from each of the cooperating universities and two from different universities;
- the members of the Assessment Committee *and* the Defence Committee attached to the cooperating university are considered as part of Maastricht University when it comes to the composition of the Defence Committee (laid down in Article 28(3) of the regulation);
- the location of the degree ceremony should be set in the cooperation agreement (but should ideally take place at Maastricht University);
- the provisions in Maastricht University's doctoral regulation are to be maintained also when the ceremony takes place at the other university;
- the name of the foreign university is to be added to the title page of the thesis for it to be approved by the Rector of Maastricht University.

10. Portugal

In Portugal, degrees and diplomas in higher education are regulated by Decree 74/2006.¹¹⁶² Apart from this Decree, Decree 27/2021 and 65/2018 also establish rules on research degrees.¹¹⁶³ Universities award the degrees of bachelor, master and doctor.¹¹⁶⁴ To be able to grant a doctoral degree in a certain speciality, the university must have a qualified teaching staff and organisational resources and demonstrate relevant scientific and academic experience in that area.¹¹⁶⁵ Generally, holders of a master's degree or equivalent, or bachelor's degree relevant to the academic curriculum, or holders of educational, scientific or professional capacity to carry out the studies, are admissible for doctoral programmes.¹¹⁶⁶

Doctoral degree is awarded to those who:

- demonstrate the ability to systematically understand a scientific domain of study;
- have competencies, skills and methods of research associated with a scientific domain;
- have the ability to conceive, design, adapt and conduct a meaningful investigation according to the requirements imposed by the standards of academic quality and integrity;
- have carried out a significant set of original research work that has contributed to the enlargement of the borders of the knowledge, part of which deserves national or international dissemination in publications with selection committee;
- are able to critically analyse, evaluate and synthesize new and complex ideas;

¹¹⁶² Article 1 *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁶³ In particular, the 2018 Decree required higher education institutions to pay more attention to research and development, more attention to be given to creating appropriate research environments, and further conditions under which Portuguese study cycles can operate abroad; See Decreto-Lei n.o. 27/2021 de 16 abril and Decreto-Lei n.o. 65/2018 de 16 de Agosto.

¹¹⁶⁴ Article 4 *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁶⁵ Article 29(2) *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁶⁶ Article 30 *Decreto-Lei n.o* 74/2006 *de* 24 *de Março*.

- are able to communicate with peers, the general academic community and society in general about the area in which they are specialized; and
- are able to promote technological social or cultural progress in a society based on knowledge.¹¹⁶⁷

The studies leading to degree of doctor consists of the creation of an original work (doctoral thesis) and courses directed towards training for research.¹¹⁶⁸ The educational institution may provide for the use of foreign languages in doctoral theses and in the respective public defence acts.¹¹⁶⁹ The thesis and its public examination is evaluated by a jury, appointed by the legal and statutory body of the competent university. The jury consists of the Rector, minimum of three doctoral members, and the student's supervisor(s).¹¹⁷⁰ Two of the members of the jury are appointed from other educational institutions.¹¹⁷¹ Furthermore, it must consists of at least three professors or researchers from the scientific field in which the doctoral thesis is submitted.¹¹⁷² Finally, the doctoral degree is awarded for those who have successfully defended their thesis in public.¹¹⁷³ Degrees can be awarded in association with other educational establishment, either by one of the establishment, separately for each establishment or by all the establishment together.¹¹⁷⁴

The competent body of the university provides further regulations on the admission, selection criteria, degrees provided, appointment of supervisors, doctoral thesis, selection of jury, defence of the thesis and final qualifications.¹¹⁷⁵

10.1 Universidade Nova de Lisboa

The University Doctoral Regulations provide the general principles and regulatory standards for doctoral degrees awarded by the University of Nova de Lisboa (NOVA). The University may also provide degrees in association with other national or foreign higher educational institutions.¹¹⁷⁶

As far as the candidates are concerned, they need to enrol as doctoral candidates as well as complete payment of a fee.¹¹⁷⁷ All doctoral candidates are thereby considered as students although some of them may be employed by the university (strongly depends on their research area). Doctorates may be funded in different ways whereby the most common is through funding from the Portuguese Foundation for Science and Technology. Some candidates may nevertheless bring their own funding provided by their countries of origin (only few are self-funded). Research may also be funded through grants from national and international projects, municipalities, industry, and grants from the European Commission.¹¹⁷⁸ The pursuit of a doctorate can be undertaken part-time, although at some faculties/institutes, it is considered a full-time activity.

¹¹⁶⁷ Article 28 *Decreto-Lei n.o* 74/2006 *de* 24 *de Março*.

¹¹⁶⁸ Article 31 Decreto-Lei n.o 74/2006 de 24 de Março.

¹¹⁶⁹ Article 51 *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁷⁰ Article 34(1) *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁷¹ Article 34(3) *Decreto-Lei n.o* 74/2006 de 24 de Março.

¹¹⁷² Article 34(5) Decreto-Lei n.o 74/2006 de 24 de Março.

¹¹⁷³ Article 35 *Decreto-Lei n.o 74/2006 de 24 de Março.*

¹¹⁷⁴ Articles 41 and 42 Decreto-Lei n.o 74/2006 de 24 de Março.

¹¹⁷⁵ Article 38 *Decreto-Lei n.o 74/2006 de 24 de Março*.

¹¹⁷⁶ Article 4 *Regulamento de Doutoramentos da Universidade Nova de Lisboa*.

¹¹⁷⁷ Based on information received by representatives of UNL.

¹¹⁷⁸ Ibid.

The maximum duration of the doctoral programme is fixed by the Scientific Councils.¹¹⁷⁹ The doctoral degree is awarded to those who successfully defend their original thesis in a public examination.¹¹⁸⁰ The jury evaluating the defence is appointed within 15 days from the receipt of the proposal from the Scientific Council.¹¹⁸¹ Within 30 days of the appointment, the jury must declare whether they accept the thesis for the defence, providing a possibility for reformulation.¹¹⁸² The defence then takes place within a maximum of 60 days from the acceptance of the thesis, or the submission of a reformulated thesis.¹¹⁸³ The oral examination should take a maximum of 3 hours.¹¹⁸⁴ During COVID-19 online defences were possible although practices differed between faculties and institutes (e.g. fully online defences vs. hybrid defences).¹¹⁸⁵ Most of the faculties and institutes dedicate that the intention is to maintain the possibility of online defences post-COVID-19.¹¹⁸⁶

After the examination, the jury will deliberate and decide whether the doctoral degree is awarded (on a scale of failed - approved - approved with distinction – approved with distinction and praise¹¹⁸⁷). In this assessment, the jury considers the merits of the thesis and the doctoral candidate's performance during the defence. In case the doctoral degree consists of courses, the final qualification takes also into account the candidate's success in them.¹¹⁸⁸ Finally, the doctoral degree is awarded by a certificate within 30 days of the delivery of copies of the doctoral thesis, that are deposited in the library.¹¹⁸⁹ As far as the thesis and its publication are concerned, the thesis should be made available to the general public (although there is no requirement for commercial publication).¹¹⁹⁰ As far as the intellectual property is concerned, the copyright over the thesis belongs to the doctoral candidate.¹¹⁹¹

Further regulations are laid down for each doctoral programme and/or doctoral school.

10.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

Doctor in Law (PhD)

Next to the Regulation on doctorates in law, the Faculty of Law follows guidelines of Good Practice in PhD Education at the University, and the European Code of Conduct for Research Integrity.¹¹⁹²

The programme is fixed to a maximum number of students, and admits those who hold a master's or equivalent degree, or a specifically relevant school, scientific or professional equivalence that is

¹¹⁷⁹ Article 6 *Regulamento de Doutoramentos da Universidade Nova de Lisboa.*

¹¹⁸⁰ Article 9 *Regulamento de Doutoramentos da Universidade Nova de Lisboa.*

¹¹⁸¹ Article 10 *Regulamento de Doutoramentos da Universidade Nova de Lisboa.*

¹¹⁸² Article 11 Regulamento de Doutoramentos da Universidade Nova de Lisboa.

¹¹⁸³ Article 12 *Regulamento de Doutoramentos da Universidade Nova de Lisboa.*

¹¹⁸⁴ Article 13 *Regulamento de Doutoramentos da Universidade Nova de Lisboa.*

¹¹⁸⁵ Based on information received by representatives of UNL. Although different options were maintained by the faculties of UNL, most of the faculties consulted indicated to consider maintaining opportunities for online defences available also post-COVID-19.

¹¹⁸⁶ Based on information received by representatives of UNL.

¹¹⁸⁷ Reprovado – Aprovado - Aprovado com distinção - Aprovado com distinção e louvor.

¹¹⁸⁸ Article 14 Regulamento de Doutoramentos da Universidade Nova de Lisboa.

¹¹⁸⁹ Articles 16 and 17 Regulamento de Doutoramentos da Universidade Nova de Lisboa.

¹¹⁹⁰ Based on information received by representatives of UNL. Differences may thereby be maintained between the different faculties/institutes of UNL. However, if the results are produced during the development of a doctoral thesis that have originated in a patent owned by UNL. In such cases, the candidate must comply with the duties as defined in Article 9 of the aforementioned policy.

¹¹⁹¹ Intellectual Property Policy of NOVA – Regulation No. 1104/2020.

¹¹⁹² Article 4 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

recognised by the Scientific Council as equivalent to a master's degree.¹¹⁹³ Furthermore, the applicants must fulfil a minimum requirement of English (equivalent to level B1).¹¹⁹⁴ The Selection Committee ranks the applicants on the basis of merit, taking account their academic curriculum vitae (50%), scientific curriculum vitae (20%, publications or other research experience), relevant professional experience (15%) and letter of motivation (15%).¹¹⁹⁵

The doctoral programme in Law consists of 240 ECTS, with the value of 60 ECTS for teaching, 25 ECTS for the preparation of the thesis project, and 150 ECTS for the research leading to the doctoral thesis.¹¹⁹⁶ At the request of the doctoral candidate, the successful completion of the programme leads to the award of European PhD title, if all the requirements are met.¹¹⁹⁷ The programme leading to a doctoral degree in Law consists of writing of an original thesis and completing a set of curricular units aimed at training for research.¹¹⁹⁸

The programme is divided into two phases, which each define the specific training and courses to be concluded.¹¹⁹⁹ During the first phase, the Scientific Council will assess the research proposal of the candidate and decides on the theme of the doctoral thesis, designation of the supervisors, and the candidate's individual research program. The supervisory role can be carried out by one or more professors, who can be external to the faculty. Joint supervision is subject to a request and must be justified.¹²⁰⁰ The role of the supervisor is to guide and monitor the work of the PhD student, by submitting an annual report to the Program Directorate.¹²⁰¹

Progressing to the second phase of the programme requires that the candidate has successfully completed all curricular units of the first phase.¹²⁰² The second phase of the programme focuses on preparatory research and writing of the doctoral thesis.¹²⁰³ From the start of the second phase, the student has five semesters to deliver their thesis.¹²⁰⁴ The thesis cannot be substituted with other research work, however, the doctoral candidates are encouraged to publishing activities, which are positively evaluated together with the public defence of the thesis.¹²⁰⁵ The doctoral thesis must not exceed 800,000 characters and must follow other style requirements.¹²⁰⁶ The thesis must be written either in English or in Portuguese. In case the candidate wishes to write in another language, he/she must obtain an authorisation from the Scientific Council.¹²⁰⁷

The thesis is evaluated during a public defence by an appointed jury. The jury consists of the Rector and of a minimum of four doctoral members, one of whom is the supervisor of the candidate. When the doctoral candidate has more than one supervisor under a partnership with one or more foreign

¹¹⁹³ Article 6(1) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁴ Article 6(2) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁵ Article 7 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁶ Article 9 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁷ Article 10(2) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁸ Article 1 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹¹⁹⁹ Chapter IV-V Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰⁰ Article 16 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

 ¹²⁰¹ Article 22 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.
 ¹²⁰² Article 19 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰³ Article 20(1) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰⁴ Article 23 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰⁵ Article 1(4) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰⁶ Article 20(2)-(3) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019., see also Rules of Style.

¹²⁰⁷ Article 20(4) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

higher educational institutions, the second supervisor may also take part to the jury. Furthermore, at least two of the four doctoral members are appointed from outside the university. The jury must also include at least three professor or researchers competent in the research area in which the thesis is submitted.¹²⁰⁸ Within 30 days after the appointment, the jury will issue a decision declaring whether they accept the dissertation for the public defence, or whether the candidate is given an opportunity to reformulate the thesis.¹²⁰⁹

The oral examination takes places for a maximum of 150 minutes, that includes a presentation by the candidate, two examinations and the possibility of the jury to ask additional questions.¹²¹⁰ After the examination, the jury will deliberate and by majority vote take a decision whether the candidate will be awarded a doctoral degree.¹²¹¹ In this assessment, the merit of the thesis and the performance of the candidate during the defence will be considered. In case of approval, the degree will be awarded on the scale of approved – approved with distinction – approved with distinction and honours.¹²¹²

Doctor in Economics and Finance, Doctor in Management (PhD)

The Regulations on both programmes of Doctor in Economics and Finance and doctor in Management, do not lay down specific conditions of admission. However, these are determined annually and as advertised on the University's website.¹²¹³ Doctoral students in this programme must demonstrate proficiency of English language.¹²¹⁴ Requirements for the award of the degree are set out in a Student Manual, that is also published annually.¹²¹⁵

10.1.2 Cluster 2 – Psychology & Medicine

NOVA Medical School

Next to the doctoral programmes that the NOVA Medical School offers, the School can provide doctoral programmes in cooperation with other national or foreign higher educational institutions.¹²¹⁶ In addition to the programme specific regulations, the programmes are also subject to a general regulation.

According to the Regulation, the degree of doctor is awarded to those who fulfil the conditions as aid down in the Decree 74/2006, and have successfully defended their thesis or other work in public.¹²¹⁷ The programmes consists of creation of an original thesis, or alternatively by a set of coherent and

¹²⁰⁸ Article 24 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²⁰⁹ Article 25 Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²¹⁰ Article 25(1) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²¹¹ Article 25(2) Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019.

¹²¹² Article 26(3), Universidade Nova de Lisboa Faculdade de Direito Regulamento n.º 756/2019: Aprovado/a - Aprovado/a com Distinção - Aprovado/a com Distinção e Louvor.

¹²¹³ Article 3 Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2821/2020, Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2820/2020.

¹²¹⁴ Article 8 Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2821/2020, Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2820/2020.

¹²¹⁵ Article 9 Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2821/2020, Universidade Nova de Lisboa Faculdade de Economia Despacho n.º 2820/2020.

