

**These doctoral regulations have been worded carefully to be up to date; however, errors cannot be completely excluded. The official German text available at the Office of Doctoral Affairs is the version that is legally binding.**

## **Faculty Doctoral Regulations for the Faculty of Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) (FPromO Tech)**

**Dated 21 January 2013**

amended by statute from  
06 February 2014

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## I. General Conditions

### Section 1 Scope

<sup>1</sup>These doctoral regulations (FPromO Tech) supplement the General Doctoral Regulations of Friedrich-Alexander-Universität Erlangen-Nürnberg (RPromO) and are thus structured in a similar manner. <sup>2</sup>Therefore some sections do not contain further provisions.

### Section 2 Doctoral Degrees

#### Section 3 Doctoral Titles

The title of the honorary doctoral degree awarded by the Faculty of Engineering is Doktorin or Doktor der Ingenieurwissenschaften ehrenhalber (Dr.-Ing. e.h.).

#### Section 4 Bodies Responsible and Procedural Regulations

(1) <sup>1</sup>The body responsible for doctoral degrees at the Faculty of Engineering is the Faculty Council. <sup>2</sup>The Faculty Council can delegate tasks to its chairperson or another of its members.

(2) If the Faculty Council takes a decision on the assessment of doctoral examinations, only the members of the Faculty Council who are authorised examiners for doctoral proposals according to Section 5 of the RPromO shall be eligible to vote.

(3) <sup>1</sup>All consultations of the Faculty Council or Examining Committee related to procedures regulated by this agreement shall be held in non-public sessions. <sup>2</sup>The reviewers shall be invited to all consultations governed by Section 11 (5)(1) of the RPromO (recommending refusal of the thesis).

(4) <sup>1</sup>The Examining Committee consists of at least four members appointed by the Dean. <sup>2</sup>The Examining Committee shall consist of:

1. A chairperson from the full-time professors at the Faculty of Engineering or professors according to Section 5 (2)(1)(2) of the RPromO, usually with the same discipline as the doctoral candidate; an adjunct professor may be appointed chairperson if they are employed on a full-time basis at the Faculty of Engineering;
2. The reviewers
3. An authorised examiner from another department of the Faculty of Engineering or another FAU faculty in exceptional cases.

<sup>3</sup>The chairperson shall not be permitted to act as a reviewer in the same procedure. <sup>4</sup>If a member of the Examining Committee cannot take part in the oral examination and less than four members of the Examining Committee remain, the Dean can appoint another university lecturer to replace them at the request of the candidate.

#### Section 5 Reviewers and Supervisors

(1) <sup>1</sup>Full-time and part-time university lecturers who are primary or secondary members of the Faculty of Engineering are entitled to supervise doctorate procedures (Section 5 (2)(2), (3) RPromO). <sup>2</sup>Section 18 of the RPromO, shall remain unaffected.

(2) As a rule, the supervisor of the doctoral proposal is also appointed as a reviewer.

(3) <sup>1</sup>At least one reviewer must be a full-time university lecturer at the Faculty of Engineering. <sup>2</sup>Junior professors must submit proof of a positive intermediary evaluation in order to be appointed as reviewers. <sup>3</sup>Retired professors maintain the same rights as full-time university lecturers at the Faculty of Engineering for three years after their retirement.

(4) If a junior professor who has not been given a positive intermediary evaluation, a university lecturer from a foreign university who holds an equivalent position or a person according to Section 5 (3)(1)(5) of the RPromO is proposed as a reviewer, an additional reviewer according to Section 3 (1) shall be required; Section 3 (2) must be applied accordingly.

(5) Doctoral degrees in co-operation with other universities shall require at least two reviewers from one of the universities to be university lecturers.

## **II. Admission to a Doctorate**

### **Section 6 Admission Requirements**

(1) To be admitted to a doctorate, the candidate must present proof of one of the following degrees:

1. A pass in a Diplom examination (Diplomhauptprüfung) or Master's examination, including a Diplom thesis or Master's thesis, after a usually five-year long degree programme at a German university or an equivalent degree programme at a foreign university in an engineering, science or maths-related subject.
2. A pass in a Master's examination after a usually five-year long degree programme at a university of applied sciences in an engineering, science or maths-related subject. Generally, applicants must have achieved 300 ECTS credits over the course of their Bachelor's and Master's studies and must have written a Master's thesis or
3. A pass in the first State Examination for teaching secondary education (Gymnasium) in computer science and another engineering, science or maths-related subject.

