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Subject-Specific Regulations for the Bachelor's and Master's Degree Programmes in Embedded Systems at Saarland University Supplementing the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science)

2 June 2016

Pursuant to Section 59 of the Saarland University Act of 23 June 2004 (Official Gazette of Saarland, p. 1782) as amended by the Act of 14 October 2014 (Official Gazette, p. 406) and pursuant to the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin No. 72, p. 616) as amended by the Ordinance to Amend the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin No. 47, p. 404) and with the consent of the Saarland University Senate and the University Board, Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) at Saarland University hereby issues the following Subject-Specific Regulations for the Bachelor's and Master's Degree Programmes in Embedded Systems at Saarland University.

Section 27
Scope
(cf. Sec. 1 of the Joint Examination Regulations)

These subject-specific regulations apply to the Bachelor's and Master's degree programmes in Embedded Systems at Saarland University. The Faculty of Mathematics and Computer Science is responsible for organizing the teaching, study curriculum and examinations relating to these programmes.

Section 28
General information
(cf. Sec. 2 of the Joint Examination Regulations)

The Faculty of Mathematics and Computer Science at Saarland University shall confer either a Bachelor of Science degree (B.Sc.) or a Master of Science degree (M.Sc.) on students who have successfully completed the respective programme in accordance with the assessment and examination procedures set out in these examination regulations.

Section 29
Types of degree programmes
(cf. Sec. 3 of the Joint Examination Regulations)

The Bachelor's and Master's degree programmes in Embedded Systems are single-subject degree programmes within the meaning of the Framework Examination Regulations for Bachelor's and Master's Degree Programmes at Saarland University (BMPRO).

Section 30
Student workload
(cf. Sec. 4 of the Joint Examination Regulations)

Course attendance may be compulsory for certain introductory seminars, seminars and practical skills classes. Students will be notified of this by the instructor at the beginning of the course.

Section 31
The Examination Board
(cf. Sec. 7 of the Joint Examination Regulations)

(1) The university faculties that conduct the academic assessments and examinations in the Bachelor's and Master's degree programmes in Embedded Systems shall establish an examination board in accordance with Section 2(4) of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science. The Examination Board shall comprise:
1. three representatives from the group of professorial staff in the participating faculties
2. one representative from the group of mid-level academic staff in the participating faculties
3. one representative, who shall have limited voting rights, from the group of students in the Department of Embedded Systems.

The member from the group of students shall only have an advisory vote on the Examination Board if questions regarding the grading of the final assessment phase of the Bachelor's or Master's degree arise, unless said member is appropriately qualified.
Each member of the Examination Board shall have a deputy who represents them in their absence. The members of the Examination Board defined in items 1 to 3 above and their deputies are elected for a term of up to two years by the Faculty Council of the Faculty of Mathematics and Computer Science after being nominated by the relevant member groups within the faculty. Members may be re-elected at the end of their term. If a member or deputy member of the Board withdraws before the end of their term, a replacement shall be selected for the remainder of the term.

(2) The Examination Board shall appoint a Chair and Deputy Chair from the members of the Board specified in items 1 and 2 of Subsection (1) above.

Section 32
Examiners; thesis examiners; supervisors, observers
(cf. Sec. 8 of the Joint Examination Regulations)

(1) The Examination Board shall appoint examiners, thesis examiners and/or thesis supervisors drawn from the groups specified in Section 8(1), items 1 to 7 of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science and, additionally, from
8. the group of mid-level academic staff in the Faculty of Mathematics and Computer Science who are qualified to supervise doctoral candidates, and
9. professorial staff within the Faculty of Natural Sciences and Technology (NT).

(2) (2) In addition to the examiners, thesis examiners and thesis supervisors specified in Section 8(2) of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science, the Examination Board may in individual cases and with the consent of those members of professorial staff with responsibility for the relevant subject area also appoint to the Board (i) heads of independent junior research groups or members of mid-level academic or research staff qualified to doctoral level who work at one of the following associated on-campus or near-campus research institutes: the German Research Centre for Artificial Intelligence (DFKI) and the Max Planck Institutes for Informatics and for Software Systems, (ii) other qualified and experienced professionals working in the relevant field, and (iii) appropriately qualified persons from the Faculty of Natural Sciences and Technology (NT).

