
This English translation serves solely for information purposes.
Please note that only the German version is legally binding.

**Subject-specific Examination Regulations
for the Master's Degree Programme
Refinement of Polymer and Composite Products at
the Kaiserslautern University of Applied Sciences**

dated 25 November 2019

(*Hochschulanzeiger* No. 53 dated 29 November 2019, p. 16)

Amended by:

- Regulations dated 13 June 2020 (*Hochschulanzeiger* No. 5 dated 30 June 2020, p.15)

This unofficial reading version applies to all students of the Master's Degree Programme Refinement of Polymer and Composite Products who have enrolled in the programme since the winter semester 2019/2020.

Students who began their studies at an earlier point in time can get information at the Examination Office about the version applicable to them and a possible transfer to this new version.

For information purposes: In the portal/QIS, the name PO 2019 is used.

Pursuant to Sec 7 (2) No. 2 and Sec 86 (2) No. 3 of the Higher Education Act (HochSchG) dated 19 November 2010 (GVBl., p. 463), last amended by Article 4 of the Act dated 18 June 2019 (GVBl, p. 101), BS 223-41, the Faculty Council of the Department of Applied Logistics and Polymer Science of the Kaiserslautern University of Applied Sciences has enacted the following Subject-specific Examination Regulations for the Master's degree programme Refinement of Polymer and Composite Products at the University of Applied Sciences Kaiserslautern on 09 October 2019. These Subject-specific Examination Regulations were approved by the President in a letter dated 11 November 2019. They are hereby published.

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Sec 1

Purpose of these Examination Regulations

(1) These subject-specific examination regulations govern the subject-specific prerequisites for participation in examinations, the examination requirements and the examination procedure for the Master's degree programme Refinement of Polymer and Composite Products. Interdisciplinary examination regulations are specified in the General Master's Examination Regulations of the Kaiserslautern University of Applied Sciences (AMPO). In particular, these contain provisions on the following aspects:

- Title of the Master's degree (Sec 1 AMPO)
- Regular duration of studies (Sec 1 AMPO)
- Examination subjects and scope of courses required for successful completion of the degree programme (Sec 1 AMPO)
- Types of examinations (Sec 1 AMPO)
- Admission conditions and admission procedure (Sec 5 AMPO)
- Types of examinations, deadlines (Sec 6 AMPO)
- Time allowed for completion of assignments and project work (Sec 8 and Sec 9 AMPO)
- Master's thesis (Sec 10 AMPO)
- Colloquium about Master's thesis (Sec 11 AMPO)
- Scope of the Master's examination (Sec 17 AMPO)
- Calculation of overall grade, transcript of records (Sec 18 AMPO)

(2) The following appendices are part of these subject-specific examination regulations:

- Appendix 1 Syllabus for the Master's Degree Programme Refinement of Polymer and Composite Products
- Appendix 2 Admission Regulations for the Master's Degree Programme Refinement of Polymer and Composite Products

Sec 2

Academic Degree

Based on the successfully completed Master's examination, the academic degree "Master of Science" (abbreviated: "M. Sc.") is awarded.

Sec 3

Regular Duration of Studies, Structure of the Degree Programme and Scope of Courses Offered

(1) The time frame during which the studies can generally be completed (regular duration of studies) is three semesters. The Master's examination can be taken during this regular period of studies. Overall, a total workload corresponding to 90 ECTS (European Credit Transfer System) points is assigned to this degree programme.

(2) The courses offered extend over three semesters. The duration of the compulsory and elective courses required for the successful completion of the degree programme is presented in Appendix 1.

(3) The courses and examinations of the compulsory and elective modules in Appendix 1 shall be held in English. The Examination Board shall decide on exceptions.

Sec 4

Examination Board

The Examination Board comprises:

1. three professors,
2. one student member and
3. one member of the groups pursuant to Sec 37 (2) No. 3 and 4 of the Higher Education Act (HochSchG).

Sec 5

Application Orientation, Research Orientation

(1) As a rule, this degree programme is application-oriented. Upon application to the Examination Board, students can also do their studies in a research-oriented manner.

(2) The following prerequisites exist for an application to study the Research Orientation track:

- The student has independently found a research topic and a supervising professor.
- The student has successfully passed the module examination "Research Management Skills and Processes". Proof of passing must be provided no later than by the start of the Research Thesis.

