Subject-Specific Examination Regulations for the Mechanical Engineering / Mechatronics Master's Degree Course at the Hochschule Kaiserslautern

As of August 9th, 2016

Based on § 7 article 2 clause 2 and § 86 article 2 clause 3 of the Hochschulgesetz (HochSchG) in the edition from p. 463) last altered in accordance with the regulation from December 22nd, 2015 (GVBI. P. 505), the Faculty Council for the Faculty for Applied Engineering at the Hochschule Kaiserslautern determined the following Subject-Specific Examination Regulations for the Mechanical Engineering / Mechatronics Master's degree course at the Hochschule Kaiserslautern on June 21st, 2016. The President approved of these examination regulations in writing on August 5th, 2016. They will be announced herewith.

§ Scope of the Subject-Specific Examination Regulations

These Subject-Specific Examination Regulations regulate the subject-specific requirements for participation in examinations, the examination requirements, and the examination process for the Mechanical Engineering / Mechatronics Master's degree course. The general examination regulations are determined in the Allgemeine Master-Prüfungsordnung [General Master's Examination Regulations] (AMPO).

The AMPO contains special regulations on the following aspects:

- Classification of the Master's degree (§ 1 AMPO)
- Standard study period (§ 1 AMPO)
- Examination subject matter and the amount of teaching time required for successful completion of the degree course (§ 1 AMPO)
- Examination types (§ 1 AMPO)
- General entry requirements and admissions process (§ 5 AMPO)
- Types and forms of examinations, module examinations, deadlines (§ 6 AMPO)
- Oral examinations, written examinations, project work (§§ 7 to 9 AMPO)
- Master's thesis (§ 10 AMPO)
- Examination for the Master's thesis (§ 11 AMPO)
- Scope of the Master's examinations (§ 17 AMPO)
- Calculation of the overall grades, certification (§ 18 AMPO)

§ 2 Classification of the Master's degree

On the basis of a successfully completed Master's examination, the academic title "Master of Engineering" (abbr.: "M.Eng." will be awarded.

§ 3 Standard Study Period, Specialization

- (1) The degree course is offered as both a part-time and a full-time course. The full-time course is comprised of three study semesters (standard study period), the part-time course is comprised of up to seven study semesters (standard study period). One semester is set aside as completing the Master's thesis as a compulsory module, all other study semesters are composed entirely of elective modules. Annex 1 stipulates in which semester the Master's thesis can be completed. The study course workload equates to 90 ECTS.
- (2) The modules offered provide opportunities to specialize in the following subjects: "Mechanical Engineering" and "Mechatronics". The subject specialization is defined by the modules selected. Examples of elective modules and the compulsory module are shown in Annex 2 in table 4. Each module is allocated a "Mechanical Engineering" and a "Mechatronics" module code, see the current module catalog. The major stated on the degree certificate will be determined by the subject with the highest number of completed modules with each code: "MB" for Mechanical Engineering; "MT" for Mechatronics. If the numbers are equal, the Examination Committee will make the final decision. Before the decision is made, students have the opportunity to express their preference.

§ 4 Application focus, Research focus

(1) The degree course is generally research-oriented.

(2) If more than 20 ECTS are completed in R&D modules and the Master's thesis is research-based, then the degree course is also considered to be research-oriented. The focus on research will be stated on the Master's degree certificate. The content of the R&D module and Master's thesis should complement one another.

§ 5 Language

- (1) The compulsory and elective modules are taught in English or German, see the current module catalog. Examples of elective modules and the compulsory module are shown in Annex 2 in table 4. The language is chosen by the relevant university teachers in a unanimous agreement with the Examination Committee. If the decision is not unanimous, the head of the degree course will decide. The module name (in German or English) corresponds with the language the module is taught in, see the current module catalog.
- (2) In exceptional cases, for organizational reasons, it may be that the teaching language of an elective module may be changed at short notice, even if students have already been admitted to it.
- (3) The language of the examination usually corresponds with the language of the module. Students can apply to use the other language offered up until the registration deadline. This must be observed in the examination protocol. Students are not entitled to use a language that does not correspond with the language of the module.
- (5) The language of the module will be shown on the Master's examination certificate.