Section 33
Admission to the Master's programme
(cf. Sec. 12 of the Joint Examination Regulations)

(1) Students seeking admission to the Master's programme shall:

1. have a Bachelor's degree from a German university or an equivalent qualification from a foreign university in computational engineering, embedded systems, computer science, electrical engineering, mechatronics or a related field.
2. demonstrate particular academic aptitude (see Section 69(5) of the Saarland University Act).

(2) The following criteria shall be used to assess the applicant's particular academic aptitude:
a. Proof of advanced proficiency in English (typically level C1 of the Common European Framework of Reference for Languages)
b. Sufficient merit in the applicant's previous academic record and the appropriate curricular content of the Bachelor's degree. Applicants should demonstrate a level of knowledge and competence that corresponds to that acquired in the Bachelor's degree programme in Embedded Systems taught at Saarland University. Specifically, this requires applicants to show that they have the necessary level of expertise in the following areas:
    I.   Mathematics (discrete mathematics, real analysis and multivariable calculus, linear algebra, numerical methods, stochastics)
    II. Computer science (functional and object-oriented programming, software development methods, formal methods)
    III. Engineering (electrical engineering, embedded systems, signal and systems theory, information theory)
c. evidence of particular interest in the subject by submission of a personal statement or portfolio compiled by the applicant and two letters of recommendation written by referees who know the applicant academically.

The criteria listed above will be used to assess the aptitude of the applicant in terms of the academic profile and requirements of the Master's degree programme in Embedded Systems. The decision whether the programme admission requirements have been met shall be made by the Examination Board.

Section 34
Procedural elements, presentation and layout of the thesis
(cf. Sec. 23 of the Joint Examination Regulations)

A colloquium lasting 30 minutes shall be held in order to establish that the Bachelor's or Master's thesis is the candidate's own original work. The colloquium shall be held no later than six weeks after the candidate has submitted the printed version of their Bachelor's or Master's thesis. One of the colloquium examiners shall be the person who set the candidate's thesis topic.

Section 35
Successfully completing the Bachelor's or Master's
programme and overall grade (cf. Sec. 24 of the Joint
Examination Regulations)

To graduate 'with distinction' a candidate must have attained a final overall grade of 1.1 or better and must have met all of the programme requirements within the standard period of study.

Section 36
Degree qualification and documentation
(cf. Sec. 25 of the Joint Examination Regulations)

In addition to the information presented in Section 25(1) of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science, the degree certificate may also list other student attainments and the results achieved.

Section 37
Commencement

(1) For the Bachelor's degree programme in Embedded Systems, these regulations shall come into force on the day after they are announced in the Official Bulletin of the Institutions of Higher Education in Saarland (*Dienstblatt der Hochschulen des Saarlandes*); for the Master's degree programme in Embedded Systems, they shall become effective on 1 October 2017.

(2) Students who began studying for a Master's degree in Computer and Communications Engineering before these regulations entered into force shall continue to study under the study and examination regulations applicable at the time they began the programme, but shall complete their studies including the final academic assessment and examination phase by the end of summer semester 2019.

Saarbrücken, 6 October 2016

President of Saarland University
(Univ.-Prof. Dr. Volker Linneweber)

Study Regulations Governing the Master's Degree Programme in Embedded Systems at Saarland University

2 June 2016

Pursuant to Section 54 of the Saarland University Act of 23 June 2004 (Official Gazette of Saarland, p. 1782) as amended by the Act of 14 October 2014 (Official Gazette, p. 406) and pursuant to the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin No. 72, p. 616) as amended by the Ordinance to Amend the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin No. 47, p. 404) and with the consent of the Saarland University Senate, Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) at Saarland University hereby issues the following Study Regulations for the Master's Degree Programme in Embedded Systems.