(3) The application must be accompanied by a description of the objective of the Research Thesis (approx. 1-3 pages) and a letter of motivation from the student. The application must be submitted to the Examination Board no later than the end of the second subject-specific semester. In justified exceptional cases (studies subject to conditions, clarification of project funds, extensive research work), the Examination Board may grant an extension of the deadline by a maximum of one semester upon application. The application must include a binding indication of how already passed or started compulsory elective modules with examinations in accordance with paragraph 4 no. 2 shall be dealt with.

(4) The following regulations apply to studies of the Research Orientation track:

- The Research Thesis replaces the Project Work and three additional compulsory elective modules that must be completed by means of examinations.
- In cases in which compulsory elective modules with examinations were already passed prior to the start of the Research Thesis, these can be submitted like compulsory elective modules with academic achievements. If the examinations included in these modules have not been passed yet, the respective compulsory elective modules can be continued in order to submit them as such or as compulsory elective modules with academic achievements; dropping them is possible, provided that more than the ECTS required in the area of compulsory electives are regarded as having been selected. Any dropped modules are to be offset against the count in accordance with Sec 7 (4) Sentence 5. The choices pursuant to Sentences 1 and 2 shall be declared the latest at the start of the Research Thesis.
- Dropping the Research Thesis is possible once unless the final attempt at the examination was not passed. If it is dropped, it must be stated which compulsory elective modules with examinations are chosen to fulfil the area of compulsory electives. If compulsory elective modules in accordance with No. 2 Sentence 2, 2nd half-sentence are selected again, the respective examinations must be repeated within the applicable deadlines.

Sec 6

Admission Conditions for Degree Programme

The admission conditions for this degree programme are governed by the Admission Regulations in Appendix 2.

Sec 7

Types of Examinations and Academic Achievements, Deadlines

(1) Examinations take the form of written examinations, oral examinations, assignments, project theses as well as Master's thesis and colloquium.

(2) Academic achievements consist, in particular, of written examinations, screen tests, oral examinations, colloquia, assignments, project theses, exercises, presentations, e-examinations or group work.

(3) Students must register for examinations and academic achievements in the subject-specific semester in which they are scheduled in accordance with Appendix 1. If this registration deadline is missed by two semesters, the examinations and academic achievements shall be deemed to have been failed for the first time.

(4) Modules comprising 30 ECTS must be selected from the area of compulsory electives. At least 20 of these ECTS must be earned through compulsory elective modules with examinations. It is compulsory to complete the Project Work unless the option of the Research Thesis is selected. Additional compulsory elective modules with examinations can also be submitted as compulsory elective modules with academic achievements; in these cases, the completed examinations shall not be included in the overall grade. It is possible to change once a compulsory elective module with examinations and once a compulsory elective module with academic achievement, provided it has not been passed yet and no final failure has occurred. No examination attempts shall be counted in the case of a change.

Sec 8 Assignments

The time allowed for completion of assignments (exercises, group work) is usually no longer than six weeks, but at least four weeks. The Examination Board decides on any exceptions.

Sec 9 Project Work

(1) The Project Work is performed as an examination in the form of a project thesis. The time for completion is three months, with a total of 150 hours. In individual cases, the Examination Board may extend the time for completion by up to six weeks upon justified request. The students shall present their Project Work in a presentation usually lasting 20 minutes. Following the presentation, questioning about the topic of the Project Work shall take place, usually lasting 10 minutes. Each of the examination parts – Project Work and presentation including questioning – must be passed; if one part is not passed, all parts must be repeated.

(2) The prerequisite for admission to the Project Work is the successful passing of the module examination “Research Management Skills and Processes”.

Sec 10 Research Thesis

(1) The Research Thesis is an examination in the form of an assignment. The time for completion is six months, with a total of 600 hours. In individual cases, the Examination Board may extend the time for completion by up to six weeks upon justified request. As part of an oral examination, the students shall present their Research Thesis in a presentation usually lasting 30 minutes; following the presentation, they shall be questioned about the topic of the Research Thesis, which usually lasts 15 minutes.

(2) Admission to the Research Thesis is specified in Sec 5.

Sec 11 Master’s Thesis

(1) The time allowed for completion of the Master’s thesis is six months. In individual cases, the Examination Board may, upon justified request, grant an extension of the time allowed for completion of up to 6 weeks.

(2) The Master's thesis can also be permitted as group work, provided the contribution of the individual students that is to be graded can be clearly distinguished and assessed.