¹²¹⁶ Article 6 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²¹⁷ Article 3 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

relevant research work published in journals.¹²¹⁸ The programme may also consists of courses of study, aiming at the training of the doctoral candidate.¹²¹⁹ The Regulation provides that each doctoral degree provided under the Medical School may have their own regulation, that stipulates the curricular structure, length of the studies, rules on admission, allocation of ECTS, management bodies, designation of supervisors, conditions on thesis, its oral examination and elements included in the diplomas.¹²²⁰

The Regulation provides general rules on admission. Holders of a master's degree or equivalent, or holders of a bachelor's degree and of school curriculum scientifically relevant and demonstrating the capacity of the applicant to carry out the doctoral studies, or holders of relevant academic, scientific, or professional experience, are eligible for the doctoral programmes.¹²²¹ Similarly as for a PhD in Law, the doctoral candidates must present a proposal for their research project and supervisor(s).¹²²²

The thesis is to be written in Portuguese or English. The thesis must contain a summary and references.¹²²³ The doctoral programme may provide alternatives to the written doctoral thesis, in a form scientific papers published in internationally recognised journals.¹²²⁴ The final doctoral exam consists of the public examination of the thesis or the compilation of the research work.¹²²⁵ Similarly as for the Faculty of Law, the doctoral jury examining the public defence consists of a Rector and of a minimum of four doctoral members, including the supervisor.¹²²⁶

Doctor in Health Sciences, Doctor in Biomedical Sciences and Doctor in Global Public Health

The programme-specific regulations under the doctoral programmes provided by the Medical School provide merely the course structure and number of ECTS. Doctoral programmes in Health Sciences and in Biomedical Sciences have a nominal value of 240 ECTS, and normally are completed in 4 years.¹²²⁷

The programme of doctor in Global Public Health is provided jointly with the NOVA University and the University of Porto. It has as its aim the realization of an original and innovative scientific contribution to the area of Life Sciences and Health. The programme consist of training in the design and execution of independent scientific research in global public health, the practice of interpretation and discussion of the research result, deepening of general knowledge of public health, skills and instruments for

¹²¹⁸ Article 4 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²¹⁹ Article 4(4) Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²⁰ Article 7 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²¹ Article 11 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²² Article 17 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²³ Article 22 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²⁴ Article 23 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²⁵ Article 24 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²⁶ Article 26 Regulamento n.º 320/2015 geral dos ciclos de estudo conducentes ao grau de doutor da NOVA Medical School/Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

¹²²⁷ Universidade Nova de Lisboa Faculdade de Ciências Médicas Despacho n.º 12077/2018.

future learning, the capacity to train new researchers and manage programmes in these sciences, and competence for the preparation and publication of articles.¹²²⁸ The programme corresponds to 240 ECTS, with a curricular component of 60 ECTS and a research component lasting three years of 180 ECTS.¹²²⁹

The required education for admissibility are similar as for other doctoral programmes at the University.¹²³⁰ Further requirements on the selection criteria and the number of students to be admitted are decided in a joint order by the Rectors of both the universities.¹²³¹ The student is supervised by a supervisor who is a doctorate professor or a doctoral researcher at a University, and there is a possibility to propose a co-supervisor.¹²³² The Scientific Committee may propose an external advisor, who is designated as a co-supervisor.¹²³³ The student is also appointed a tutor, who supports in the integration and guidance of the study programme, regularly monitoring the learning process and supporting in matters of the doctoral research and facilitating the student's access to other teachers or institutions.¹²³⁴

The doctoral thesis will be evaluated by a jury, that is composed similarly as for other doctoral programmes, however the Rector will be appointed based on the supervisor's university. At least one of the members of the jury must be from the partner university.¹²³⁵ The final classification of the candidate will be on a scale of disapproved – approved – approved with distinction.¹²³⁶ Distinction will be awarded on a unanimous decision of the jury to those who demonstrate exceptional scientific quality of the thesis.¹²³⁷ The student may be given the chance for corrections, that must be carried out within one month after the public defence.¹²³⁸ Finally, the degree of doctor in Global Public Health is provided jointly by the Universities.¹²³⁹

¹²²⁸ Article 3 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global. See also Universidade Nova de Lisboa Escola Nacional de Saúde Pública Despacho n.º 12412/2014.

¹²²⁹ Article 4 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁰ Article 11 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³¹ Article 10 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³² Article 14(1) Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³³ Article 14(2) Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁴ Article 15 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁵ Aerticle 19 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁶ Article 22(2) Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁷ Article 22(3) Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁸ Article 22(4) Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

¹²³⁹ Article 23 Universidade Nova de Lisboa Reitoria Despacho n.º 2424/2018 Anexo Regulamento do ciclo de estudos conducente ao grau de doutor em Saúde Pública Global.

11. Spain

In Spain, doctoral education is organised in doctoral schools that may be created by one or more universities or in cooperation with other organisations, centres and institutes working on research, development and innovation (both within Spain or in other countries).¹²⁴⁰ Universities may again create doctoral schools in accordance with their own regulations and those of the respective autonomous communities. Doctoral studies lead to the corresponding official title of Doctor (Doctor/Doctora) attesting to the successful completion of third cycle higher education and valid in the whole national territory in Spain.¹²⁴¹ The organisation of those studies is determined by the university statutes (designated in accordance with nationally set regulations on the award of the title of doctor). Essential to the completion of a doctorate is the completion of a period of training and the preparation, presentation and approval of an original research project. In order to acquire the title, the original work laid down in the thesis must be defended.¹²⁴² The mention of cum laude and/or doctorado internacional or Doctorado industrial may also be included in the title. In the event of a joint doctorate the provisions applying to the doctorate shall be set in a separate agreement signed by the respective universities.¹²⁴³ The doctoral diploma must indicate that the candidate is doctor by all of the universities at which the joint doctorate was undertaken (i.e. the candidate will acquire a double title following a cotutelle). Apart from mentioning both universities, the diploma shall also include information on the field of knowledge and the name of the programme pursued.

Provisions on doctoral education can be found in the *Real Decreto 99/2011, de 28 enero, por el que se regulan las enseñanzas oficiales de doctorado* (hereinafter: the Decree). The pursuit of a doctorate concerns a candidate conducting original research which ultimately leads to the degree of Doctor.¹²⁴⁴ In order to take into account the individual nature of doctoral training, there is a need to maintain flexible regulation which is realized by leaving the exact organization of doctoral training to the universities.¹²⁴⁵ In any case, the conclusion of a doctorate is marked by the defence of the doctoral thesis.

In terms of definitions, a doctorate is considered the third cycle of higher education attesting to a candidate having the competences and capabilities to conduct high quality scientific research.¹²⁴⁶ During their doctorates, candidates are not only considered students, but also researchers in training.¹²⁴⁷ Although their main focus is to conduct research, candidates also follow a doctoral programme teaching them skills and competences to conduct research and to develop their doctoral theses.¹²⁴⁸ Several actors play an important role during the doctorate. In particular, these are the thesis director (who has the ultimate responsibility for the research, the tutor (overseeing the doctoral training), and the academic commission (responsible for overseeing the progress of the research and

 ¹²⁴⁰ Article 7 and 8(4) Ley Orgánica 6/2001, de 21 dicembre, de Universidades, BOE núm. 307, de 24 de dicembre de 2001.
 ¹²⁴¹ Article 38 Ley Orgánica 6/2001; Article 3(1)(3) Real Decreto 1002/2010, de 5 agosto, sobre expedición de títulos universitarios oficiales, BOE núm. 190, de 6 de Agosto de 2010.

¹²⁴² Article 11 Real Decreto 1002/2010.

¹²⁴³ Article 13(1) Real Decreto 1002/2010.

¹²⁴⁴ Preamble Real Decreto 99/2011, de 28 enero, por el que se regulan las enseñanzas oficiales de doctorado, BOE núm.
35, de 10 de febrero de 2011 (Última modificación: 3 de junio de 2016).

¹²⁴⁵ Ibid; Article 3(1) and 4(1).

¹²⁴⁶ Article 2(1) Real Decreto 99/2011.

¹²⁴⁷ Preamble Real Decreto 99/2011.

¹²⁴⁸ Article 2(2) and 4(1) Real Decreto 99/2011.

authorizing the thesis to be admitted to the public defence).¹²⁴⁹ The thesis director and tutor are appointed by the academic commission after admission of the candidate and may be the same person.¹²⁵⁰ The thesis director is ultimately responsible for the coherence of training, impact of the research, and planning of activities.¹²⁵¹ It is possible for a thesis to be co-supervised. In order for such co-supervision to take place, there is a need to obtain prior authorization from the academic commission.

Doctoral programmes in Spain need to undergo accreditation through verification by the *Consejo de Universidades* and through authorization by the relevant competent authorities in Spain's autonomous communities.¹²⁵² In order to undergo such accreditation procedures, universities must provide an overview of information in reports fulfilling the criteria of Annex I of the Decree.¹²⁵³ The doctoral programmes are subsequently assessed following the criteria of Annex II which include assessments regarding the level of the level of internationalization of the doctoral programmes, researchers, and cooperation with other universities.¹²⁵⁴ Despite the need for accreditation, some doctorates are exempted from this requirement. This particularly goes for joint doctorates undertaken within the framework of competitive calls issued by the European Commission (e.g. Erasmus Mundus) and concerns a unique situation in terms of accreditation. Otherwise, the requirement for accreditation forms a considerable complication on cooperation on joint doctorates. In that case, the successful receipt of the grant is considered as accreditation in the sense of Article 10 of the Decree.¹²⁵⁵

The duration of a doctorate in Spain amounts to a maximum of three years on a full-time basis.¹²⁵⁶ The three-year term is counted from the moment of admission up to the defence of the thesis. It is possible for the doctorate to be extended by two one-year periods. However, this extension is exceptional in nature and must be approved by the relevant academic commission in accordance with the university doctoral regulations.

In order to undertake a doctorate, candidates must fulfil all requirements set in Articles 6 and 7 of the Decree as well as being admitted to and enrolled in the doctorate.¹²⁵⁷ The basic criterion for a person to access doctoral training is the possession of a bachelor's and master's degree (or equivalent) attesting to studies consisting of at least 300 ECTS. Nevertheless, alternatives are possible and are expressly provided for in Article 6(2)(a-f) of the Decree. Apart from these general provisions, universities (through their academic commissions) are free to set additional access criteria which may

¹²⁴⁹ Article 2(4)(5)(6) Real Decreto 99/2011.

¹²⁵⁰ Article 11(3) Real Decreto 99/2011.

¹²⁵¹ Article 12(1) Real Decreto 99/2011.

¹²⁵² Article 10(1) Real Decreto 99/2011. In Spain, competences on accreditation are divided between the federal level and the level of the autonomous communities; see Article 24(3) Real Decreto 1393/2007, de 29 de octubre, por el que se establece la ordenación de las enseñanzas universitarias oficiales, BOE núm. 260, de 30 octubre de 2007 (Última modificación 15 de marzo de 2019).

¹²⁵³ Article 4(2) and 10(2) Real Decreto 99/2011.

¹²⁵⁴ Article 10(5) Real Decreto 99/2011.

¹²⁵⁵ Disposición adicional primera Real Decreto 99/2011.

¹²⁵⁶ Article 3(2) Real Decreto 99/2011. It is, nevertheless, also possible to undertake a doctorate on a part-time basis in which case it may last up to five years. There is a possibility to extend the part-time doctorate for one two-year term and another one-year term. However, this extension is exceptional in nature and must be approved by the relevant academic commission.

¹²⁵⁷ Article 2(3) Real Decreto 99/2011.

even include additional training.¹²⁵⁸ Furthermore, in line with Article 5, candidates must obtain a certain number of competences and capabilities during their doctorates. Examples of basic competences are the systematic comprehension of an area of study and relevant research methods, the ability to realise a critical analysis and synthesis of new ideas, and the ability to communicate within and outside academia. Apart from these research-related competences and abilities, candidates must also develop a number of personal competences.¹²⁵⁹ These concern, for example, the identification of core questions in the resolution of problems, undertaking new and innovative projects, and the ability to work independently in an international or multidisciplinary setting.

For their part, universities must ensure that doctoral programmes are established and organised in Doctoral Schools (or other competent research organisations).¹²⁶⁰ These play a crucial role in organising and managing doctoral training within or across areas of expertise.¹²⁶¹ They may be organised by one university or by several national or foreign universities and research centres. Doctoral Schools must create their own research policy and strategy connected to that of the university to which they belong.¹²⁶² Each of the doctoral programmes maintained by universities must have an academic commission, composed of doctors and researchers, that coordinates the training and research activities.¹²⁶³ Furthermore, each programme should also have a coordinator who is an experienced researcher in possession of a doctorate and having supervised at least two doctoral theses.¹²⁶⁴

In order to pursue the doctorate, candidates must conclude annual registrations.¹²⁶⁵ During their doctorates, candidates are to keep track of their training activities in a report to be reviewed by the thesis director and tutor and evaluated by the academic commission.¹²⁶⁶ After their first year, candidates must also draft annual research plans laying down the objectives to be achieved, the methodologies used, and the planning to achieve them.¹²⁶⁷ The activities report and research plan are both assessed annually by the academic commissions.¹²⁶⁸

Provisions on the thesis are found in Article 13 of the Decree. As a rule, the thesis must consist of an original research work attesting to the candidate being able to conduct autonomous work in the field of research, development and innovation. Universities must set procedures for the presentation and quality management of doctoral theses. In terms of the presentation of the thesis, universities must ensure that the thesis is available for comments from other doctors. The thesis may be developed and defended in the languages used in a specific field of study.

When the candidate progresses to the final stages of the doctorate, the thesis is to be assessed by a panel of researchers, the majority of which originate from outside the university and cooperating

¹²⁶⁶ Article 2(7), 4(3), and 11(5) Real Decreto 99/2011.

¹²⁵⁸ Article 7(1)(2) Real Decreto 99/2011.

¹²⁵⁹ Article 5 Real Decreto 99/2011.

¹²⁶⁰ Article 8(1) and 9(2) Real Decreto 99/2011.

¹²⁶¹ Article 2(8) Real Decreto 99/2011.

¹²⁶² Article 9(3) Real Decreto 99/2011.

¹²⁶³ Article 8(3) Real Decreto 99/2011.

¹²⁶⁴ Article 8(4) Real Decreto 99/2011.

¹²⁶⁵ Article 11(1) Real Decreto 99/2011. In the case of joint programmes, the provisions established in the separate agreement will determine how registration will take place.

¹²⁶⁷ Article 11(6) Real Decreto 99/2011.

¹²⁶⁸ Article 11(7) Real Decreto 99/2011.

institutions.¹²⁶⁹ Ultimately, the evaluation of the thesis takes place via public defence of the work where the panel evaluates whether the candidate's thesis is unsuitable, approved, remarkable, or outstanding.¹²⁷⁰ Apart from an evaluation of the thesis, the panel may also consider the activities report held by the candidate. After successful defence of the thesis, it will be electronically archived in an open format by the university and sent to the Ministry of Education.¹²⁷¹

Apart from the title of doctor, candidates can also obtain the mention of "*Doctorado internacional*".¹²⁷² In order to obtain this title, candidates must have spent at least three months at another university abroad during their doctorates, ensure that part of the thesis (e.g. summary and conclusions) is written in a language other than the official languages of Spain, that the thesis was assessed by at least two doctors from a foreign university or research institute, and that at least one member of the panel originates from a foreign university (and who was not responsible for supervising the candidate during their stay abroad). In the case of co-supervision between doctors from one Spanish and another foreign university (*cotutelas internacional*), specific mention of this will also be made if the candidate has spent at least six months at the foreign supervisor's institution.¹²⁷³ Apart from the international doctorate, the Decree also foresees in the possibility to issue an industrial doctorate (*Doctorado Industrial*).¹²⁷⁴

11.1 Universidad Carlos III de Madrid

For the Universidad Carlos III de Madrid (UC3M), regulations on doctoral training as well as the organization of the Doctoral School can be found in the Regulations of the Doctoral School at Universidad Carlos III de Madrid (hereinafter: the Regulations). At the UC3M, doctoral training is organised in progammes concerning either one or multiple fields of knowledge.¹²⁷⁵ A programme is subsequently understood as 'an organized set of activities conducive to the acquisition of the skills and abilities necessary to earn a Doctor degree'. It is the School's task to, among others, organise the doctoral training activities, to coordinate the programmes, and to identify possible synergies.¹²⁷⁶

The School has various categories of PhD candidates whereby most of the candidates are considered students. Around 30% of the candidates are indicated as being hired by the university as research and teaching assistants (and receive financial support for this).¹²⁷⁷ In terms of funding, this may come from various competitive schemes as made available by, for example, the Spanish Ministry. However, funding can also come from other sources such as enterprises, Marie Curie Networks and ERC grants.