Section 1
Scope

These study regulations, which govern the content and structure of the Master's degree programme in Embedded Systems, are based on the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin No. 72, p. 616) as amended by the Ordinance to Amend the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin No. 47, p. 404) and on the Subject-Specific Regulations for the Bachelor's and Master's Degree Programmes in Embedded Systems of 2 June 2016 (Official Bulletin No. 67, p. 642). The Faculty of Mathematics and Computer Science is responsible for organizing the teaching, study curriculum and examinations relating to these programmes.

Section 2
Objectives of the degree programme and career relevance

The Master's degree programme in Embedded Systems aims to build on the mathematical and scientific foundations of the subject so that graduates from the programme are able to apply relevant computer science methodologies to develop advanced innovative solutions to technical problems. These solutions are often embedded in a technical system and thus provide added value to the system user. In addition, graduates from the Master's degree programme in Embedded Systems will be able to apply advanced scientific and computer-assisted methods to analyse complex problems including those relevant in a more general engineering context. As a result, graduates will be particularly well qualified for careers in industry, business and the research sector. To meet these objectives, students must acquire a good grounding in both the theoretical and practical aspects of all areas needed in order to be able to understand and develop systems. The core principle behind the Master's programme is to educate and train students in a manner that straddles classical engineering disciplines and general computer science. By covering such areas as the design of analogue circuit components, antenna design, control engineering, measurement and instrumentation technology, sensors and actuators, communications engineering, voice recognition, multimodal user interfaces and design verification, the curriculum enables students to acquire a thorough understanding of the field and the skills needed to develop modern embedded and networked systems. A further important aim of the programme is to strengthen key career skills, such as effective communication, teamwork and the ability to independently acquire an understanding of new topics.

Section 3
Start and duration of programme

(1) Students can begin the programme at the beginning of the winter or summer semester of each year.

(2) The curriculum is organized such that the programme can be completed in four semesters (standard period of study).

Section 4
Types of academic instruction

The curriculum content is taught using the following types of academic instruction:

–   Lectures ('L', standard class size = 100): Lectures serve to introduce a particular subject area and also provide an overview of the relevant theoretical concepts and principles, methodologies and skills, technologies and practical implementations that are common to the subject. Lecture courses provide suggestions for further reading on a topic and open the way to acquiring a deeper understanding of an area through subsequent exercise and problem-solving classes, practical skills classes and self-directed study.

–   Exercise and problem-solving classes ('EP', standard class size = 20): Exercise and problem-solving classes are small-group sessions used primarily to supplement and reinforce what was learned in the lectures. Students work on representative problems as this provides an opportunity for them to apply and deepen the knowledge they acquired in the lectures, to assess their personal understanding of a specific area and to clarify any questions that they may have.

–   Seminars ('S', standard class size = 15): Seminars provide an opportunity for students to broaden the knowledge and skills that they have already acquired and to gain a deeper understanding of a particular field of research by participating in discussions, giving presentations or completing seminar assignments based on their study of the specialist literature and relevant academic sources. They also help students acquire the skills necessary for the effective oral and visual presentation of scientific and academic content and encourage students to engage in critical analysis and discussion of research results. A seminar may also include project-related work in areas of current scientific interest or debate. The deeper understanding of a particular field that students acquire through project-related work in the Master's seminar may provide the basis for their final-year Master's thesis.

–   Practical skills classes and project work ('P', standard class size = 15): Practical skills classes or projects offer a number of practical subject-related topics that introduce students to the specific approaches and methods used in a particular discipline or field of study. The necessary theoretical knowledge underlying a specific topic is acquired by attending lectures and studying the relevant scientific literature. An additional goal of the practical skills classes is to provide students with the opportunity to gain practical experience with computer-aided methods. Projects tend to address interdisciplinary topics. Working on a topic offers students the opportunity to work in supervised groups to tackle specific assignments from the initial solution design concept through to its final practical implementation. Students learn about the relationships between theory and practice not only through their own independent study and research, but also through project-based teamwork. Participation in a particular practical skills class or project may be dependent on a student having first successfully completed a required course of lectures and the associated exercise and problem-solving classes.