(2) According to Section 6(1)(3) of the RPromO, in exceptional cases, the bodies responsible can also consider equivalent university degrees for admission, in particular those which were not obtained in the subjects in (1)(1) if a doctoral qualification examination is passed according to Section 7.

(3) In individual cases, candidates who have obtained an undergraduate degree may be admitted on the condition that proof of the degree according to (1) (1) is provided within one year after submission of the application form and that no more than 30 outstanding ECTS credits are required in order to complete this degree.

### **Section 7 Doctoral Qualification Examination**

(1) Individuals shall be admitted to the doctoral qualification examination on request if:

1. The general admission requirements in Section 6 are not completely satisfied;
- or

2. The grade 2.0 or better was achieved in a Diplom examination (Diplomprüfung) at a university of applied sciences; or
3. The candidate shall be admitted to the doctorate according to Section 6(2).

(2) <sup>1</sup>In the doctoral qualification examination, the candidate must prove that they have sufficient skills and knowledge in the subject of the pursued doctoral degree. <sup>2</sup>A pass in the doctoral qualification examination confirms the subject qualification of the candidate and qualifies the candidate for studying a doctoral degree in the subject of the examination.

(3) <sup>1</sup>The doctoral qualification examination consists of an oral examination which lasts approximately 45 minutes. <sup>2</sup>The Examining Committee is appointed by the Dean following the supervisor's recommendation and consists of two university lecturers from the pursued subject and a university lecturer from another subject.

(4) <sup>1</sup>The Examining Committee may stipulate further conditions which must be fulfilled for awarding a pass in the doctoral qualification examination according to (3). <sup>2</sup>These conditions are limited to:

1. Examinations in two subjects in the discipline of the pursued doctoral degree
2. An admissions essay with a maximum duration of four months.

(5) <sup>1</sup>The examinations imposed are subject to the General Examination Regulations for Bachelor's and Master's examinations at the Faculty of Engineering in conjunction with the currently valid degree programme examination regulations and must be completed by the deadlines outlined in the degree programme examination regulations. <sup>2</sup>Oral examinations shall be conducted in the presence of a second university lecturer from the discipline. <sup>3</sup>The oral examination shall last approximately half an hour. <sup>4</sup>The examinations must be completed by one year after the admission to the doctoral qualification examination at the latest. <sup>5</sup>If this deadline is exceeded due to circumstances within the candidate's influence the doctoral qualification examination shall count as failed. <sup>6</sup>If the candidate does not achieve a minimum grade of 2.3 in all examinations, the doctoral qualification examination shall count as failed.

(6) <sup>1</sup>The admissions essay must demonstrate that the candidate is capable of solving a problem relating to the subject in which they are pursuing the doctoral degree independently and according to academic methodology (Section 8 (2)(4) RPromO). <sup>2</sup>The Dean shall appoint a supervisor from the examiners according to (3). <sup>3</sup>A topic and deadline shall be agreed upon with the candidate. <sup>4</sup>The admissions essay shall be assessed by the supervisor. <sup>5</sup>The supervisor shall recommend acceptance or refusal of the admissions essay to the Examining Committee according to (3). <sup>6</sup>The Examining Committee shall accept or refuse the admissions essay and request a further evaluation if deemed necessary. <sup>7</sup>The admissions essay shall count as refused if the candidate does not submit it before the deadline. <sup>8</sup>If the admissions essay is refused or counts as refused, the doctoral qualification examination shall be failed.

### **Section 8 Admission to a Doctorate**

The CV according to Section 8 (2)(1) of the RPromO may also be submitted in English.

### **III. The Doctorate Procedure**

## **Section 9 Initiation of the Doctorate Procedure**

In addition to the copies of the thesis required in Section 9 (2)(3) RPromO, a further copy of the thesis is required for the application for initiation of the doctorate procedure.

## **Section 10 Requirements for the Thesis**

(1) <sup>1</sup>The thesis must be a standalone monograph that provides evidence of scientific findings which can be accredited to the author. <sup>2</sup>A cumulative thesis shall not be permitted.

(2) The thesis must include a detailed summary in English.

(3) <sup>1</sup>Publishing partial results while the thesis is being written is encouraged and therefore not damaging for publication of the thesis (Section 10(2) RPromO). <sup>2</sup>Any inclusion of publications with several authors must clearly credit the authorship of the individual authors in the thesis.

## **Section 11 Evaluation, Acceptance and Refusal of the Thesis**

(1) The evaluations shall be written in German or English.

(2) The bodies responsible can request more than two evaluations if the supervisor is not (or is no longer) a full-time member of the Faculty of Engineering at the initiation of the doctorate procedure, if the first evaluation does not cover the required breadth of the subject, or if a further evaluation of the thesis is deemed necessary due to the interdisciplinary nature of the research.