A core role is fulfilled by the Academic Committees of the doctoral programmes. These consist of a director together with two PhD holders and may be supplemented by up to four members depending

¹²⁶⁹ Article 14(1)(2) Real Decreto 99/2011.

¹²⁷⁰ Article 14(4)(7) Real Decreto 99/2011. The panel may also award the distinction of cum laude.

¹²⁷¹ Article 14(5) Real Decreto 99/2011.

¹²⁷² See Article 15 of the Real Decreto 99/2011.

¹²⁷³ Article 15(2) Real Decreto 99/2011.

¹²⁷⁴ See Article 15 bis of the Real Decreto 99/2011.

¹²⁷⁵ Article 1(2) Regulations of the Doctoral School at Universidad Carlos III de Madrid approved by the Government Council in session of February 7, 2013, and modified in session of November 28, 2013. The regulations are hereinafter cited as Regulations UC3M.

¹²⁷⁶ Article 3(1)(a-d) Regulations UC3M.

¹²⁷⁷ Based on information received by a representative of UC3M.

on the departments involved in the programme.¹²⁷⁸ In relation to the doctoral candidates, the Academic Committees play a central role in establishing admission criteria, appointing thesis directors and tutors, authorizing co-supervisions, authorizing the public defence, proposing thesis committees, evaluating activity reports on an annual basis, and authorising possible extensions or leaves of absence.¹²⁷⁹

During the doctorate, the candidate will be guided by a tutor and a thesis director. Whereas the tutor is the academic link between the doctoral programme, the Faculty and the student, the director is the supervisor with particular expertise in doctoral research.¹²⁸⁰ The tutor is appointed by the Academic Committee and ensures the adaptation of the candidate's training to the provisions established by the programme and to ensure the interaction between the candidate and the Academic Committee.¹²⁸¹ Whereas the tutor may also act as thesis director, this must be a doctor professor connected to UC3M. This contrary to the thesis director who may also be external to UC3M.¹²⁸² Co-supervision of a thesis is possible if approved by the Academic Committee.

When it comes to the exact content of the training, admission requirements, and authorisation of the thesis, each of the programmes may approve its own regulations establishing such training activities.¹²⁸³ These regulations are explored below (Sections 11.1.1 and 11.1.2). It is nevertheless possible that candidates need to undergo additional training before the start of their doctorates equivalent to a maximum of 30 ECTS. In order to take part in the doctoral programme, candidates must enrol on an annual basis and fulfil the payment of a fee.¹²⁸⁴ In terms of duration, the UC3M Regulations follow the national provisions. Doctorates therefore last three years from enrolment to the application for the thesis deposit.¹²⁸⁵ This term may be extended for two one-year periods if authorized by the Academic Committee.¹²⁸⁶

During their doctorates, candidates must submit activity reports in which they report on the activities that are part of the programme.¹²⁸⁷ These will be assessed by the tutor and thesis director as well as the Academic Committee.¹²⁸⁸ Apart from the activity report, candidates also submit a research plan which they will elaborate and modify annually.¹²⁸⁹ Annual evaluations are conducted by the Academic Committees and favourable evaluations are necessary to continue with the pursuit of the doctorate.¹²⁹⁰

The thesis itself is an original research work elaborated by the candidate in any field of knowledge qualifying the candidate to work autonomously in the field of research & development and

¹²⁸⁶ Article 17(1) Regulations UC3M.

¹²⁷⁸ Article 9(1) Regulations UC3M.

¹²⁷⁹ Article 9(2)(a-f) Regulations UC3M.

¹²⁸⁰ Based on information received by a representative of UC3M.

¹²⁸¹ Article 18(1)(2) Regulations UC3M.

¹²⁸² Article 18(3) Regulations UC3M.

¹²⁸³ Article 13, 14(1), and 26(1) Regulations UC3M.

¹²⁸⁴ Article 15(1) Regulations UC3M.

 $^{^{1285}}$ Article 16(1) Regulations UC3M. Part-time doctorates are also possible and may – as is established also in the national Spanish legislation – last up to five years. Extensions are possible (for one two-year period and an additional one-year period), though exceptional; See Article 16(2) and 17(2) Regulations UC3M.

¹²⁸⁷ Article 19(1) Regulations UC3M.

¹²⁸⁸ Article 19(2) Regulations UC3M.

¹²⁸⁹ Article 20 Regulations UC3M.

¹²⁹⁰ Article 22 Regulations UC3M.

innovation.¹²⁹¹ Apart from Spanish, the thesis may also be drafted and defended in 'the usual languages for scientific communication in its field of knowledge'.¹²⁹² Upon completion of the doctorate, the intellectual property rights will mostly lie with the candidate (if no special provisions are made, for example, in light of cooperation with enterprises).¹²⁹³ In order to progress to the final stages of the doctorate, a candidate must have completed at least two years of study, have passed the required evaluations, have obtained authorisation from the Academic Committee, and have fulfilled the examination fees.¹²⁹⁴ The thesis is then deposited at the Doctoral School (by electronic file after plagiarism check)¹²⁹⁵ for a period of fifteen days during which other doctors are able to submit observations.¹²⁹⁶ After this period has lapsed, the Dean of the Doctoral School will authorise the public defence of the thesis in line with Article 27 of the Regulations. The Dean also plays a role in the appointment of the Thesis Committee and will confirm the composition of the Committee on proposal of the Academic Committee.¹²⁹⁷ The Thesis Committee consists of a President, a spokesperson, a Secretary, and a substitute.¹²⁹⁸ The majority of the members of the Thesis Committee must be connected to external institutions (i.e. not to the UC3M or entities cooperating with the School or the programme).¹²⁹⁹

Before the public defence, each member of the Thesis Committee obtains a copy of the thesis (either electronically or in hardcopy).¹³⁰⁰ It is up to the President of the Thesis Committee to determine the date and location of the defence while the Doctoral School will communicate the date and place of the defence to the university community.¹³⁰¹ After the presentation and defence of the thesis, the Thesis Committee will issue a report with the qualification awarded to the thesis.¹³⁰² After successful completion of the defence, the thesis will be archived in open-access format and shared with the Ministry of Education.¹³⁰³ In light of the COVID-19 pandemic, thesis defences can take place online following special instructions.¹³⁰⁴

¹²⁹⁹ Article 29(5) Regulations UC3M.

¹³⁰⁰ Article 30(1) Regulations UC3M.

¹²⁹¹ Article 24 Regulations UC3M.

¹²⁹² Article 25(1) Regulations UC3M. In accordance with paragraph 2 of the article, the Chancellor may authorise the writing and defence of the thesis in another language as long as the linguistic competence of the members of the Thesis Committee can be guaranteed.

¹²⁹³ Based on information received by a representative of UC3M.

¹²⁹⁴ Article 26(2)(3) Regulations UC3M.

¹²⁹⁵ See also

https://www.uc3m.es/ss/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadername2=Cache-

<u>Control&blobheadervalue1=attachment%3B+filename%3D%22Code_of_Good_Practice_for_Managing_Plagiarism_of_Ph.</u> D._Theses.pdf%22&blobheadervalue2=private&blobkey=id&blobtable=MungoBlobs&blobwhere=1371561241251&ssbinar y=true.

¹²⁹⁶ Article 26(4) Regulations UC3M.

¹²⁹⁷ Article 28(1) Regulations UC3M.

¹²⁹⁸ Article 29(1) Regulations UC3M. In accordance with Article 29(2)(a-c), tutors and thesis directors are excluded from participation in the Thesis Committee, unless a candidate is following a joint PhD. Also excluded are co-authors of certain publications and the supervisor of a research visit taking place in the context of a *Doctorado Internacional*. In case of such an international doctorate, one of the members of the Thesis Committee must be an expert from a foreign institution who was not the supervisor of the research stay.

¹³⁰¹ Article 30(2)(3) Regulations UC3M. Videoconferences are possible where necessary and although defences take place on the premises of UC3M as a rule, the Dean of the Doctoral School may authorise defences outside the University's premises.

¹³⁰² Article 30(4) Regulations UC3M. The award of the "cum laude" distinction may also be awarded in accordance with paragraphs 5 through 8 of that Article.

¹³⁰³ Article 31(1) Regulations UC3M. Exceptions to this are possible in line with Article 32.

¹³⁰⁴ UC3M, 'Videodefenses COVID-19', <u>https://www.uc3m.es/phdprogram/en/defense/videodefenses-covid19</u>. Based on information received by a representative of UC3M, the university is returning to real-life events.

It is possible for doctoral candidates at UC3M to qualify for the distinction of *Doctorado Interncional*. In such a case, Regulations follow the requirements prescribed at the national level. In particular, the candidate must fulfil the following conditions:¹³⁰⁵

- have completed a research stay of at least three months at a foreign institution;
- have written at least the summary and conclusions in a language other than the official languages of Spain;¹³⁰⁶
- have at least two foreign PhD experts review the thesis;
- have at least one foreign PhD expert who was not the supervisor of the research stay abroad as a member of the Thesis Committee.

The defence for a *Doctorado Internacional* will take place at the Spanish university where the researcher is enrolled or, in the case of interuniversity doctorates or collaboration agreements, at any of the participating universities.¹³⁰⁷

Cooperation on doctoral programmes is possible in the context of a cotutelle. This means that the candidate will ultimately receive two diplomas after completing the doctorate (joint diplomas are only possible in very limited cases due to national legislation on accreditation). Provisions can thereby be found in Article 12 of the Regulations. As a rule, the cooperation for the cotutelle should be based on a specific agreement which establishes the common objectives of the doctorate, the procedure for appointing the thesis director and Academic Committee, and the conditions for the development of the programme (especially in relation to training).

11.1.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

UC3M organises doctorates across four disciplines (law, social sciences, engineering and science, and humanities, communication and library science). Within each of these disciplines, different doctoral programmes are offered. When it comes to cluster 1, the focus in this report is placed on the programmes in Law, Social Sciences, Economics, and Humanities.

For the programme in Law, candidates must have a suitable academic background with a minimum of a B average grade (or 7/10), Spanish "notable" for their previous degree as well as relevant language knowledge based on a certification.¹³⁰⁸ More specifically, candidate's must hold a Bachelor's degree (preferably in law), and a master's degree of at least 60 ECTS. Candidates holding a Spanish Licenciatura are not required to have a master's degree to access a doctorate. Holders of foreign degrees can get access to the degree if their degree is considered equivalent following a homologation procedure. It is possible to access a doctorate without a degree in law, however, the candidate must submit a thesis project stating the connection of their previous education with the area of law they want to study and have found a supervisor. Some candidates, may have to fulfil additional training worth between 18 and 40 ECTS credits. Whether or not such training is required to start with the doctorate depends on the prior experience. For example, a candidate with an academic background

¹³⁰⁵ Article 33 Regulations UC3M.

¹³⁰⁶ An exception applies for a research stay followed in another Spanish-speaking country.

¹³⁰⁷ Article 34 Regulations UC3M.

¹³⁰⁸ UC3M – PhD Programs, 'Law', <u>https://www.uc3m.es/phdprogram/law#access</u>.

in a non-law related field must follow 40 ECTS credits worth of subjects on methodology of law and theory of law at master level as well as subjects related to the topic of the doctorate. During the doctorate, candidates must follow training consisting of a minimum of two conferences on philosophy of law and theory and methodology of law, one conference on non-legal subjects and five conferences on different legal disciplines. Next to these conferences, candidates must also undertake training to strengthen their research skills.

In order to access the programme on Social Sciences, applicants must have a thorough knowledge of advanced research methods and techniques in social sciences.¹³⁰⁹ Applicants should either have the Spanish graduate and master's diplomas in social sciences (sociology, political science, administration science, economics, demography or economic history). Alternatively, an equivalent master from the European Higher Education Area may also give access. In principle, prospective candidates should have completed 300 ECTS in training of which 60 ECTS at master level. in exceptional cases, candidates that do not hold these qualifications may also access a doctorate. Specific provisions are provided meaning that two alternative access routes exist. Apart from a suitable prior degree, candidates should also possess sufficient level of English knowledge (B2), evidence of prior research experience, and a description of the research project. During their doctorate, candidates will follow different types of research seminars and take part in research skills training. The thesis may then take the form of both a monograph or a compilation of papers that will be evaluated based on the same criteria. The Academic Committee must authorise the presentation of the thesis in consultation with the tutor and thesis director. An external evaluator may be used to assess the quality of the thesis before allowing its defence.

When it comes to the programme in Economics, access is possible on the basis of a research oriented master's degree in economics awarded by a prestigious institution, excellent academic record, training in economics, analytics and mathematics, English knowledge skills of at least B2 level, and the research project fitting in the programme framework.¹³¹⁰ Candidates with other backgrounds may also be admitted provided that they fulfil the requirements set in Spanish legislation to access a doctorate and their training is considered equivalent to that of the UC3M master's degree in economic analysis (to be considered by the Academic Committee). Students who do not fulfil this requirement are recommended to first follow this master's degree. Training again undertake training through participation in research seminars and doctoral meetings. Optional activities include mobility actions in the context of the European Network for Training in Economics Research (ENTER), participation in summer courses, workshop attendance, research stays abroad, and participation in events as a speaker. Apart from this discipline-specific training, candidates may also follow training to strengthen their research skills. Once the thesis is approved by the supervisor, the thesis must be presented before a committee consisting of three professors who evaluate the thesis suitability. Furthermore, at least two of the three chapters must be suitable for publication in an indexed JCR journal in economics.

For the programme in Humanities, prior graduate training in arts and humanities must be combined with relevant research interests. Several admissions profiles are identified for the doctoral programme in humanities and paired with possible complementary training of up to 18 ECTS (to take place before the doctorate). These degrees may be obtained by following courses in master's offered by UC3M.

 ¹³⁰⁹ UC3M – PhD Programs, 'Social Sciences', <u>https://www.uc3m.es/phdprogram/social-sciences#access</u>.
 ¹³¹⁰ UC3M – PhD Programs, 'Economics', <u>https://www.uc3m.es/phdprogram/economics#access</u>.

More specifically, candidates need a bachelor's and master's degree (300 ECTS combined of which 60 ECTS at master level). proof of Spanish language knowledge is also generally required, except for candidates who have completed undergraduate studies in a Spanish speaking country. This requirement furthermore, does not apply to candidates who will prepare their thesis in English (provided their knowledge in English is of C1 level). Research experience may furthermore contribute to a candidate's suitability for a particular doctoral programme. As is the case for the other programmes under cluster 1, training includes mandatory seminars and optional training such as participation in a mobility programme and research skills training. Admission to the thesis defence is dependent on having approval of the supervisor and Academic Committee, having completed the complementary training necessary to access the doctorate, participation in training, submission of a contribution to one edition of the doctoral seminars, and publication of at least one conference communication or journal paper.

11.1.2 Cluster 3 – Engineering

When it comes to engineering and science, UC3M again provides for many different programmes. For the purpose of this report, attention is primarily given to the programme in Materials Science and Engineering and Mechanical Engineering and Industrial Organisation.