Section 5
Structure and content of the programme

(1)　To graduate from the Master's programme in Embedded Systems, students are required to earn a total of 120 credits (often referred to in Germany as 'credit points' or 'CPs') as defined by the European Credit Transfer System (ECTS). Of these, at least 103 credits and at most 111 shall be from graded assignments. As a rule, students are required to earn 30 credits per semester.

(2)　The degree programme comprises modules associated with the different sections of the programme listed below. Appendix A provides details of the modules and module elements offered in the different sections of the programme, the type of academic instruction used, the number of credit hours per week and the ECTS credits earned, the module frequency, the type of academic assessment and whether the module is graded.

1.　At least 27 and at most 31 graded credits shall be earned from the core lecture courses on embedded systems (the number of credits that can be earned depends on the courses taken)

2.　At least 27 and at most 31 graded credits from the core lecture courses (the number of credits is course-dependent), from the advanced lecture courses (the number of credits is course-dependent) or from the seminars covering topics in embedded systems (each worth 7 credits) (mandatory elective): of which only one further seminar may be included (cf. Section 5(2)(3)).

3.　7 graded credits from the seminars in embedded systems (each worth 7 credits; mandatory elective)

4.　12 graded credits from the Master's Seminar (12 credits) and 30 graded credits for the Master's thesis.

5.　Freely selectable, mandatory elective modules (at least 17 ungraded credits) where modules can be chosen from the following areas:
　–　Additional credits from core lectures, advanced lectures or seminars on embedded systems
　–　Tutoring and supervising undergraduate students in exercise and problem-solving classes (usually 4 credits). Tutoring several groups of students is permitted, provided that the exercise and problem-solving classes are from different modules.
　–　Language courses (maximum of 6 ungraded credits; modern languages only and not the student's native language)
　–　Soft Skills Seminar
　–　Work placement or internship in industry (maximum of 6 credits) for which an application has been submitted to and approved by the Examination Board
　–　Modules for which an application has been submitted to and approved by the Examination Board. For example, students have the option of submitting an application to the Examination Board requesting recognition of certain student activities (particularly university-related administrative activities) or of attendance at courses teaching key skills (maximum of 3 credits in each case).

(3) Students can select either entire modules or individual module elements from the mandatory electives offered. Credits from academic assessments and examinations that were used to obtain the preceding Bachelor's degree cannot also be used to meet the degree requirements of the Master's programme. However, any credits from academic assessments and examinations that were earned during the Bachelor's degree period but that were not used to meet the total credit requirements for the Bachelor's programme may be transferred to the Master's programme provided that they do not exceed 30 credits in total.

(4) Students shall accumulate a total of 42 credits in the compulsory part of the curriculum

(of which 30 credits are from the 'Master's Thesis' module and 12 credits are from the 'Master's Seminar') and at least 78 credits are from the mandatory electives offered.

(5) The number of places available in practical skills classes and seminars and in the mandatory elective modules 'Tutoring', 'Soft Skills Seminar' and 'Language Courses' are limited. Admission to these modules is managed by the module coordinator.

(6) Academic credits are either graded or ungraded. A graded academic assessment or examination cannot be split into ungraded and graded credits.

(7) A student who received academic credits for successfully completing a core lecture course is permitted to retake the assessment or examination on one further occasion within the same examination period and during the standard period of study in order to improve the mark awarded (cf. Sec. 13(4) of the Examination Regulations). A student who received academic credits for successfully completing an advanced lecture course is permitted to retake the assessment or examination on one further occasion within the same examination period in order to improve the mark awarded, provided that the lecturer gave notice at the beginning of the course that the final examination or assessment may be repeated for this purpose. The student will be awarded the higher of the two grades. In all other cases, students are not permitted to repeat an assessment or examination for which they have already achieved at least the minimum pass mark.

(8) The core lecture courses offered in the mandatory electives section of the programme are offered at least once every two years. Seminars and advanced lecture courses will not necessarily be repeated. The Dean of Studies will ensure that a sufficient number of courses and modules are offered each year.