(3) Only students who have obtained at least 40 ECTS from academic achievements and examinations and who have fulfilled all existing admission conditions pursuant to the Admission Regulations in Appendix 2 may be granted permission to write the Master's thesis.

Sec 12 **Colloquium about Master's Thesis**

The students shall present the results of their Master's thesis in a presentation usually lasting a maximum of 30 minutes. This presentation shall be followed by questioning about the subject of the Master's thesis, which generally lasts for 15 minutes.

Sec 13 **Scope of Master's Examination and Weighting of Grades**

The examinations to be taken, the modularisation and the weighting used to calculate the overall grade are specified in the Syllabus in Appendix 1.

Sec 14 **Area of Applicability, Effective Date, Expiration**

(1) These subject-specific examination regulations shall apply to students enrolled in this degree programme starting from the summer semester 2020.

(2) Students who started their studies in the Master's degree programme "Refinement of Polymer and Composite Products" under the name "Product Refinement" pursuant to the Subject-specific Examination Regulations named in Sec 3 (2) shall have the opportunity up to and including the summer semester 2022 to finish their studies in accordance with these Subject-specific Examination Regulations. Upon application, students may transfer to these Subject-specific Examination Regulations and finish their studies according to the stipulations of these Subject-specific Examination Regulations. The application is irrevocable. Details regarding the transition when changing the Subject-specific Examination Regulations, in particular credit for achievements, shall be regulated by the Examination Board.

(3) These Subject-specific Examination Regulations shall become effective the day following their publication in the *Hochschulanzeiger* of the Kaiserslautern University of Applied Sciences. At the same time, the Subject-specific Examination Regulations for the Master's degree programme Product Refinement at the Kaiserslautern University of Applied Sciences dated 25 July 2014 (*Hochschulanzeiger* No. 14 dated 29 August 2014, p. 21), last amended by the Regulations dated 24 March 2016 (*Hochschulanzeiger* No. 28 dated 31 March 2016, p. 4), shall expire.

Pirmasens, 25 November 2019

Prof. Dr. Peetz
Dean of the Faculty of
Applied Logistics and Polymer Sciences at the
Kaiserslautern University of Applied Sciences

Appendix 1: Syllabus of the Master's Degree Programme Refinement of Polymer and Composite Products

Start in summer semester (SS)

Module No.	Module name	PL/SL	Fach-sem.	SWS	ECT S	Type of examination	Percentage of overall rating	Remarks
Summer Semester								
RPCP 1.1	Research Management Skills and Processes	PL	1	4	5	M	5%	
RPCP 1.2	Advanced Mathematics for Engineers	PL	1	4	5	K	5%	
RPCP 1.3	Advanced Material Science	PL	1	4	5	K	5%	
RPCP 1.4	Coating Technology and Functional Surfaces	PL	1	4	5	K	5%	
RPCP 2.1	Refinement of Polymer Compounds and Textiles	PL	1	4	5	K	7.5%	[1]
RPCP 2.2	Customer Oriented Polymer Refinement	SL	1	4	5	K		[1]
RPCP 2.3	Refinement of Additively Manufactured Products	PL	1	4	5	M	7.5%	[1]
RPCP 2.9	Application Training and Presentation Techniques	SL	1	4	5	H		[1]
RPCP 1.5	Advanced Mechanics (Strength of Materials, Dynamics)	PL	2	4	5	K	5%	
RPCP 1.6	Material and Surface Characterisation of Polymers and Composites	PL	2	4	5	K	5%	
RPCP 2.4	Colorimetry, Varnishing and Product Cleaning Technology	PL	2	4	5	K	7.5%	[1]
RPCP 2.5	Fracture Mechanics and Tribology	PL	2	4	5	K	7.5%	[1]
RPCP 2.6	Project Work	PL	2		5	P	7.5%	[2]
RPCP 2.7	Corporate Social Responsibility	SL	2	4	5	H		[1]
RPCP 2.8	Machine Learning and Artificial Intelligence	SL	2	4	5	K		[1]
RPCP 2.10	Research Thesis	PL	2		20	H	50%	30%
		PL				M	50%	
RPCP 3.1	Master Thesis	PL	3		24		30%	
RPCP 3.2	Colloquium	PL	3		6		10%	

(1) The modules RPCP 2.1 – 2.9 are compulsory elective modules. For these modules, the regulation in Sec 7 (4) applies.