For the programme in Materials Science and Engineering, a bachelor's and master's degree are necessary (or equivalent) whereby the master's degree should be in the field of materials science and other designated fields.¹³¹¹ Candidates with a background in other fields may be exceptionally admitted if they meet requirements set in national legislation. In that case, complementary training will be designated by the Academic Committee (up to 30 ECTS). Apart from substantive knowledge, candidates must also have sufficient language knowledge in English (B2 level). Training for the research programme in Materials Science and Engineering consists of mandatory specific training seminars, conference presentations, attendance at the programme's conference series, publication of at least one article, and research skills training. In order to progress to the defence of the thesis, candidates must have organised a 30 minute seminar on their research outcomes (organised after their first annual evaluation and before application for thesis deposit), publication of an article derived from the thesis research, and attendance to a minimum of two seminars for every category hosted by the programme.

In order to access the programme in Mechanical Engineering and Industrial Organisation, candidates must have completed prior training expressing affinity to the relevant specialisation of the programme and prospective thesis.¹³¹² More specifically, this concerns a bachelor's and master's degree in engineering with a specialisation in one of the areas of the doctorate. Language knowledge in English is also highly valued. Complementary training may be required by the Academic Committee (up to 12 ECTS) for candidates who meet the preferred profile. Candidates who have a different profile may be asked to complete up to 24 ECTS in complementary training. This different profile generally concerns candidates with a bachelor's and master's in physics, mathematics, engineering or architecture with specialisations allowing them to acquire the skills and competences necessary to be successful in the

¹³¹¹ UC3M – PhD Programs, 'Materials Science and Engineering', <u>https://www.uc3m.es/phdprogram/materials-science-engineering#access</u>.

¹³¹² UC3M – PhD Programs, 'Materials Engineering and Industrial Organisation', <u>https://www.uc3m.es/phdprogram/mechanical-engineering-industrial-organization#access</u>.

programme. In terms of training, candidates are required to attend 30 hours of research seminars or conferences, complete a research stay in Spain or abroad (100 hours), and the organisation and attendance of conferences or presentations (10 hours). Additionally, candidates must also complete 20 hours in research skills training. in order to defend the thesis, the research must be of sufficient scientific quality (corroborated by i.a. scientific and technical contributions, articles JCR indexed journals, patents, presentations in conferences, awards). Ultimately, it is the Academic Committee who sets specific requirements to be met for the thesis defence together with the relevant department. Similarly, assessment committees are organised depending on the area of scientific knowledge.

11.2 Universidad Autónoma de Madrid

In order to enroll for a doctorate at the Universidad Autónoma de Madrid (UAM), prospective candidates need to submit necessary documentation via online application.¹³¹³ Each of the individual doctoral programmes of the UAM may set specific requirements related to the level of prior knowledge a candidate must possess and documentation they must hand over.¹³¹⁴

Upon being accepted, the originals of the documents (or certified copies for EU qualifications/legalised documents for non-EU qualifications) must be demonstrated to the university. Only after these documents have been transmitted may the candidate be admitted. The doctoral school reviews the applications and may require any missing information. It is up to the programme coordinator, representing the Academic Committee of that programme, to approve the application and to assign a supervisor to the doctoral candidate. Should a candidate not be admitted he/she must be informed of this in writing including motivation for the rejection. If admitted, additional training may be required depending on what qualifications the candidate has and what is required for the doctoral programme.¹³¹⁵

Admitted candidates must ensure they formalise their enrolment by completing necessary additional training within the deadlines indicated (in general between the first and second year).¹³¹⁶ Candidates must re-enrol annually until the thesis is registered for defence.¹³¹⁷ Failure to successfully re-enrol will result in removal from the programme. In order to enrol, candidates must also pay the tuition fees for supervision (and training).¹³¹⁸ In terms of insurance, candidates under 28 years of age will be covered

UAM/1446711296967.htm?language=en_GB&nodepath=Doctoral%20Programmes&pid=1446711296967.

¹³¹³ Paragraph 1 Procedimento para el seguimiento de los doctorandos en la Universidad Autónoma de Madrid, aprobado por el Comité de Dirección el 15 de septiembre de 2017 (Hereinafter Regulation Universidad Autónoma de Madrid – Doctoral Research & Training).

¹³¹⁴ For an overview of all admission requirements for each of the doctoral programmes see UAM, Doctoral school – programmes, <u>http://www.uam.es/EscuelaDoctorado/(en_GB)-Programas-de-Doctorado-de-</u>

¹³¹⁵ The doctoral programme itself must be reviewed, evaluated and approved before candidates may be admitted. Within the Universidad Autónoma de Madrid a separatre regulation governs this procedure. In particular, a new programme must be approved by the Steering Committee of the doctoral school and the Doctoral Commission of the university before being submitted to the Governing Council and Social Council (*Consejo de Gobierno y Consejo Social*). See Actualización del procedimento para la presentación y aprobación de programas de doctorado en la Universidad Autónoma de Madrid (Aprobado por Consejo de Gobierno 7 de octubre de 2017).

¹³¹⁶ Paragraph 2.1(1) Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³¹⁷ Paragraph 2.2 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³¹⁸ Paragraph 2.1(2) Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

by the *Seguro escolar*.¹³¹⁹ Candidates over 28 years of age must ensure they take out insurance themselves.

In terms of supervision, candidates are assigned a supervisor who may be affiliated to any Spanish or foreign university as long a s the person is holder of the title of doctor and has relevant research experience.¹³²⁰ Co-supervision is possible, but is nevertheless restricted to one co-supervisor. Apart from a supervisor, a candidate is also assigned a tutor (also holding a doctor's degree and relevant research experience) who is affiliated to the doctoral programme and connected to one of the institutions participating in the project.¹³²¹ Whereas the supervisor is responsible for the research work of the candidate, the tutor will be responsible for monitoring the candidate's research training and ensuring the candidate's interaction with the Academic Committee. It is possible that the tutor and supervisor is the same person, but not necessary.

Conditions concerning the supervision of the candidate will be set out in an agreement signed by the doctoral school director, programme coordinator, candidate, tutor and supervisor.¹³²² Apart from supervision, the document also details a procedure for conflict resolution and provisions concerning intellectual or industrial property rights. It is the candidate who must initiate the procedure of signing the document within the first month of enrolment. Complementary to the supervision agreement, the candidate will draw up a research plan including the objectives, methodology and timetable of the research (to be submitted within set deadlines and approved by the supervisor and tutor).¹³²³ All documentation will be registered in an online system (SIGMA). Candidates will also use this system to log different activities next to their research.¹³²⁴ Additional activities must be proposed by the candidate and accepted by the tutor and/or supervisor. The candidate must subsequently ensure that activities are accredited by providing necessary certifications and/or other documentary evidence in SIGMA. All activities carried out will result in a document: *Documento de Actividades del Doctorando (DAD)* – Doctoral Student Activities Document.

Progress is monitored annually by the programme's Academic Committee. This evaluation is based on the DAD, the candidate's report, and the supervisor's report (possibly supported by the tutor).¹³²⁵ The foregoing is assessed in light of the research plan to see whether sufficient progress has been made. The Academic Committee may issue a positive or negative assessment of the research. In particular, the Academic Committee will assess: whether the research plan is sufficiently relevant and innovative, whether the approach is clear, whether the hypotheses/research objectives are clear, testable and feasible, whether the methodology is appropriate, and if the proposed is sufficient for a thesis (i.e. whether the research topic is sufficiently demarcated).¹³²⁶ The Academic Committee will furthermore assess whether the research activities sufficiently complement the research activities foreseen by the doctoral programme.¹³²⁷ In the case of a negative evaluation by the Academic Committee, the

¹³¹⁹ This is an insurance applicable to all candidates enrolled in doctoral training in Spain.

 ¹³²⁰ Paragraph 3 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.
 ¹³²¹ Ibid.

¹³²² Paragraph 4 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²³ Paragraph 5 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²⁴ Paragraph 6 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²⁵ Paragraph 7 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²⁶ Paragraph 7.1(a) Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²⁷ Paragraph 7.1(b) Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

candidate will be evaluated again after a four-month period.¹³²⁸ During that period the candidate must have satisfied to the requirements set by the Academic Committee. Only upon fulfilling those requirements may the candidate re-enrol for the doctorate (if the candidate is unsuccessful they are removed from the programme).

The doctorate itself lasts a maximum term of three years.¹³²⁹ Extensions are possible (up to five years) if approved by the Academic Committee.¹³³⁰ Doctoral studies are in principle carried out full-time, but may be carried out part-time (in which case they last a maximum of five years extendable for another three years). Part-time studies are, however, not permitted if candidates have a contract exclusively to carry out their doctoral research (*contrato con dedicación exclusiva*). It is possible for candidates to change their type of commitment between full-time and part-time upon request.¹³³¹ In order to conclude the doctorate, the candidate needs to have successfully passed the annual evaluations.

In order to gain access to the defence, the candidate will have to gain approval by the supervisor, tutor, and Academic Committee of the relevant programme.¹³³² The ultimate authorisation to access the defence depends on the verdict of the *Comisión de Equivalencias y Defensa de Tesis Doctorales* (hereinafter: Doctoral Committee) of the doctoral school to which the candidate must apply for authorisation to defend the thesis.¹³³³ Candidates must submit several documents together with their application, namely a copy of the thesis, digital copy of the thesis, DAD document, additional documents,¹³³⁴ a report from the supervisors assessing the thesis and containing the approval for defence, proposal for a *tribunal de evaluación de la tesis* (hereinafter: Defence Committee),¹³³⁵ form on open access publication, and a form proving the originality of the thesis.¹³³⁶ After receipt of all the documentation to the Doctoral Committee.¹³³⁷ The Doctoral Committee may then decide to authorise (or not)¹³³⁸ the reading of the thesis by the Defence Committee which it itself appoints.¹³³⁹ In exceptional cases, the Doctoral Committee may subject the defence to a prior assessment procedure consisting of assessments from two doctors with expert on the thesis topic coming from outside the

¹³²⁸ Paragraph 7.2 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³²⁹ Paragraph 8 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training. Temporary leaves of absence may be deducted from the total time a candidate spends on their doctorate; See Paragraph 8.1 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³³⁰ Paragraph 8.2 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³³¹ To this end, see Paragraph 8.3 Regulation Universidad Autónoma de Madrid – Doctoral Research & Training.

¹³³² Article 2.1.1 Procedimiento relative al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³³³ Article 2.1.2 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³³⁴ These documents are necessary for theses written as a compendium of publications, written in a different language than those of the University, international doctorates, industrial doctorates, and co-supervised theses.

¹³³⁵ In particular, the panel must consist of 5-7 doctors. Their expertise and research experience must be specified in the application by means of publications.

¹³³⁶ Article 2.1.2(a-h) Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³³⁷ Article 2.3.1 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³³⁸ If the Doctoral Committee decides not to authorise the defence, it will inform the candidate and supervisor in writing of its reasons; Article 2.4.3 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³³⁹ Article 2.4.2

university. After approval of the defence, the electronic version of the thesis will be forwarded to the library for (open access) publication¹³⁴⁰ and the Education Ministry's register for archival.¹³⁴¹

When it comes to the Defence Committee, this committee consists of three to five full members and two substitutes¹³⁴² that are proposed by the Academic Committee of the doctoral programme.¹³⁴³ It must be ensured that no more than two members are from the Universidad Autónoma de Madrid and institutions cooperating in the doctoral programme.¹³⁴⁴ Of the members, at least one must be a professor working in the Autonomous Community of Madrid. Supervisors and tutors may not be part of the Defence Committee, except in the event that the thesis was written in the context of a bilateral co-supervision agreement with a foreign university.¹³⁴⁵

Upon authorisation by the Doctoral Committee, the defence must take place within six months.¹³⁴⁶ Before the defence, the candidate must send the Defence Committee a copy of the thesis along with the DAD document.¹³⁴⁷ The defence itself is public and consists of a presentation and defence at which doctors present may also ask questions.¹³⁴⁸ The Defence Committee's secretary is responsible for establishing an opinion based on the defence to be signed by the committee members.¹³⁴⁹ The Defence Committee will subsequently issue a grade in terms of fail, pass, good, outstanding (the latter of which may merit the mention of *cum laude*.¹³⁵⁰

Apart from the *cum laude* distinction, candidates can also obtain the mention "*Doctor Internacional*". Several requirements must be fulfilled for the candidate to obtain this mention:¹³⁵¹

¹³⁴⁰ Special procedures nevertheless exist for theses that are subject to particular protection, for example, due to issues concerning patents. In that case, the thesis may exceptionally be exempted temporarily from the publication requirement. For more information see Article 7 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴¹ Article 2.3.1 and 6 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴² At least three members must be present during the defence. If it is not possible for three Defence Committee members to be present, the committee chair must inform the Doctoral Committee who must take a decision regarding the inclusion of a new member of the Defence Committee; see Article 5 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴³ Article 2.2.1 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁴ More specifically, members connected to UAM must occupy a post as civil servant or contracted lecturer or be contracted as a researcher by the university. For more details see Article 2(2.2.4) Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁵ Article 2.2.2 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁶ Article 4.1 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁷ Article 4.3 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁸ Article 4.5 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁴⁹ Article 4.7 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵⁰ Article 4.6, 4.8 and 4.9 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵¹ Paragraph A Procedimento para la obtenión de la mención internacionel en el título de doctor, aprobado en Consejo de Gobierno de 15 de diciembre de 2011.

- have spent a minimum of three months outside Spain at an accredited host higher education institution/research centre for their doctorate;
- at least part of the thesis must be written in a language other than Spanish;¹³⁵²
- at least two experts holding a doctorate and affiliated to a non-Spanish higher education institute or research centre must have reviewed the thesis;
- at least one expert from a non-Spanish higher education institution with a doctoral degree must form part of the Defence Committee;
- the defence must take place at the Universidad Autónoma de Madrid.

In case of the last requirement an exception applies for persons having followed a joint doctorate or having jointly supervised. In that case, the defense may take place at any of the participating universities depending on what the cooperation agreement states. In order to obtain the international doctorate distinction, candidates must undergo a separate application procedure in addition to the regular procedure to apply for authorisation of the thesis.¹³⁵³

The thesis itself may be written in languages usually used for scientific communication in the field of knowledge.¹³⁵⁴ If that language is not Spanish, at least the introduction and conclusion must be presented in Spanish. The public defence will generally be in Spanish but may be held in another language as long as all Defence Committee members have agreed to this.¹³⁵⁵ In terms of content, the thesis must contain a declaration of ethical commitment and originality on the first page.¹³⁵⁶ In relation to form, theses written as a compendium of publications are possible depending on the express authorisation of the thesis supervisor and Academic Committee of the relevant doctoral programme.¹³⁵⁷ In case of approval, a minimum of three articles must have been published or accepted for publication (after admission to the doctorate). In order to be defended as a thesis, the publication must be accompanied by a general introduction explaining the work and justifying the subject matter, a summary, and complete copies of the published works. The Universidad Autónoma de Madrid has additional regulations concerning the organisation of live defences and semi-live defences (online) defences.¹³⁵⁸ In light of the COVID-19 pandemic, the University has also issued additional regulations to ensure a deviation from the regular procedure for the deposit of the thesis.¹³⁵⁹

In terms of international cooperation, UAM provides for the possibility to develop a doctoral thesis in the context of a cotutelle. UAM defines the cotutelle as 'an option for developing a doctoral thesis whereby the candidate simultaneously meets the requirements of two institutions: UAM and a foreign

 ¹³⁵² Exceptions to this rule apply in the event that a person has spent their research stay in a Spanish speaking country.
 ¹³⁵³ See Paragraph B Procedimento para la obtenión de la mención internacionel en el título de doctor, aprobado en Consejo de Gobierno de 15 de diciembre de 2011.