§ 6 Course applicant selection and admission

The selection of applicants and their admission is carried out in accordance with the "Regulations for Selection and Admission" (Annex 3).

- § 7 Offered modules and admission to elective modules
- (1) The current range of modules offered is included in the admission application for this degree course and is published in advance for the 3 semesters at the Hochschule Kaiserslautern website.
- (2) The entry requirements for each of the modules can be found in the module handbook.
- (3) The letter of admission will stipulate the individual elective modules to which the applicant has been admitted, based on the information provided in their application.
- (4) Changes to the selection of elective modules can only be made with approval from the Examination Committee.
- (5) In exceptional cases, for organizational reasons, it may be that an elective module is canceled if there are too few participants, even if students have already been admitted to the module.
- (6) Module examinations always relate to examination performance.

§ 8 Form and duration of examinations

- (1) The type of examination to be completed for each of the modules can be found in the module handbook.
- (2) For an elective module, examination tasks must be set and submitted in the same semester. The module head will announce the schedule at the start of the semester.
- (3) There is a separate schedule for mobility modules, which will be agreed upon at the start of the semester between the module head and the students.
- (4) If a student can provide evidence of relevant extenuating circumstances, the Examination Committee can extend the deadline for an R&D module by up to 6 weeks.

§ 9 Master's Thesis and Examination

- (1) Students may be accepted for the Master's thesis if they have completed 30 ECTS in the degree course. The Examination Committee may make exceptions to this rule on an individual basis if there are sufficient grounds to do so.
- (2) The work must be completed within 6 months.
- (3) Master's theses may be completed as group work, as long as the assessed contributions made by each student can be clearly defined and evaluated and comply with §10 article 1 of the AMPO.
- (4) The examination on the Master's thesis generally lasts 30 minutes.

§ 10 Repeating Modules

- (1) Elective modules awarded a final evaluation of "insufficient" can be retaken twice. Modules completed with a passing grade may not be retaken.
- (2) An examination retake must be taken during the examination period in the two semesters after the initial attempt.
- (3) Each student may replace an elective module for which they received an "insufficient" grade with another elective module of the same value, if the examination in that elective module has not yet been failed. The Examination Committee may make exceptions to this rule on an individual basis if there are sufficient grounds to do so. The new module(s) is/are subject to Article 1.

§ 11 Calculation of the overall grades

The overall grade is calculated from weighted averages of the grades from all successfully completed modules. It is weighted based on the ECTS credits, see the current module catalog. Examples of elective modules and the compulsory module are shown in Annex 2 in table 4. If the ECTS credits achieved exceed 90, the weighting of the mobility module will be reduced accordingly.

§ 12 Validity

- (1) The Subject-Specific Examination Regulations come into effect on the day that they are published in the Hochschulanzeiger.
- (2) They apply to students who are beginning a Master's degree course in Mechanical Engineering / Mechatronics at the Hochschule Kaiserslautern and those who have already begun their studies.

Kaiserslautern, August 9th, 2016

Prof. Dr. Thomas Reiner
Dean of the Faculty for Applied Engineering

Abbreviations:

ECTS Credits in the European Credit Transfer System

SS Summer Semester WS Winter semester

Annex 1 Study Schedule

The full-time study course consists of three semesters, each with a workload of 30 ECTS. The part-time study course consists of 4 to 7 semesters, each with a workload of either 10 or 20 ECTS per semester (exception: the Master's thesis worth 30 ECTS). Teaching for the modules is distributed throughout the week, i.e. there are no blocks of teaching time. No binding information on the schedule can be given until the start of the semester. The workload for each module can be seen in table 4. Each semester, students select modules from the current module catalog worth up to 30 ECTS, with an total of 90 ECTS for the entire course. Examples of elective modules and the compulsory module are shown in Annex 2 in table 4.