(9) The language of instruction is usually English and will be announced at the beginning of each course or module.

(10) The range of modules offered as mandatory electives may be modified for one or more semesters, though such a change shall require the approval of the Examination Board. These additional modules or module elements, their weighting in ECTS credits and their classification within the different sections of the programme will be announced before the semester begins.

(11) Detailed information about the content of the individual modules and module elements is provided in the module catalogue that will be made available in suitable form. Any changes or amendments to the information in the module catalogue not covered in these regulations shall be reported to the Dean of Studies and documented appropriately.

(12) Course attendance may be compulsory for certain seminars, exercise and problem-solving classes and practical skills classes. Students will be notified of this by the instructor at the beginning of the course.

Section 6
Study plan

The Dean of Studies will compile a study plan based on these study regulations that includes details of the types and scope of the module elements offered (Appendix A) with recommendations on how students can organize and structure their studies efficiently (Appendix B).
 The study plan will be made available in suitable form. The range of modules offered in a particular semester will be published in the Saarland University course catalogue for that semester.

Section 7
Study counselling

(1) The Central Student Advisory Service (*Zentrale Studienberatung*) at Saarland University provides counselling and guidance to prospective students and enrolled students concerning the content, structure and requirements of academic study at Saarland University. It also can advise and assist students with respect to their study options as well as with planning and organizing their studies.

(2) Questions concerning curricular demands, learning objectives, admission requirements and study planning and organization can be addressed to the departmental academic adviser for Embedded Systems.

(3) Questions relating to individual modules can be addressed to the respective module coordinators.

Section 8
Studying abroad

Students have the opportunity to spend part of the programme studying abroad. Students interested in studying abroad should seek advice from a relevant source, take preparatory language courses as needed and should clarify credit transfer arrangements in accordance with the examination regulations by completing a study abroad learning agreement. Information on study abroad opportunities, exchange programmes, scholarships and administrative formalities is available from Saarland University's International Office or from the relevant departmental or subject representatives. As foreign host universities and scholarship-awarding bodies often have early application deadlines and long application processing times, study abroad applications should normally be submitted to the Examinations Office one year before the planned start date.

Section 9
Master's thesis and Master's seminar

(1) By completing a Master's thesis, students demonstrate that they are able to work independently on tackling problems in the area of embedded systems or related fields. The completion period for the Master's thesis is six months. Students are awarded 30 ECTS credits for completing their Master's thesis.

(2) Before finishing their Master's thesis, each student shall have successfully completed a Master's seminar in an area with direct relevance to the topic being addressed in the thesis. Students attending a Master's seminar shall give an oral presentation on the problem they propose to tackle in their Master's thesis and submit a written description of the issues to be addressed.

(3) Students shall register their thesis project with the Examinations Office no later than one semester after successfully completing the Master's seminar. Students who fail to meet this deadline will be required to successfully complete another Master's seminar.

Section 10
Commencement

These Regulations shall come into force on 1 October 2017.

Saarbrücken, 6 October 2016

President of Saarland University
Univ.-Prof. Dr. Volker Linneweber

Appendix A. Modules, assessments and examinations in the Master's degree programme 'Embedded Systems'

Master's degree programme (M.Sc.) 'Embedded Systems'											
Module category or name	Type of assessment	Grading	ECTS credits		Winter semester		Summer semester		Winter semester		Summer semester
					Subject semester						
					1		2		3		4
			ungraded	graded	L / EP / S credit hrs/wk	ECTS credits	L / EP / S credit hrs/wk	ECTS credits	L / EP / S credit hrs/wk	ECTS credits	L / EP / S credit hrs/wk	ECTS credits
Core lecture courses (variable credits, see below)	written exam(s), PA	g	0	27–31	4/2/0 each	18	4/2/0	9				
Seminar (7 credits each), core or advanced lectures (variable credits, see below)	written exam(s), PA	g	0	27–31			4/2/0 2/2/0	9 6	2/2/0 2/2/0	6 6		
Seminar	oral, written	g	0	7	0/0/3	7						
Mandatory electives (see below)		u	at least 17	0	4/0/0	6	2/2/0	4	0/0/3	7		
Master's Seminar	oral, written	g	0	12						12		
Master's Thesis	Master's Thesis	g	0	30								30
TOTAL						31		28		31		30