¹³⁵⁴ Article 3.1 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵⁵ Article 3.2 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵⁶ Article 2.1.2(a) Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵⁷ Article 8 Procedimiento relativo al tribunal, defensa y evaluación de la tesis doctoral en la Universidad Autónoma de Madrid.

¹³⁵⁸ Protocolo defensa de tesis – Instrucciones para el secretario del tribunal – tesis presenciales; Protocolo defensa de tesis – Instrucciones para el secretario del tribunal – tesis semi-presenciales;

¹³⁵⁹ See the UAM document titled "The exceptional procedure for the deposit of doctoral theses as a result of the measures adopted to combat COVID-19".

university'.¹³⁶⁰ The one thesis prepared enables the candidate to receive a degree from both institutions involved. Therefore, the cotutelle procedure from UAM should be understood as a double degree. In order to set up such a double degree structure, both universities need to conclude an agreement stipulating the conditions under which the work will be carried out. This agreement includes provisions on:

- how much time the candidate will spend at both universities (minimum of 6 months);
- the place where the thesis is deposited (depending on how much time is spent at which institution);
- the doctoral programme to be followed in each institution;
- where the fees will be paid;
- place of the defence.

UAM recommends the use of its standard agreement although other formats may also be used.¹³⁶¹ Apart from the candidate, the supervisors must also sign the agreement. Ultimately, the agreement must be approved by the Academic Committee of the Doctoral School and signed by Vice Chancellor on behalf of the Dean.

Apart from additional provisions set in the agreement, UAM double doctorate candidates must meet the same requirements as all other doctoral candidates in all phases of their work.¹³⁶² This means that they must, for example, fulfil the same admission requirements as other doctoral candidates in Spain set out by Royal Decree 99/2011. In terms of fees the candidate in principle only fulfils the fees at one of the two universities. Administration, insurance and defence fees must always be paid at UAM. Candidates must apply for the cotutelle separately after they have been admitted to a doctoral programme at UAM.¹³⁶³ Upon being admitted, the candidate will be jointly supervised by a supervisor from each of the two institutions (generally professors). Whereas the supervisor may not be part of the defence committee at UAM, the UAM supervisor may form part of the committee at the foreign university if it allows this. Regarding the approval of the thesis for defence, the rules of both institutions must be followed. After approval, the composition of the defence committee takes place following the rules of one of the two institutions. After the defence, the UAM degree is issued following national legislation in Spain.

11.2.1 Cluster 1 – Social Sciences, Humanities, Law & Economics

UAM offers over 20 doctoral programmes spread across the following disciplines: arts & humanities, engineering, health sciences, sciences, and social & legal sciences. Accordingly, each of the individual programmes has its own access criteria and required documentation. Whereas some programmes

 ¹³⁶⁰ Universidad Autónoma de Madrid, 'Cotutelle Procedure', <u>http://www.uam.es/EscuelaDoctorado/(en_GB)-Cotutela/1446744016963.htm?language=en_GB&nDept=5&nodepath=Cotutelle%20agreements</u>.
 ¹³⁶¹ See Universidad Autónoma de Madrid, 'Doctoral thesis co-tutorship agreement',

<u>http://www.uam.es/EscuelaDoctorado/documento/1446744793164/Convenio_Cotutela_logo_EN.pdf?blobheader=applica_tion/pdf&blobheadername1=Content-</u>

disposition&blobheadername2=pragma&blobheadervalue1=attachment;%20filename=Convenio_Cotutela_logo_EN.pdf&b_lobheadervalue2=public.

 ¹³⁶² Universidad Autónoma de Madrid, 'Cotutelle Procedure', <u>http://www.uam.es/EscuelaDoctorado/(en_GB)-Cotutela/1446744016963.htm?language=en_GB&nDept=5&nodepath=Cotutelle%20agreements</u>.
 ¹³⁶³ Ibid., para. 2.

have set designated regulations, others appear to primarily set access criteria and give general information on training. When it comes to cluster 1, the focus in this report is placed on the programmes in Economics & Business, Law, Government and Public Policy, Modern and Contemporary History.

When it comes to the Economics & Business programmes, access to the doctorate is dependent on the prospective candidate having sufficient knowledge of economics or business administration at postgraduate level.¹³⁶⁴ Furthermore, candidates are also required to have the ability to understand the economic, business and social environment, analyse qualitative and quantitative information, and be able to communicate in Spanish and English. Applications for doctorates are assessed by the Academic Committee of the doctoral programme in Economics & Business. This Committee plays a core role in matters related to the doctorate from designating the thesis director and tutor to assessing the annual progress of candidates and approving the thesis for defence.¹³⁶⁵ It is recommended that candidates have a master's degree in economics or business. Other profiles that fulfil the minimum access criteria set by national law may also be considered for admission as long as their past experience also includes knowledge of economics or business that can be considered equivalent to postgraduate studies. In order to be admitted, prospective students are assessed on the basis of a point system where a minimum of 15 points out of 20 must be scored to gain access to the programme. Evaluation criteria concern: academic record and affinity of the studies undertaken with the recommended profile as well as the average mark during the bachelor's and master's degrees, CV including professional experience and publications, motivation letter, and English language skills over B2 level. During their doctorate, candidates will follow training by attending research seminars and workshops, presenting papers at (inter)national conferences, and by completing research stays both nationally and abroad.

When it comes to Law, Government and Public Policy, candidates need to have advanced knowledge and a detailed understanding in the field of legal and political sciences amounting to a master's degree in the area in which they want to conduct a doctorate.¹³⁶⁶ In addition, candidates may also need to provide evidence of their language knowledge in Spanish, English or any other relevant language equivalent to B2 level. The Academic Committee is responsible for admitting students meeting the access requirements thereby paying particular attention to academic record, their thesis proposal (following a designated format), and other merits (e.g. scientific publications or references).¹³⁶⁷ Additionally, their research must fit within the designated research lines of the programme in Law, Government, and Public Policy.¹³⁶⁸ Upon being admitted, the candidate must draw up a research plan that establishes the objectives, methods and timetable of the research.¹³⁶⁹ Both the supervisor and the tutor must approve the research plan (which may be adapted over the course of the doctorate).

https://www.uam.es/EscuelaDoctorado/documento/1446743701108/FichaEconomiayEmpresa.pdf.

¹³⁶⁴ Escuela de Doctorado UAM, Programa de Doctorado en Economía y Empresa,

¹³⁶⁵ See Article 2 Reglamento intenro de la Comisión Académica del Programa de Doctorado en Economía y Empresa de la Universidad Autónoma de Madrid, 28 enero 2021.

¹³⁶⁶ Escuela de Doctorado UAM, Progama de Doctorado en Derecho, Gobierno y Políticas Públicas, <u>https://www.uam.es/EscuelaDoctorado/documento/1446743091197/Derechoficha.pdf</u>.

¹³⁶⁷ See Article 15 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁶⁸ Article 18 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁶⁹ Article 23(1) Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

Indeed, the research plan along with the candidate's progress on training activities is assessed annually by the academic committee.¹³⁷⁰ Approval of the plan is necessary to continue with the doctorate. Alternatively, the candidate may have to re-submit a new plan that must again be evaluated. At the start of their doctorates, candidates are assigned a supervisor and a tutor (which may be the same person) at the start of their doctorate by the Academic Committee.¹³⁷¹ The supervisor does not have to be connected to UAM and may also be connected to a Spanish or foreign institute. Co-supervision is possible if authorised by the Academic Committee and may especially be authorised when the research is multidisciplinary in nature, when it is carried out at two research centres, when the candidate requests so, and when it is the first doctoral thesis to be supervised by a professor.¹³⁷² The research proposed by prospective candidates must fit with the designated research lines of the programme in Law, Government and Public Policy.¹³⁷³ During their doctorate, candidates will follow training by organising and attending conferences and seminars, presenting papers at conferences, and completing research stays in foreign research centres.¹³⁷⁴ Attendance is accredited via a certificate attesting to active participation which must be evaluated by the supervisor or tutor.¹³⁷⁵ In order to conclude their doctorates, the thesis supervisor/tutor must approve the thesis after which the candidate may submit the thesis for assessment to the Academic Committee.¹³⁷⁶ Once the Academic Committee has approved the thesis, the candidate must apply to the Equivalence and Defence Committee of the doctoral school to proceed to the defence. The thesis itself may take the form of a monograph, but also of a compendium (provided that at least three articles have been published or accepted for publication in scientific journals).¹³⁷⁷ The doctorate itself takes three years when pursued full-time (or alternatively 5 years part-time).¹³⁷⁸

Looking at the programme in Modern and Contemporary History, doctorates are provided in the context of an inter-university cooperation of six Spanish universities. Each of the universities is accordingly responsible for designated research lines.¹³⁷⁹ Candidates combine the preparation of their thesis with other formative activities allowing them to acquire theoretical and practical competences. Training is structured following a permanent research seminar, doctoral conferences, research visits

¹³⁷⁰ Article 23(2) Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷¹ Article 16 and 17 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷² Article 21 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷³ Article 18 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷⁴ Although research stays are an optional activity, stays of at least three months are recommended depending on the availability of funding. During the stay abroad, the work will be supervised by an academic from the host institution together with the UAM supervisor/tutor. At the end of the research stay, the candidate's activities are assessed via a report drawn up by the UAM supervisor/tutor and will be taken up in the candidate's activities document. For more provisions on research stays see Article 24 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷⁵ Article 22(1) Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷⁶ Article 26 Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷⁷ Article 26(3) Reglamento de functionamiento del Programa de Doctorado en Derecho, Gobierno y Políticas Públicas, 12 noviembre 2019.

¹³⁷⁸ UAM Doctoral School, Programme Law, Government and Public Policy,

https://www.uam.es/EscuelaDoctorado/Programa-de-Doctorado-en-Derecho,-Gobierno-

^{/1429099804201.}htm?language=en_GB&nDept=5&pid=1446711296967&pidDept=1446711297569.

¹³⁷⁹ Escuela de Doctorado / UAM, 'Programa de Doctorado en Historia Contemporánea',

https://www.uam.es/EscuelaDoctorado/documento/1446743518360/Historia%20Contemporanea.pdf.

and stays in other (foreign) academic centres, and attendance at conferences and scientific meetings.¹³⁸⁰ Apart from these activities, interuniversity days in contemporary history are also organised.¹³⁸¹ Candidates are selected by the Academic Committee and depend on: their academic record obtained in previous studies, CV (whereby special consideration is given to qualifications relevant to the doctoral programme, academic stays abroad during their bachelor's or master's, possible study grants obtained during their bachelor's and master's), level of language knowledge in English (B2) or other relevant languages, and the result of a personal interview with the candidate.¹³⁸²

11.2.2 Cluster 2 – Psychology & Medicine

The doctoral programme in psychology at UAM consists of three research lines (in development and education, basic psychological processes in learning and education, and social psychology).¹³⁸³ These main research lines are again divided into more specific research lines on which candidates may conduct doctoral research. The Academic committee of the programme is responsible for admission. In particular, the Committee assessed the prior qualifications (i.e. bachelor's and master's degrees) of the candidate, whether the candidate has received particular training in research, publications and participation in scientific conferences undertaken during the master, whether the prospective candidate has followed courses specific to the substance of the doctorate, and whether the candidate has a B1 level of English.¹³⁸⁴ Part-time doctoral studies are possible and will last a maximum of five years. Training activities (beyond writing and defending the doctoral thesis) primarily relate to participation in conferences and research seminars, presenting on the progress of the doctoral research in seminars, taking part in national and international specialisation or technical courses, organising and presenting at conferences, research stays at foreign universities or research centres, publication in scientific journals, and participation in dissemination and outreach activities.¹³⁸⁵ In the event that candidates need additional substantive knowledge before they can start their doctorate, it is possible that they may have to complete additional training. in particular, candidates who have completed master's in human resource management, psychosocial and community intervention, and educational psychology do not have to undergo additional training to be admitted to a doctorate in psychology at UAM.¹³⁸⁶ Other candidates who may still qualify for admission but do not have the aforementioned degrees may be asked to complete training specific to each of the research lines of the doctoral programme in psychology (mostly on the theories and methodologies of the particular

¹³⁸⁰ UAM Doctoral School, Modern and Contemporary History, <u>https://www.uam.es/EscuelaDoctorado/Programa-Doctorado-en-Historia-</u>

Contemporánea/1446711311417.htm?language=en GB&nDept=1&pid=1446711296967&pidDept=1446711297512. ¹³⁸¹ Escuela de Doctorado / UAM, 'Programa de Doctorado en Historia Contemporánea', https://www.uam.es/EscuelaDoctorado/documento/1446743518360/Historia%20Contemporanea.pdf.

¹³⁸² Ibid.

 ¹³⁸³ Doctoral School / UAM, 'Psychology', <u>https://www.uam.es/EscuelaDoctorado/Programa-de-Doctorado-en-</u>
 <u>Psicolog%C3%ADa/1429099804312.htm?language=en_GB&nDept=5&pid=1446711296967&pidDept=1446711297569</u>
 ¹³⁸⁴ Escuela de Doctorado / UAM, 'Programa de Doctorado en Psicología',

https://www.uam.es/EscuelaDoctorado/documento/1446743713169/Psicolog%C3%ADa.pdf. See also Facultad de Psicología, 'Doctorado en Psicología – 2013 – Criterios de selección', <u>https://www.uam.es/Psicologia/DP-Criterios-de-selección/1242684133924.htm?language=es&nodepath=Criterios%20de%20selecci?n</u>. ¹³⁸⁵ Escuela de Doctorado / UAM, 'Programa de Doctorado en Psicología',

https://www.uam.es/EscuelaDoctorado/documento/1446743713169/Psicolog%C3%ADa.pdf. For more informatio on training activities see Facultad de Psicología, 'Doctorado en Psicología – 2013 – Actividades Formativas', https://www.uam.es/Psicologia/DP-Actividades-de-form-deben-

realizarse/1242684360431.htm?language=es&nodepath=Actividades%20que%20deben%20realizarse. ¹³⁸⁶ Escuela de Doctorado / UAM, 'Programa de Doctorado en Psicología',

https://www.uam.es/EscuelaDoctorado/documento/1446743713169/Psicolog%C3%ADa.pdf.

research field).¹³⁸⁷ When it comes to their progress, candidates in psychology must annually submit a research plan – first to their tutor and ultimately to a wider committee (of internal and/or external doctors) – for assessment.¹³⁸⁸ The research plan must thereby annually be defended by the candidate in a one hour session after which the committee establishes a report that will be transferred to the Academic Committee who will issue a verdict on the research plan (adequate with or without changes, or inadequate after which the candidate must thoroughly review the research plan).¹³⁸⁹ Ultimately the doctorate is concluded with the defence of the thesis. This procedure is initiated by the candidate by submitting the necessary documentation to the Academic Committee. For the further organisation of the defence the Faculty of Psychology follows the provisions set in the general UAM regulations.¹³⁹⁰