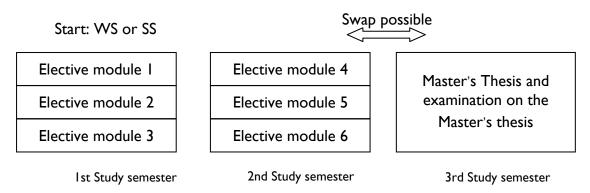


Table 1 Study schedule full-time degree course

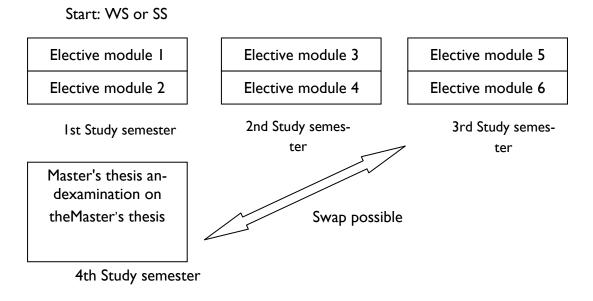


Table 2 Study schedule part-time degree course (20 ECTS)

Start: WS or SS Elective module I Elective module 2 Elective module 3 1st Study semester 2nd Study semester 3rd Study semester Elective module 4 Elective module 5 Elective module 6 4th Study semester 5th Study semester 6th Study semester Swap possible Master's thesis and examination on the Master's thesis 7th Study semester

Table 3 Study schedule part-time degree course (10 ECTS)

Annex 2 Examples of elective and compulsory modules

Examples of elective modules	ECTS	WS	SS	MB	MT
Automotive drive systems	10	×		7	3
Energy Systems	10		×	7	3
Ergänzende Vertiefungen / Supplementary studies	10	×	×	To be determined by the Examination Committee on an individual basis	
Fiber reinforced plastics	10		×	8	2
Fluid mechanics: CFD and measurement techniques	10	×		8	2
F&E-Modul Basis / R&D base module	10	×	×		
F&E-Modul Aufbau / R&D enhancement module *)	20	×	×	To be determined by the Examination Committee on an individual basis	
F&E-Modul Aufbau / R&D enhancement module *)	30	×	×		
Image processing	10	×			
Lightweight Construction and Acoustics	10	×		8	2
Mobility module (semester)	30	×	×	To be determined by the Examination Committee on an individual basis	
Mobility module (trimester)	20	×	×		
Numeric methods	10		×	5	5
Product development: from need to market	10		×	8	2
Process Development	10		X	7	3
Software Engineering for Embedded Systems	10	×		2	8
Structural durability	10	×		7	3
System level rapid development in mechatronics	10		×	1	9
Virtual product development: tools and processes	10		×	7	3
Virtual Production and Logistics	10		×	8	2
Compulsory module	ECTS	WS	SS	MB	MT
Master's Thesis and Examination	30	×	×	To be determ Examination on an indivi	Committee

^{*)} Requirement: completed 10-ECTS R&D base module; a maximum of 40 ECTS may be selected for R&D modules

Table 4 Elective and compulsory modules with workload, semester allocated and technical classification ("Module code"). The module name corresponds with the language it is taught in

Annex 3 Regulations for selection and admission

Contents:

- § 1 Special entry requirements
- § 2 Application for admission, application deadline
- § 3 Evaluation process
- § 4 Admission
- § 1 Special entry requirements (evidence for admission)
- (1) A requirement for admission to the Master's degree course is evidence of a completed university degree course (210 ECTS) in Mechanical Engineering, Mechanical Engineering or a comparable degree course, as well as evidence of the applicant's technical and personal suitability.

Under certain conditions, the Examination Committee may be able to admit applicants with fewer than 210 ECTS, but more than 180 ECTS. These conditions may include the recognition of additional Bachelor modules, extra-curricular studies abroad, relevant professional experience after completing a Bachelor's degree, or successful completion of Bachelor's degree course modules at the HS Kaiserslautern. The Examination Committee will inform admitted students of the requirements before they begin the Master's degree course. The requirements may be fulfilled before or while studying the Master's modules. All requirements must be fulfilled by the time the student registers for the Master's thesis, at the latest.