Core lecture courses				
Electronic Assembly and Surface-Mounting Technology 1	written exam(s), PA	g	0	4
Automation Systems	written exam(s), PA	g	0	4
Compiler Construction	written exam(s), PA	g	0	9
Computational Electromagnetics 1	written exam(s), PA	g	0	4
Computational Electromagnetics 2	written exam(s), PA	g	0	4
Computer Architecture	written exam(s), PA	g	0	9
Data Networks	written exam(s), PA	g	0	9
Digital Signal Processing	written exam(s), PA	g	0	6
Distributed Systems	written exam(s), PA	g	0	9
Introduction to electromagnetic field simulation	written exam(s), PA	g	0	4
Electrical Drive Systems	written exam(s), PA	g	0	4
Measurement, Instrumentation and Sensor Technology	written exam(s), PA	g	0	6
Electronics / Components	written exam(s), PA	g	0	3
High-Speed Electronics	written exam(s), PA	g	0	4
High-Frequency Engineering	written exam(s), PA	g	0	4
Embedded Systems (compulsory in the Bachelor's degree programme 'Embedded Systems')	written exam(s), PA	g	0	9
Future Media Internet	written exam(s), PA	g	0	9
Image Processing and Computer Vision	written exam(s), PA	g	0	9
Microelectronics 2	written exam(s), PA	g	0	4
Microelectronics 3	written exam(s), PA	g	0	4
Microelectronics 4	written exam(s), PA	g	0	4
Micromechanical Components	written exam(s), PA	g	0	4
Microfabrication	written exam(s), PA	g	0	4
Pattern and Speech Recognition	written exam(s), PA	g	0	6
Operating Systems	written exam(s), PA	g	0	9
Security	written exam(s), PA	g	0	9
Software Engineering	written exam(s), PA	g	0	9
Statistical Natural Language Processing	written exam(s), PA	g	0	6
Systems Theory and Control Engineering 1	written exam(s), PA	g	0	6
Systems Theory and Control Engineering 2	written exam(s), PA	g	0	5
Telecommunications 1 (compulsory in the Bachelor's degree programme 'Embedded Systems')	written exam(s), PA	g	0	9
Telecommunications 2	written exam(s), PA	g	0	9
Electrical Engineering Theory 2	written exam(s), PA	g	0	5
Verification	written exam(s), PA	g	0	9
The Examination Board may add modules to or withdraw modules from this list.				
Advanced lectures				
The range of advanced lecture courses offered in the field of embedded systems varies from semester to semester		g	0	variable
The Examination Board may add modules to or withdraw modules from this list.				
Mandatory electives				
Tutoring (4 credits per module)	Tutoring	u	4	0
Soft Skills Seminar	oral, written	u	variable	0
Language Courses (max. 6 credits)	oral, written	u	6	0
Industrial Work Placement / Internship (max. 6 credits)		u	6	0
Other lectures from the sections 'Seminars', 'Core Lectures' and 'Advanced Lectures' in the field of embedded systems		u	variable	0
The Examination Board may add modules to or withdraw modules from this list.				

Key: L = Lecture, EP = Exercise and problem-solving class, P = Project or practical training, PA = Preliminary assessment, credits = ECTS credits, credit hrs/wk = no. of class or supervised hours per week during the semester

Appendix B. Example study plans – M.Sc. 'Embedded Systems'

1	Core lecture (9 credits)	Core lecture (9 credits)	Seminar (7 credits)	Language course (6 credits)	31
2	Core lecture (9 credits)	Core lecture (9 credits)	Advanced lecture (6 credits)	Tutoring (4 credits per module)	28
3	Advanced lecture (6 credits)	Advanced lecture (6 credits)	Seminar (7 credits)	Master's seminar (12 credits)	31
4	Master's thesis (30 credits)				30