When it comes to medicine, candidates looking to access a doctorate in that field at UAM must already be admitted for specialised health training and have been pursuing such training for at least two years, have a degree in nursing and a master's degree, have a degree in physiotherapy, biology, biochemistry, food sciences, human nutrition and dietetics or related fields and a master's degree in biomedicine.¹³⁹¹ Next to fulfilling these degree requirements, candidates must also possess B2 level language knowledge in English. When assessing applications, the Academic Committee will take particular account of the prospective candidate's academic record, knowledge of English, other merits such as research stays, participation in conferences, and published articles.¹³⁹² Furthermore, the aforementioned candidates do not need to undergo additional training before being able to access their doctorate. Other candidates may thereby be considered by the Academic Committee but may be asked to complete additional training.¹³⁹³ Additional training in this context consists of subjects of one of UAM's master's degrees (up to 30 ECTS) which is not considered part of the three-year full-time limit maintained for a doctorate in medicine and surgery.¹³⁹⁴ Upon admission, candidates must

<u>https://www.uam.es/EscuelaDoctorado/documento/1446743713169/Psicolog%C3%ADa.pdf</u>. See also Facultad de Psicología, 'Doctorado en Psicología – 2013 – Complementos de formación', <u>https://www.uam.es/Psicologia/DP-</u>

Complementos-de-formación/1242684133932.htm?language=es&nodepath=Complementos%20de%20Formaci?n. ¹³⁸⁸ Facultad de Psicología, 'Doctorado en Psicología – 2013 – Presentacion del proyecto',

https://www.uam.es/Psicologia/DP-La-presentacion-del-proy-

- inv/1242684360438.htm?language=es&nodepath=Presentaci?n%20del%20proyecto.
- 1389 Facultad de Psicología, 'Doctorado en Psicología 2013 Presentacion del proyecto',

https://www.uam.es/Psicologia/DP-La-presentacion-del-proy-

 $\underline{inv/1242684360438.htm?language=es\&nodepath=Presentaci?n\%20del\%20proyecto.$

¹³⁹⁰ Facultad de Psicología, 'Doctorado en Psicología – 2013 – Procedimiento de presentación y defensa', <u>https://www.uam.es/Psicologia/DP-Procedimiento-pres-y-</u>

<u>https://www.uam.es/EscuelaDoctorado/documento/1446743649839/Medicina%20y%20Cirug%C3%ADa.pdf</u>. Next to the aforementioned routes of access, prospective candidates with idfferent qualifications may also be admitted. For more information see Facultad de Medicina, 'Requisitos de acceso',

https://www.uam.es/EscuelaDoctorado/documento/1446743649839/Medicina%20y%20Cirug%C3%ADa.pdf.

¹³⁹³ Escuela de Doctorado / UAM, Programa de Doctorado en Medicina y Cirurgía,

¹³⁸⁷ Escuela de Doctorado / UAM, 'Programa de Doctorado en Psicología',

<u>def/1242684141314.htm?language=es&nodepath=Procedimiento%20de%20presentaci?n%20y%20defensa</u>. ¹³⁹¹ Escuela de Doctorado / UAM, Programa de Doctorado en Medicina y Cirurgía,

https://www.uam.es/Medicina/RequisitosAcceso/1446765980987.htm?language=es&nodepath=Requisitos%20de%20acces0.

¹³⁹² Escuela de Doctorado / UAM, Programa de Doctorado en Medicina y Cirurgía,

https://www.uam.es/EscuelaDoctorado/documento/1446743649839/Medicina%20y%20Cirug%C3%ADa.pdf. ¹³⁹⁴ Facultad de Medicina, Admisíon,

<u>https://www.uam.es/Medicina/Admision/1446765985710.htm?language=es&nodepath=Admisi?n</u>. Depending on the level of prior traiinng, candidates may need to undergo different types additional training. Additionally, they may also need to undergo complementary training of a maximum of 18 ECTs to be completed within one year. See Facultad de Medicina, Complementos de formacíon,

https://www.uam.es/Medicina/ComplementosFormacion/1446765990469.htm?language=es&nodepath=Complementos%

pursue additional training activities which in the area of medicine and surgery primarily concern clinical and research seminars, attendance at conferences, meetings and training courses, presentation of papers at conferences, presentation of a formal seminar, publication of scientific articles, and national and international research stays.¹³⁹⁵ Upon admission, candidates must also present a research plan within six months which must be updated and assessed on an annual basis.¹³⁹⁶ When it comes to the completion of the doctorate, the programme in medicine and surgery follows UAM's general doctoral regulations. Nevertheless, one criterion is added to the regular criteria, namely that the candidate must have been first author of at least one indexed publication on the topic of the dissertation.¹³⁹⁷ This criterion may be taken to apply primarily to candidates who have written their thesis as a monograph since candidates who have written a thesis presented as a compendium of publications must have published (as first authors) at least three articles.¹³⁹⁸

11.2.3 Cluster 3 – Engineering

UAM provides for one programme in engineering, namely in Computer and Telecommunication Engineering. For this programme, the recommended access profile is a prior degree in the field of Computer Science, Telecommunications or in related fields (physics, mathematics, industrial engineering).¹³⁹⁹ Candidates should have completed a master's degree in subjects which are related to the subject of the doctorate to be pursued.¹⁴⁰⁰ Language knowledge of B2 level in English is also required. Again, it is the Academic Committee who is responsible for admitting prospective candidates. For this, the Committee will particularly focus on: the candidate's CV, academic record during their bachelor's and master's, scientific publications, knowledge of English, other merits (e.g. research stays, excellence grants), and motivation and references.¹⁴⁰¹ Furthermore, candidates must also provide for a letter explaining how their previous training is suitable to the doctoral programme's research line to be pursued as well as two recommendation letters. The Academic Committee assesses

<u>20de%20formaci?n</u>. Furthermore, candidates may undertake the doctorate on a part-time basis in which case they have a maximum of five years to complete the doctorate; Facultad de Medicina, 'Dedicación a los estudios de doctorado', <u>https://www.uam.es/Medicina/DedicacionEstudiosDoctorado/1446765995325.htm?language=es&nodepath=Dedicaci?n%</u> <u>20a%20los%20estudios%20de%20doctorado</u>.

¹³⁹⁵ Escuela de Doctorado / UAM, Programa de Doctorado en Medicina y Cirurgía,

<u>https://www.uam.es/EscuelaDoctorado/documento/1446743649839/Medicina%20y%20Cirug%C3%ADa.pdf</u>. For more information on the exact content of the training activities see Facultad de Medicina, 'Actividades formativas',

https://www.uam.es/Medicina/ActividadesFormativas/1446766090923.htm?language=es&nodepath=Actividades%20form ativas.

¹³⁹⁶ Facultad de Medicina, 'Seguimiento de los estudios de Doctorado',

https://www.uam.es/Medicina/SeguimientoDoctorandos/1446766092140.htm?language=es&nodepath=Seguimiento%20 de%20los%20estudios%20de%20Doctorado and Facultad de Medicina, 'Evaluación',

https://www.uam.es/Medicina/Evaluacion/1446766092526.htm?language=es&nodepath=Evaluaci?n. ¹³⁹⁷ Facultad de Medicina, 'Tesis Doctorales',

https://www.uam.es/Medicina/TesisDoctorales/1446766399036.htm?language=es&nodepath=Tesis%20Doctorales. ¹³⁹⁸ Facultad de Medicina, 'Tesis Doctorales',

https://www.uam.es/Medicina/TesisDoctorales/1446766399036.htm?language=es&nodepath=Tesis%20Doctorales. ¹³⁹⁹ Escuela de Doctorado / UAM, Programa de Doctorado en Ingenería Informática y Telecomunicación,

https://www.uam.es/EscuelaDoctorado/documento/1446743664018/Ingenieria%20informatica%20y%20teleco.pdf. Alternative ways of accessing the doctorate area lso possible and can be found via Escuela Politécnica Superior, Requisitos de Acceso y Admisión,

https://www.uam.es/EPS/AccesoYAdmision/1242676000014.htm?language=es&nodepath=Requisitos%20de%20Acceso%2 0y%20Admisi?n.

¹⁴⁰⁰ See also Escuela Politécnica Superior, Perfil de ingreso,

https://www.uam.es/EPS/PerfilDeIngreso/1242675953367.htm?language=es&nodepath=Perfil%20de%20ingreso. ¹⁴⁰¹ Escuela de Doctorado / UAM, Programa de Doctorado en Ingenería Informática y Telecomunicación, https://www.uam.es/EscuelaDoctorado/documento/1446743664018/Ingenieria%20informatica%20y%20teleco.pdf.

the application by using a point system where a maximum of 120 points can be acquired for an application.¹⁴⁰² Additional training may be required by the Academic Committee in the event that the candidate's previous training does not meet the entry profile. Such additional training can comprise up to 30 ECTS in additional training and ideally corresponds to subjects of a research nature taught in relevant UAM master's degrees.¹⁴⁰³ This training must have been fulfilled in the first year after admission to the doctoral programme. Different from this complementary training, is the training doctoral candidates undergo after they have been admitted to the doctorate. In that case, training consist of attendance at research seminars and specialised courses, development of papers/presentations at (inter)national conferences, preparation and presentation at formal seminars, publication of articles in scientific journals, and research stays in foreign centres.¹⁴⁰⁴

12. The United Kingdom

In the United Kingdom, the Quality Code for Higher Education was recently revised and is now very succinct. It provides for expectations, core and common practices, and advice and guidance. The expectations are mandatory for all UK institutions, as are the core practices. The common practices are mandatory for institutions in Northern-Ireland, Scotland and Wales, but are not mandatory for institutions in England. The advice and guidance is not mandatory, but merely illustrative of a range of possible approaches. The expectations and practices are then divided between standards and quality. Research degrees are only mentioned once; in a core practice on quality, which provides that: "where the provider offers research degrees, it delivers these in appropriate and supportive research environments."

More information on Research Degrees can be found in a set of advice and guidance, which is, as mentioned earlier, neither mandatory nor binding. The Advice and Guidance on Research Degrees defines "Doctoral degrees" as "qualifications rooted in original research - the creation of new knowledge or originality in the application of knowledge. The doctorate is, therefore, unique in the array of qualifications offered by higher education providers."

The practical advice contained in this Advice and Guidance on Research Degrees covers the provision of information to research students and staff, the responsibilities of students and supervisors, the research environment, the supervisory team, opportunities for professional development, monitoring of progression, and assessment. However, these examples only illustrate the possibilities for the providers. They are free to take a completely different approach, or to follow the practical advice and guidance. In February 2020, the QAA adopted a new Characteristics Statement on Doctoral Degrees. As part of the UK Quality Code for Higher Education, the Characteristics Statement is not binding, but identifies what doctoral degrees could look like.

- ¹⁴⁰³ Escuela de Doctorado / UAM, Programa de Doctorado en Ingenería Informática y Telecomunicación, <u>https://www.uam.es/EscuelaDoctorado/documento/1446743664018/Ingenieria%20informatica%20y%20teleco.pdf</u>. See also Escuela Politécnica Superior, Perfil de ingreso,
- https://www.uam.es/EPS/PerfilDeIngreso/1242675953367.htm?language=es&nodepath=Perfil%20de%20ingreso. ¹⁴⁰⁴ Escuela de Doctorado / UAM, Programa de Doctorado en Ingenería Informática y Telecomunicación, https://www.uam.es/EscuelaDoctorado/documento/1446743664018/Ingenieria%20informatica%20y%20teleco.pdf.

¹⁴⁰² Escuela Politécnica Superior, Requisitos de Acceso y Admisión,

https://www.uam.es/EPS/AccesoYAdmision/1242676000014.htm?language=es&nodepath=Requisitos%20de%20Acceso%2 0y%20Admisi?n.

This means that no concrete conclusions can be drawn from the Advice and Guidance or the Characteristics Statement. More detailed provisions can therefore be found in the institutional regulations.

12.1 University of Essex

The University of Essex was attributed the power to confer degrees and grant other academic awards by Queen Elisabeth II, according to The Charter 4.A.vi. According to The Charter 21.A, the Senate of the University of Essex may adopt regulations pertaining to, among others, the award of degrees and other academic distinctions. The Senate has accordingly adopted the Principle Regulations on Research Degrees (PRRD) and the Code of Practice on Postgraduate Research Degrees (CPPRD). The University of Essex thus maintains two general regulations for its three faculties.

University of Essex confers, among others, the research degrees Doctor of Philosophy (PhD), Doctor of Medicine (MD), and a range of professional doctorates.¹⁴⁰⁵ In order to be admitted to a PhD, prospective candidates must fulfil several steps starting with the selection of their desired course of study.¹⁴⁰⁶ Once this course of study has been selected, prospective candidates must prepare a research proposal and find a supervisor willing to supervise the work.¹⁴⁰⁷ Prospective candidates must subsequently apply online providing documentation of their language knowledge, academic transcripts, CV, research proposal, personal statement, and references. There are three possible entry points for new doctoral candidates: October, January, and April. Whereas most candidates start in October, some programmes have starting dates in January or April.¹⁴⁰⁸ In light of the start date for those applicants who need a visa, or a month ahead of the start date for those who do not need a visa.¹⁴⁰⁹

When it comes to the status of the doctoral candidates, these are considered students (rather than staff). However, if they take up employment (e.g. teaching duties or work as a research assistant) they will also hold staff member status for that purpose.¹⁴¹⁰ Candidates must enrol and pay fees to undertake their doctorate at UEssex. Nevertheless, the payment of fees is not necessary for candidates on scholarship (since the scholarship will cover the fees). Doctoral candidates are thereby mostly self-funded (i.e. the student pays all fees and costs associated with their studies and there is no scholarship). Students can nevertheless also be funded through UEssex scholarships, the UK Research Council, other research unit or charitable trust scholarships, funding from the government of the candidate's home country, or funding from an employer.¹⁴¹¹

¹⁴⁰⁵ Article 4.1 of the PRRD. PhDs are generally the most prevalent type of PhD at UEssex followed by integrated PhDs, medical doctorates, and biomedical doctorates (based on information received from a representative of UEssex).
¹⁴⁰⁶ See University of Essex, 'Preparing and making your application',

<u>https://www.essex.ac.uk/postgraduate/research/applying-to-essex</u>. ¹⁴⁰⁷ Ihid.

¹⁴⁰⁸ Based on information received by a representative of UEssex.

¹⁴⁰⁹ University of Essex, 'Preparing and making your application',

https://www.essex.ac.uk/postgraduate/research/applying-to-essex.

¹⁴¹⁰ Based on information received by a representative of UEssex. Students who receive a scholarship are given student status, whereby UEssex scholarships do not require teaching as part of the scholarship. The university is currently working on developing Assistant Lecturer scholarships which would see students having both student and staff status. ¹⁴¹¹ Based on information received by a representative of UEssex.

Access criteria are set for each of the doctoral programmes individually but generally require either a combination of a good honours degree and a master's degree or a master's degree with merit/good master's degree.¹⁴¹² Each Department, School or Centre with doctoral students must supply all new doctoral students with the departmental arrangements, which should be appropriate for the research degree concerned and be approved by the Dean.¹⁴¹³ Furthermore, the doctoral students must also receive an induction programme at the start of their study.¹⁴¹⁴ Doctoral students must also receive guidelines regarding the volume and standard of work to be expected at the end of each year and for confirmation using a milestones document.¹⁴¹⁵ Training at UEssex takes place both at the department level and through Proficio – the university's innovative professional development scheme which provides doctoral students with a designated amount of funding to curate a tailored training plan tailored to their needs.¹⁴¹⁶ This means that candidates do not follow pre-determined courses, but in set are able to tailor their training to their specific needs.