- (3) For the Master's degree course in Mechanical Engineering / Mechatronics, applicants who have completed a university degree in another subject area may apply if it can be determined that the degree course was of equal value. In such cases, fulfillment of the entry requirements can be specified in accordance with article 2.
- (4) The Examination Committee is responsible for determining comparability.
- (5) Technical suitability is evidenced by appropriate and sound knowledge and skills, generally evidenced by the completion of a relevant study course with overall grades of a maximum of 2.8 (in the German grading system).
- (6) Personal suitability is shown by a keen interest in a Master's degree course in Mechanical Engineering / Mechatronics, an appropriately high level of motivation and commitment, which is to be evidenced by a written description of the applicant's personal and professional journey and their motivation for their intent to pursue this course of study.
- (7) All applicants whose native language is not German require German skills at least B2 level at the time of submitting the application. Applicants whose native language is not English require good English skills at B2 level, TOEIC Listening and Reading 785, TOEIC Speaking and Writing 310; TOEFL iBT 87, TOEFL ITP 543, IELTS 6.0 or equivalent. The applicants must provide a certificate from a recognized language test as evidence, which was completed within the last 24 months. Applicants for modules taught in German whose native language is not German must evidence their spoken German skills to the degree course head at a B2, Test-DaF-3, or DSH-1 level, or equivalent, by the time the module begins at the latest.
- (8) The Examination Committee may be able to admit applicants with only very basic language skills under certain conditions. These conditions may include successful completion of one of the recognized language tests outlined in (7). The Examination Committee will inform admitted students of the requirements before they begin the Master's degree course. All requirements must be fulfilled by the time that lectures start for modules taught in the language in question.

§ 2 Application for admission, application deadline

- (1) The application for admission and the application deadline are subject to the enrollment conditions for students at the Hochschule Kaiserslautern (Enrollment Regulations) as applicable.
- In addition to the required documents specified in the Enrollment Regulations, the application for admission to the Master's degree course in Mechanical Engineering / Mechatronics must include the following documents in either German or English:
 - 1. Legally attested evidence on the special entry requirements as outlined in §1;
 - 2. Description of the applicants personal and professional journey (personal data sheet / résumé) as outlined in §1 article 6;
 - 3. Evidence of the study period for all completed or abandoned study courses, ECTS credits achieved, or any other evidence of the applicant's knowledge and skills;
 - 4. Personal letter of motivation for pursuing the degree course and the intended goals as outlined in § 1 article 6:
 - 5. If applicable, any other evidence of language skills in the languages the modules are taught in as outlined in § 1 article 7;
 - 6. Recent photograph
- (2) Applicants must prioritize their module preferences in the admission application. Admission to selected modules can be characterized as a binding requirement for your enrollment.
- (3) Applications for the winter semester must be submitted by June 30th, applications for the summer semester must be submitted by November 30th. Any deviations from these deadlines will be communicated appropriately by the Examination Committee.

§ 3 Evaluation process

- (1) The Examination Committee will involve at least two Professors from the Bachelor's or Master's degree courses in Mechanical Engineering and Mechatronics to evaluate the application documents.
- (2) Suitability is determined using a points system. As such, points will be awarded for the technical and personal suitability and language skills as follows:

		Evaluation	Minimum score required for admission
Technical suitability As outlined in § 1 article 5	Qualifications	0 - 8 points	1 point
As outlined in § 1 article	Description of personal and pro- fessional history	0 - 3 points	1 point
	Letter of motivation	0 - 3 points	1 point
Language skills As outlined in § 1 article 7	Written description / evidence	0 - 3 points	1 point

Table 5 Points system for evaluating admission applications

§ 4Admission

Applicants may be admitted with a minimum score of 9 points.