(3) <sup>1</sup>The evaluations shall include a grade. <sup>2</sup>The following grade scales shall apply:

Sehr gut = 1 for outstanding achievement

Gut = 2 for commendable achievement

Befriedigend = 3 for acceptable achievement

Ausreichend = 4 for barely sufficient achievement

Ungenügend = 5 for insufficient achievement

<sup>3</sup> The grade may be increased or decreased by 0.3 to reflect the level of the achievement. <sup>4</sup>The grades 0.7 and 5.3 shall not be awarded; grade 4.3 and higher shall be considered as unsatisfactory.

## **Section 12 Oral examinations**

(1) The oral examination shall be conducted by the Examining Committee Section 4 (5) and shall comprise:

1. A public, academic presentation by the candidate lasting 30 minutes and expressed freely, followed by a 15-minute public discussion on the objectives, methodology and results of the thesis
2. A non-public defence lasting approximately 45 minutes.

(2) <sup>1</sup>The oral examination shall be open to the public. <sup>2</sup>The non-public part of the examination shall be open to members of the Faculty of Engineering and of other faculties at the University who are authorised examiners for doctoral degrees.

(3) The Examining Committee may allow the oral examination to be conducted in English at the candidate's request.

(4) <sup>1</sup>The discussion and the defence shall be led by the chairperson of the Examining Committee. <sup>2</sup>All participants may ask questions at the discussion and the defence. <sup>3</sup>The chairperson can declare questions as inadmissible. <sup>4</sup>During the defence, questions should focus on the topic of the thesis or be related to the basic concepts and development of the subject area.

(5) <sup>1</sup>The discussion and presentation shall be awarded a grade according to Section 11(3) by each member of the Examining Committee; the same shall apply to the defence. <sup>2</sup>The grade for both parts of the examination shall be calculated from the arithmetic average of the grades calculated to two decimal places.

### **Section 13 Resitting the Oral Examination**

#### **Section 14 Results of the Doctorate Procedure, Notification**

<sup>1</sup>The final grade is calculated from the arithmetic average of the thesis grades produced by the reviewers multiplied by six, the grade for the presentation and discussion multiplied by two, and the grade for the defence multiplied by two. <sup>2</sup>The average shall be calculated from the individual grades up to two decimal places. <sup>3</sup>The assessment of the doctoral degree is as follows (based on the overall grade):

1.00 to 1.50 'Sehr gut bestanden'

1.51 to 2.50 'Gut bestanden'

2.51 to 3.50 'Befriedigend bestanden'

3.51 to 4.00 'Ausreichend bestanden'

<sup>4</sup>The assessment 'mit Auszeichnung bestanden' shall be awarded if all reviewers have assessed the thesis with the grade 1.0 and the overall grade is better than 1.05.

#### **Section 15 Publication of the Thesis and Submission of the Mandatory Copies of the Thesis**

In exceptional cases, the bodies responsible can extend the deadline for publishing the thesis up to three years calculated from the date of the oral examination.

#### **Section 16 Completion of the Doctoral Degree**

(1) The Dean of the Faculty of Engineering shall sign the doctoral degree certificate.

(2) The doctoral degree certificate will be issued in German with a supplement in English.

### **IV. Honorary Doctoral Degrees**

#### **Section 17 Honorary Doctoral Degree Certificates**

The decision to award an honorary doctoral degree certificate shall be taken by authorised examiners from the Faculty Council according to Section 5 of the RPromO.

### **V. Interuniversity Co-operation**

#### **Section 18 Interuniversity Co-operation**

**VI. Doctoral Degrees in Co-operation with Foreign Universities**

**Section 19 General information**

**Section 20 Examinations Procedure at FAU**

**Section 21 Examinations Procedure at the Partner Institution**

**Section 22 Joint Doctoral Degree Certificate**

**VII. Invalidity and Revocation of Doctoral Degrees**

**Section 23 Invalidity of Doctoral Examinations**

**Section 24 Revocation of Doctoral Degrees**

**VIII. Concluding Provisions**

**Section 25 Legal Validity and Transitory Provisions**

<sup>1</sup>These regulations shall come into effect on the day after their publication. <sup>2</sup>After the RPromO and FPromO come into effect, all of the doctorate procedures which have already been initiated shall be governed by the existing doctoral regulations from 30 July 1975 in the version of 13 January 2011. All doctoral procedures which have been admitted but not initiated will be governed by the new doctoral regulations.