Of course, doctoral students must also be supervised. Doctoral students must have at least one supervisor who is engaged in research and has relevant publications. If two supervisors are appointed, one supervisor will be nominated as the primary supervisor. The primary supervisor will act as the first point of contact for the student, be responsible for record keeping and provide reports.¹⁴¹⁷ Formal supervisory meetings between the doctoral student and the supervisors must be held at least once a month, where they are supposed to communicate and engage in discussion and/or review of the progress.¹⁴¹⁸ Additionally, the Supervisory panel must take place twice a year. The Supervisory Panel consists of three members of staff, including the supervisor(s), one staff member as Chair, and often another member of staff in the relevant area of expertise.¹⁴¹⁹ Specific provisions are in place in case of problems with supervision.¹⁴²⁰

The supervisors too have certain responsibilities, such as maintaining regular contact with the student,¹⁴²¹ providing guidance about the nature and standard of the expected research work,¹⁴²² requesting written work and oral presentations and giving feedback,¹⁴²³ identifying, recording and ensuring the training needs of doctoral students,¹⁴²⁴ keeping records of meetings with the doctoral

¹⁴¹² See University of Essex, "Courses – PhD", <u>https://www.essex.ac.uk/course-search?collection=uoe-courses-</u>

<u>meta&query=PhD&f.All%7CPGR=Research+degrees&start_rank=21</u>. Requirements may differ for integrated PhD's where a candidate will first study a year at master's level as part of their PhD course. In general, masters degrees are the expectation although equivalent vocational or research experience may also be used instead of a masters degree. It is also more common (in comparison with other fields) for the natural sciences for students to be able to enter a doctorate directly from undergraduate study. Furthermore, funders may also set particular levels of training and skills acquisition for doctoral studies; based on information received from a representative of UEssex.

¹⁴¹⁷ Article 1.4 of the CPPRD.

¹⁴¹³ Article 1.2 of the CPPRD.

¹⁴¹⁴ Article 1.3 of the CPPRD.

¹⁴¹⁵ Article 1.12 of the CPPRD.

¹⁴¹⁶ See University of Essex, 'Postgraudate research funding – Proficio',

<u>https://www.essex.ac.uk/postgraduate/research/proficio</u> and University of Essex, 'Proficio – the scheme explained', <u>https://www.essex.ac.uk/student/postgraduate-research/proficio</u>.

¹⁴¹⁸ Article 1.7 of the CPPRD.

¹⁴¹⁹ Articles 1.8 and 4.1 of the CPPRD

 $^{^{\}rm 1420}$ Article 1.10 of the CPPRD.

¹⁴²¹ Article 2.2 of the CPPRD.

¹⁴²² Article 2.3 of the CPPRD.

¹⁴²³ Article 2.4 of the CPPRD.

¹⁴²⁴ Article 2.8 of the CPPRD.

students,¹⁴²⁵ arranging meetings with the Supervisory Panels,¹⁴²⁶ submitting reports on the progress doctoral students,¹⁴²⁷ advising the doctoral students,¹⁴²⁸ encouraging doctoral students to think about their employment and future career,¹⁴²⁹ approving the proposed title for the thesis¹⁴³⁰ and nominating the examiners.¹⁴³¹

Doctoral students attend classes, seminars and personal consultations as required and arranged by the supervisor(s), must attend meetings with the Supervisory Panel and produce work or other proof of progress, must submit a thesis for examination under a title which has been approved by the Head of the Department, and must be aware of the requirements of these regulations and the Code of Practice.¹⁴³² Full-time students typically undertake 36 hours of study per week of work on the research project and thesi writing, averaged across the year.¹⁴³³ However, they can also be employed to teach or demonstrate at the University of Essex, in which case they are regulated by both their employment contract and the student status expectations and, if in receipt of a scholarship, by their scholarship or studentship.1434

Doctoral students who wish to obtain a PhD research degree are initially registered as MPhil/PhD.¹⁴³⁵ At the end of the first year of study, students of the Faculty of Social Sciences or the Faculty of Humanities may have their PhD status confirmed. Students of the Faculty of Science and Health may have their PhD status confirmed during the first term of the second year of study.¹⁴³⁶ Their progress is monitored by the Research Students' Progress Board (RSPB), which meets twice a year to review the progress of all doctoral students against discipline-specific milestones.¹⁴³⁷ The RSPB is established by each department, is chaired by the Graduate Director or the Head of Department and should include at least two other experienced supervisors.¹⁴³⁸ It is the RSPB that decides on the confirmation of their PhD status, but only when it is satisfied that the student has produced work of sufficient quality and quantity to provide evidence of appropriate PhD-level progress in a given discipline.¹⁴³⁹ If the PhD status of the doctoral student is not confirmed at the first meeting with the RSPB, their progress will be re-evaluated at the next meeting.¹⁴⁴⁰ If the PhD status of the doctoral student is not confirmed at the second meeting, the RSPB will recommend to the Dean that the status be downgraded or that the doctoral student be required to withdraw. The Dean may accept or reject that recommendation.¹⁴⁴¹

Doctoral students are required to be registered as a doctoral student for a minimum period, referred to as the standard period. If they do not submit the thesis within the standard period, they may be

¹⁴³³ Article 4.3 of the PRRD.

¹⁴²⁵ Article 2.9 of the CPPRD.

¹⁴²⁶ Article 2.10 of the CPPRD.

¹⁴²⁷ Article 2.11 of the CPPRD. ¹⁴²⁸ Article 2.12 of the CPPRD.

¹⁴²⁹ Article 2.14 of the CPPRD.

¹⁴³⁰ Article 2.15 of the CPPRD.

¹⁴³¹ Article 2.16 of the CPPRD. ¹⁴³² Article 4.2 of the PRRD.

¹⁴³⁴ Article 4.4 of the PRRD.

¹⁴³⁵ Article 4.63 of the PRRD and Article 4.4 of the CPPRD. ¹⁴³⁶ Article 4.64 of the PRRD and Article 4.4 of the CPPRD.

¹⁴³⁷ Articles 1.13 and 5.2 of the CPPRD.

¹⁴³⁸ Article 5.1 of the CPPRD.

¹⁴³⁹ Article 4.65 of the PRRD.

¹⁴⁴⁰ Article 4.67 of the PRRD and Article 5.5 of the CPPRD.

¹⁴⁴¹ Article 4.68 of the PRRD.

permitted to move into a completion period.¹⁴⁴² The completion period covers the period between the end of the standard period and the end of the last expected submission date.¹⁴⁴³ This period consists of a maximum of three terms which can be approved on a term-by-term basis or two terms may also be approved from the start.¹⁴⁴⁴ Extensions beyond the completion period can only be granted in exceptional circumstances and must be approved by the Dean.¹⁴⁴⁵ The standard and completion period of the MD research degree are two years standard period and up to one year completion period;¹⁴⁴⁶ those of the PhD research degree are three years standard period and up to one year completion period.¹⁴⁴⁷ For Integrated PhD research degrees (MRES and PhD), the standard period is four years, with the first year comprising an intensive period of training, followed by three years in accordance with the PhD research programme.¹⁴⁴⁸ The PhD by Programme research degree comprises of three years, but is preceded by six months of intensive training.¹⁴⁴⁹ However, the Dean may also reduce the standard period of study in exceptional circumstances, if no more than three terms shall be waived and if they are satisfied that the doctoral student has completed their study and research and is ready to submit the thesis.¹⁴⁵⁰

At the end of each academic year during the standard period, the RSPB may permit a doctoral student to proceed to the next year if it is satisfied that the doctoral student met the requirements. The RSPB will report its decision to the Dean, accompanied by the appropriate supporting documents.¹⁴⁵¹ It is also the RSPB that allows the doctoral student to proceed into the completion period, if it is satisfied that the student has met the requirements.¹⁴⁵² Furthermore, if the doctoral student has not met the requirements at the end of the standard period, the Dean may extend the standard period with one term on the recommendation of the RSPB. In such instances, the number of available terms for the completion period will be reduced by one term.¹⁴⁵³

Specific provisions apply in case of upgrading, downgrading or discontinuation of the research degree or transfer from full-time to part-time or vice-versa.¹⁴⁵⁴ The Dean may permit a change of degree title via a transfer to an alternative and approved programme.¹⁴⁵⁵

As regards the requirements for the thesis, the maximum word length is specified for each research programme. If the maximum word length is exceeded, permission from the Dean must be sought at least one month prior to the submission of the thesis.¹⁴⁵⁶ The maximum word length for the MD research degree is 65.000 words, excluding references and bibliography;¹⁴⁵⁷ that of the PhD research

- ¹⁴⁴⁹ Article 4.75 of the PRRD.
- ¹⁴⁵⁰ Article 4.8 of the PRRD.
- ¹⁴⁵¹ Article 4.7 of the PRRD.
- ¹⁴⁵² Article 4.10 of the PRRD. ¹⁴⁵³ Article 4.11 of the PRRD.

¹⁴⁴² Article 4.6 of the PRRD.

¹⁴⁴³ Article 4.9 of the PRRD.

¹⁴⁴⁴ Based on information received by a representative of UEssex.

¹⁴⁴⁵ Article 4.6 of the PRRD.

 $^{^{\}rm 1446}$ Article 4.84 of the PRRD.

¹⁴⁴⁷ Article 4.62 of the PRRD.

 $^{^{\}rm 1448}$ Article 4.72 of the PRRD.

¹⁴⁵⁴ Articles 4.13-4.16 of the PRRD.

¹⁴⁵⁵ Articles 4.13-4.16 of the PRRD.

¹⁴⁵⁶ Article 4.17 of the PRRD. ¹⁴⁵⁶ Article 4.18 of the PRRD.

¹⁴⁵⁷ Article 4.85 of the PRRD.

degree is 80.000 words, excluding references and bibliography.¹⁴⁵⁸ The summary or abstract of the thesis may not exceed 300 words.¹⁴⁵⁹ The thesis and summary must be written in English, but the Dean may allow the doctoral student to write in another language.¹⁴⁶⁰ The doctoral student must give two months prior notice to the Dean before submitting the thesis.¹⁴⁶¹ The form of the thesis may vary. Accordingly, the thesis normally consists of an investigation by one author into a research theme. However, specific rules apply if the thesis consists of co-written or co-produced work, as well as if the thesis consists of papers or involves original creative output.¹⁴⁶² The doctoral student must identify, and provide full references to, all sources, published and unpublished.¹⁴⁶³ Upon submission of a thesis for examination, the doctoral student becomes a candidate for that research degree.¹⁴⁶⁴

The PhD thesis must embody the research results.¹⁴⁶⁵ For both research degrees, in the thesis and the viva voce, the doctoral candidate must conduct and present original investigations that make a significant contribution to knowledge, to test ideas, to understand the relationship of the theme of the investigations to a wider field of knowledge and to express themselves clearly and concisely.¹⁴⁶⁶

Copies of the thesis for examination must be submitted in accordance with the Policy on Thesis Submission, Deposit and Retention (PTSDR).¹⁴⁶⁷ Doctoral candidates must submit their thesis electronically as a single PDF file.¹⁴⁶⁸

Once the thesis is submitted for examination, the examiners will be appointed. The doctoral candidate will be examined by at least two persons appointed by the Dean: an internal and an external examiner.¹⁴⁶⁹ The internal examiner is an academic staff member of the University of Essex or Partner Institution,¹⁴⁷⁰ whereas the external examiner must be independent.¹⁴⁷¹ Specific provisions apply on the role of the internal and external examiners.¹⁴⁷² If a person has been involved as supervisor, that person cannot be appointed as an examiner, nor be present at the viva voce (oral examination) of the doctoral candidate. The same applies to any person who has a professional or personal relationship with the doctoral candidate. Furthermore, when recommending and appointing examiners, every effort shall be made to achieve a reasonable gender balance.¹⁴⁷³ If appropriate, the Dean will appoint an independent chair in accordance with the Policy on the Appointment of an Independent Chair.¹⁴⁷⁴

Prior to the viva voce, the examiners must each complete an Initial Report Form, giving their assessment of the thesis. These must be submitted to the Postgraduate Research Education Team at

- ¹⁴⁶⁶ Articles 4.69 and 4.85 of the PRRD.
- ¹⁴⁶⁷ Article 4.22 of the PRRD.
- ¹⁴⁶⁸ Article 2.1 of the PTSDR.
- ¹⁴⁶⁹ Article 6.1 of the CPPRD.
- ¹⁴⁷⁰ Article 6.3 of the CPPRD.
- ¹⁴⁷¹ Article 6.4 of the CPPRD.
- ¹⁴⁷² Articles 6.5-6.6 of the CPPRD.

 $^{^{\}rm 1458}$ Article 4.70 of the PRRD.

¹⁴⁵⁹ Article 4.19 of the PRRD.

¹⁴⁶⁰ Article 4.20 of the PRRD.

¹⁴⁶¹ Article 4.21 of the PRRD. ¹⁴⁶² Article 4.23 of the PRRD.

¹⁴⁶³ Article 4.24 of the PRRD.

¹⁴⁶⁴ Article 4.27 of the PRRD.

¹⁴⁶⁵ Article 4.69 of the PRRD.

¹⁴⁷³ Article 4.28 of the PRRD.

¹⁴⁷⁴ Article 6.9 of the CPPRD.

least one week prior to the viva voce. Following the viva voce, the examiners must complete a Joint Report Form, recording the outcome of the examination.¹⁴⁷⁵ Upon request, the doctoral candidate can receive copies from the reports of the examiners.¹⁴⁷⁶

The viva voce is held within two months of the submission of the thesis for examination.¹⁴⁷⁷ Online defences were conducted during COVID-19 and will also be maintained in the future (candidates can request preferred format: in-person or an online viva voce examination).¹⁴⁷⁸ The doctoral candidate must be informed within one month from the date of the viva voce.¹⁴⁷⁹ The examiners must be present at the viva voce and must hold a meeting to discuss their preliminary views on the thesis and to plan the viva voce. The doctoral candidate should be given the opportunity to defend the thesis.¹⁴⁸⁰ The doctoral candidate must attend the viva voce, except if excused by the Dean. The doctoral candidate will only be excused if the examiners are in agreement that the doctoral candidate will pass the viva voce, or if exceptional circumstances prevent the doctoral candidate from engaging in the viva voce. The viva voce will not be waived if the examiners are of the opinion that the doctoral candidate seems likely to fail, is only eligible for a lower degree, or is to be referred.¹⁴⁸¹ Supervisors may not be present at the viva voce, except in exceptional circumstances and if approved by the Dean and the external examiner. It is good practice to invite the supervisor to attend the end of the viva voce when the examiners communicate their recommendation to the doctoral candidate.¹⁴⁸²

Several positive outcomes of the viva voce are possible for each research degree, ranging from "pass subject to no corrections" to "pass subject to major corrections". In case the doctoral candidate does not meet the requirements for the higher degree, the doctoral candidate may resubmit a revised thesis for examination within 12 months. The examiners must indicate the shortcomings of the thesis and the required changes. If those criteria are met, a lower degree may be awarded, if necessary subject to corrections.¹⁴⁸³

In case the examiners disagree on the outcome of the viva voce, they may, after due consideration, certify that their disagreement is irreconcilable. Two new examiners will then be appointed. They will examine the thesis and conduct a viva voce.¹⁴⁸⁴

In order to receive the degree, the doctoral candidate must first deposit a copy or copies of the thesis in accordance with the Policy on Thesis Submission, Deposit and Retention (PTSDR).¹⁴⁸⁵ Depending on the outcome of the viva voce, the doctoral candidate must either submit the thesis following a period of corrections,¹⁴⁸⁶ submit the thesis following a referral period,¹⁴⁸⁷ or submit the thesis for award.¹⁴⁸⁸

¹⁴⁷⁵ Article 6.10 of the CPPRD.

¹⁴⁷⁶ Article 4.35 of the PRRD.

¹⁴⁷⁷ Article 4.30 of the PRRD.

¹⁴⁷⁸ Based on information received by a representative of UEssex.

¹⁴⁷⁹ Article 4.35 of the PRRD.

¹⁴⁸⁰ Article 6.8 of the CPPRD.

 $^{^{\}rm 1481}$ Article 4.30 of the PRRD and Article 6.11 of the CPPRD.

¹⁴⁸² Article 4.32 of the PRRD.

¹⁴⁸³ Article 4.33 of the PRRD.

¹⁴⁸⁴ Article 4.34 of the PRRD and Article 6.12 of the CPPRD.

¹⁴⁸⁵ Article 4.36 of the PRRD.

¹⁴⁸⁶ Article 2.2 of the PTSDR.¹⁴⁸⁷ Article 2.3 of the PTSDR.

¹⁴⁸⁸ Article 2.4 of the PTSDR.

The thesis is normally made open access when deposited,¹⁴⁸⁹ but it is possible for doctoral candidates to place restrictions on their thesis by writing to the Research Repository prior to submission of their thesis.¹⁴⁹⁰ The Dean then determines the conferment of the degree.¹⁴⁹¹

If the doctoral candidate is suspected of an academic offence, at any stage during the examination process, the examiners must notify the Postgraduate Research Education Team, which will arrange an investigation into the matter. The viva voce will of course be suspended.¹⁴⁹²

Doctoral students and candidates have the right to appeal to a decision of the RSPB or an outcome of the viva voce, in accordance with the Progress and Appeals Procedures for Research Degree Students (PAPRDS).¹⁴⁹³ Accordingly, doctoral students who wish to appeal against one of these decision, must do so in writing using the Form of Appeal, stating fully and precisely the grounds for appeal, and do so within 20 working days of receiving the written confirmation of that decision.¹⁴⁹⁴ Appeals procedures are normally completed within 40 working days.¹⁴⁹⁵

Finally, joint awards, dual awards and co-supervision of doctoral students are regulated by the Policy on Dual and Joint Awards (PDJA).¹⁴⁹⁶ As regards dual awards, only the definition as employed by the QAA is repeated.¹⁴⁹⁷ Joint awards are regulated more in detail. Joint awards are defined as research programmes which are co-developed by two (or more) degree-awarding bodies. All components must be successfully completed and lead to a single joint award. The single award can be conferred with multiple certificates, all specifying the joint degree, and validated by and bearing the names of the joint award partners.¹⁴⁹⁸ For the development of a dual or joint award, reference must be had to the Partnership approval process and the University's strategic framework for partnerships, which apply to all types of academic partnership.¹⁴⁹⁹ The standard University Regulations do not apply to joint awards,¹⁵⁰⁰ but the agreed Memorandum of Understanding applies instead.¹⁵⁰¹ Finally, co-supervision can take place in two forms.¹⁵⁰² Either a student at another institution requests that a member of academic staff of the University of Essex be their second supervisor,¹⁵⁰³ or a research student of the University of Essex requests an external academic to ben an Associate Supervisor.¹⁵⁰⁴

12.2 Brunel University London

Regulations on doctoral degrees in the Brunel University London can be found from the Senate Regulation 5 on Research Degrees and in the Code of Practice for Research Degrees.

¹⁴⁹⁷ Article 1 of the PDJA.

¹⁵⁰⁰ Article 2.6 of the PDJA.

¹⁵⁰² Article 4 of the PDJA.

¹⁴⁸⁹ Article 5 of the PTSDR.

¹⁴⁹⁰ Article 3 of the PTSDR.

¹⁴⁹¹ Article 4.37 of the PRRD.

¹⁴⁹² Article 6.13 of the CPPRD.

¹⁴⁹³ Article 4.38 of the PRRD and Article 6.14 of the CPPRD.

¹⁴⁹⁴ Article 2.2 of the PAPRDS.

¹⁴⁹⁵ Article 2.5 of the PAPRDS.

¹⁴⁹⁶ Article 4.50 of the PRRD.

¹⁴⁹⁸ Article 2 of the PDJA.¹⁴⁹⁹ Article 2.1 of the PDJA.

¹⁵⁰¹ Article 2.7 of the PDJA.

¹⁵⁰³ Article 4.1 of the PDJA.

¹⁵⁰⁴ Article 4.2 of the PDJA.

The University offers doctoral programmes in Doctor of Education (EdD), Doctor of Engineering (EngD), Doctor of Philosophy (PhD) and Doctor of Public Health (DrPH).¹⁵⁰⁵ Applicants with a First of Upper Second Class Honours degree are admissible to the programmes, as are persons holding a master's degree. Moreover, a sufficient level of English language is required.¹⁵⁰⁶ The University also provides a degree of Doctor of Philosophy by published works (PhD) and Higher Doctorates leading to awarding of Doctor of Laws (LLD), Doctor of Letters (DLitt), Doctor of Science (DSc) and Doctor of Technology (DTech), which are subject to specific requirements discussed further below.

The programmes can be organised either full-time or part-time.¹⁵⁰⁷ Generally, a full-time programme has a minimum duration of 24-36 months, and a maximum of 48-60 months depending on the chosen degree programme.¹⁵⁰⁸ Only in exceptional circumstances the candidates are permitted to be registered simultaneously for more than one degree.¹⁵⁰⁹ In order to pursue the doctorate, candidates must enrol and pay fees annually (either themselves or from their sponsorship).¹⁵¹⁰ During their time at BUL, candidates are considered doctoral researchers since they can be employed as graduate teaching assistants or take up other work activities on campus.¹⁵¹¹ In terms of funding, BUL offers candidates PhD studentships, partial scholarships, and academic prizes to help with research fees.¹⁵¹²

Doctoral candidates must demonstrate the "creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication."¹⁵¹³ Furthermore, the candidates must show the ability to conceptualise, design and implement a project and show understanding of research and advanced academic techniques.¹⁵¹⁴ Next to a thesis, they are required to attend lectures, courses and training specified in the programme.¹⁵¹⁵ Candidates may need complete all or part of a postgraduate programme or formal training in research methods as part of their research programme.¹⁵¹⁶ The candidate's progress is reviewed at least annually.¹⁵¹⁷

Each candidate is appointed a supervisory team, where one principal supervisor is selected. The supervisors must be members of the University's academic staff or hold a recognised supervisor status. If the candidate is registered outside the campus, at least one local supervisor must be appointed.¹⁵¹⁸ The principal supervisor must have experience of supervision or other appropriate experience and be active in research according to the disciplinary norms.¹⁵¹⁹ The supervisors are

1516 Ibid.

¹⁵⁰⁵ Section 9 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁰⁶ Section 7 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁰⁷ Section 8 Brunel University London Senate Regulation 5 on Research Degrees. Depending on the course, and the time spent, the duration of the doctorate may differ. For example, a full-time PhD course is 24-48 months while a part-time PhD course is 48-96 months (Based on information received by a representative of BUL).

 $^{^{\}rm 1508}$ Section 10 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁰⁹ Section 13 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵¹⁰ Based on information received by a representative of BUL.

¹⁵¹¹ Based on information received by a representative of BUL.

¹⁵¹² Ibid.

¹⁵¹³ Section 1(a) Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵¹⁴ Section 1(b)-(d) Brunel University London Senate Regulation 5 on Research Degrees.

 $^{^{\}rm 1515}$ Section 15 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵¹⁷ Section 16 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵¹⁸ Section 14 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵¹⁹ Brunel University Code of Practice for Research Degrees, p. 14.

responsible, for instance, for providing guidance in the research, the planning of the programme, career options, ethics and research integrity, and drafting the thesis.¹⁵²⁰

Doctoral thesis can be concluded in various formats, that is substantiated with a scholarly text indicating its contribution to the requirements of the doctoral degree. It may be a portfolio of substantial musical composition, an original literary text, a form of practical performance or an artefact.¹⁵²¹ The doctoral thesis is to be written in English. It must demonstrate appropriate organisation and have clarity of expression and written style. Furthermore, it must be suitable for publication.¹⁵²² The final version is published in the Brunel University Research Archive.¹⁵²³ The thesis is copyright protected by a declaration included in the thesis.¹⁵²⁴ At least two weeks before the formal submission, the candidate is required to submit a final draft to be reviewed by the principal supervisor.¹⁵²⁵

The doctoral candidates are examined by at least two examiners, of which one must be external to the University.¹⁵²⁶ The external examiner must hold position as a professor, a reader, or a senior lecturer in a UK university. Otherwise, their appointment must be substantiated with other reasons.¹⁵²⁷ The oral examination will take place within three months of the date of submission of the thesis.¹⁵²⁸ Prior to the viva voce examination, the examiners complete a preliminary report assessing the thesis.¹⁵²⁹ As far as the viva voce is concerned, these took place online during the COVID-19 pandemic.¹⁵³⁰ After the oral examination has taken place, the examiners in agreement will submit a joint report.¹⁵³¹ In case the examiners disagree whether the degree should be awarded, the reports will be submitted separately.¹⁵³²

As comparison to the "regular" Doctor of Philosophy, the Doctor of Philosophy by published works can be completed on the basis of publications accompanied by a critical review. The "published works" include work that is written, performed, or displayed in the public domain, and for which there is a retrievable record. The publications must follow an overarching theme.¹⁵³³ Applicants who have been a member of the academic staff of the University for at least three continuous years are eligible for the programme.¹⁵³⁴ Generally, applicants with a previous doctoral degree are not admissible.¹⁵³⁵ The final approval for the programme is decided on the basis of published works and the applicant's

¹⁵²⁰ Brunel University Code of Practice for Research Degrees, p. 17.

 $^{^{\}rm 1521}$ Section 4 Brunel University London Senate Regulation 5 on Research Degrees.

 $^{^{\}rm 1522}$ Section 3 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²³ Section 23 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²⁴ Section 24 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²⁵ Brunel University Code of Practice for Research Degrees, p. 31.

 $^{^{\}rm 1526}$ Section 26 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²⁷ Section 27 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²⁸ Section 33 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵²⁹ Section 32 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³⁰ BUL has nevertheless recently started having online defences again; Based on information received by a representative of BUL.

¹⁵³¹ Section 35 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³² Section 36 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³³ Sections 41 and 42 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³⁴ Section 43 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³⁵ Section 44 Brunel University London Senate Regulation 5 on Research Degrees.

contribution to collaborative work.¹⁵³⁶ The PhD by published works is completed for a minimum period of 6 months and maximum of one year,¹⁵³⁷ during which they are supervised by two supervisors.¹⁵³⁸

As mentioned above, the University also provides Higher Doctorate degrees. They are awarded to candidates who present distinguished original work, establishing their position as an authority in a specific field of study. The original work can be concluded in a form of published material or as a scientific or technological innovation, development, or achievement.¹⁵³⁹ Applicants who are a current member of the University staff or who hold another degree are admissible to the programme.¹⁵⁴⁰ The final submission is examined by three examiners, of which at least two are external to the University.¹⁵⁴¹ The examiners will submit a report of their recommendation on the awarding of the degree to the Vice-Chancellor.¹⁵⁴²

With collaboration with other institutions, it is possible to complete the degree of Doctor of Philosophy as a joint award.¹⁵⁴³ The degree is governed by a Memorandum of Agreement approved and signed between the University and the institutions involved.¹⁵⁴⁴ The agreement is supplemented by an Individual Doctor Agreement signed by the institutions and the candidate's supervisors, that lays down the terms and conditions governing the joint award.¹⁵⁴⁵

As further specified in these agreements, the applicants must satisfy the entry requirements in both the institutions.¹⁵⁴⁶ The candidate is subject to the regulations of the institutions in which they are registered.¹⁵⁴⁷ The candidates are normally registered in both institutions, unless otherwise agreed.¹⁵⁴⁸ The periods spend at each institution is specified in the agreement.¹⁵⁴⁹ The minimum period of the programme should not be less than 24 months and a maximum of 48 months.¹⁵⁵⁰

The joint programme includes a full-time supervised study, generic and subject specific research training, together with training on generic skills.¹⁵⁵¹ It is the responsibility of the supervisor to ensure that the candidate follows a programme that meets all the training requirements.¹⁵⁵² The candidates are supervised by a team including at least one supervisor from each institution. These supervisors must satisfy the criteria of appointment of supervisors at both institutions. The supervisor from Brunel University must be an academic member of the University staff. One of these supervisors are appointed as the principal supervisor, which may change depending on the institution where the

¹⁵³⁶ Section 45 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵³⁷ Section 46 Brunel University London Senate Regulation 5 on Research Degrees. ¹⁵³⁸ Section 47 Brunel University London Senate Regulation 5 on Research Degrees.

 ¹⁵³⁹ Section 47 Brunel University London Senate Regulation 5 on Research Degrees.
 ¹⁵³⁹ Section 54 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁰ Section 55 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴¹ Section 59 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴² Section 62 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴³ Section 65 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁴ Section 66 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁵ Section 67 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁶ Sections 69 and 70 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁷ Section 73 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁸ Section 72 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁴⁹ Section 74 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁵⁰ Section 80 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁵¹ Section 71 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁵² Section 78 Brunel University London Senate Regulation 5 on Research Degrees.

candidate is physically staying. In addition, the team may consist of other supervisors and/or independent mentors.¹⁵⁵³

The examination is based on common principles, under which no member of supervisory team may be appointed as an examiner. At least two examiners are appointed, of which one is external to the Universities. The candidate must submit a written thesis or equivalent that is defended in an oral examination.¹⁵⁵⁴ The degree award is to be approved by both institutions, where in Brunel University, the decision is taken by the Senate on the recommendation of the examiners.¹⁵⁵⁵

Further provisions on collaboration and joint degrees are found from Senate Regulation 7 on Collaborative Provision. The Senate is the principal body empowered with the awarding of degrees and the establishment of collaborative partnerships with other institutions, business, government or with the non-profit sector in the UK or abroad.¹⁵⁵⁶ The collaborative arrangements are subject to the mandatory code of practice approved by the Senate.¹⁵⁵⁷ The degrees provided under these arrangements are to be equivalent to any comparable awards provided by the University¹⁵⁵⁸, and unless otherwise stated by the Senate, the partner institutions must comply with all the regulations that apply to programmes of study.¹⁵⁵⁹

 $^{^{\}rm 1553}$ Section 76 Brunel University London Senate Regulation 5 on Research Degrees.

 $^{^{\}rm 1554}$ Section 86 Brunel University London Senate Regulation 5 on Research Degrees.

 $^{^{\}rm 1555}$ Section 90 Brunel University London Senate Regulation 5 on Research Degrees.

¹⁵⁵⁶ Section 2 Brunel University Senate Regulation 7 on Collaboration Provision.

¹⁵⁵⁷ Section 3 Brunel University Senate Regulation 7 on Collaboration Provision.

¹⁵⁵⁸ Section 4 Brunel University Senate Regulation 7 on Collaboration Provision.

 $^{^{\}rm 1559}$ Section 7 Brunel University Senate Regulation 7 on Collaboration Provision.



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