(2) The module Project Work (RPCP 2.6) must be selected in the Application Orientation track. It cannot be selected if the Research Orientation track has been selected. See Sec 5.

(3) The module Research Thesis must be selected in the Research Orientation track. See Sec 5.

Types and forms of examinations:

K – Written Examination

H – Term Paper

M – Oral Examination

P – Project Thesis

Start in winter semester (WS)

Module No.	Module name	PL/SL	Fach-sem.	SWS	ECT S	Type of examination	Percentage of overall rating	Remarks	
RPCP 1.1	Research Management Skills and Processes	PL	1	4	5	M	5%		
RPCP 1.5	Advanced Mechanics (Strength of Materials, Dynamics)	PL	1	4	5	K	5%		
RPCP 1.6	Material and Surface Characterisation of Polymers and Composites	PL	1	4	5	K	5%		
RPCP 2.4	Colorimetry, Varnishing and Product Cleaning Technology	PL	1	4	5	K	7.5%	[1]	
RPCP 2.5	Fracture Mechanics and Tribology	PL	1	4	5	K	7.5%	[1]	
RPCP 2.7	Corporate Social Responsibility	SL	1	4	5	H		[1]	
RPCP 2.8	Machine Learning and Artificial Intelligence	SL	1	4	5	K		[1]	
RPCP 1.2	Advanced Mathematics for Engineers	PL	2	4	5	K	5%		
RPCP 1.3	Advanced Material Science	PL	2	4	5	K	5%		
RPCP 1.4	Coating Technology and Functional Surfaces	PL	2	4	5	K	5%		
RPCP 2.1	Refinement of Polymer Compounds and Textiles	PL	2	4	5	K	7.5%	[1]	
RPCP 2.2	Customer Oriented Polymer Refinement	SL	2	4	5	K		[1]	
RPCP 2.3	Refinement of Additively Manufactured Products	PL	2	4	5	M	7.5%	[1]	
RPCP 2.6	Project Work	PL	2		5	P	7.5%	[2]	
RPCP 2.9	Application Training and Presentation Techniques	SL	2	4	5	H		[1]	
RPCP 2.10	Research Thesis	PL	2		20	H	50%	30%	[3]
		PL				M	50%		
RPCP 3.1	Master Thesis	PL	3		24		30%		
RPCP 3.2	Colloquium	PL	3		6		10%		

(1) The modules RPCP 2.1 – 2.9 are compulsory elective modules. For these modules, the regulation in Sec 7 (4) applies.

(2) The module Project Work (RPCP 2.6) must be selected in the Application Orientation track. It cannot be selected if the Research Orientation track has been selected. See Sec 5.

(3) The module Research Thesis must be selected in the Research Orientation track. See Sec 5.

Types and forms of examinations:

- K – Written Examination
- H – Term Paper
- M – Oral Examination
- P – Project Thesis

Appendix 2: Admission Regulations for the Master's Degree Programme Refinement of Polymer and Composite Products

Content:

- § 1 Special Admission Conditions
- § 2 Application for Admission, Application Deadline
- § 3 Assessment Procedure
- § 4 Admission

Sec 1 Special Admission Conditions

(1) This Master's degree programme is a consecutive degree programme and requires an undergraduate degree that qualifies the graduate for a professional career. The prerequisite for admission to the Master's degree programme is proof of the completion of a university degree in an engineering or natural sciences degree programme that qualifies the graduate for a professional career, with 210 ECTS, a grade of at least 2.5 and evidence of professional and personal aptitude. Subject to approval by the Examination Board, admission pursuant to Sec 5 (1) Sentences 1-5 of the AMPO (General Master's Examination Regulations) is permitted in justified exceptional cases even if up to 30 ECTS are missing.

(2) The Admissions Commission can conditionally admit study applicants with fewer than 210 ECTS, but at least 180 ECTS. These conditions can be fulfilled, for example, through credit awarded for additional Bachelor's modules, through relevant extracurricular studies abroad or through relevant professional experience. Subject to prior approval by the Examination Board, modules from Bachelor's degree programs of the Kaiserslautern University of Applied Sciences may also be submitted to fulfil the conditions. The Admissions Commission shall inform the applicant about the conditions prior to the start of the Master's studies. The conditions must be fulfilled by the time the Master's thesis is registered.

(3) A university degree in a different degree programme may also be accepted as a prerequisite for admission, provided its equivalence has been determined by the Examination Board; otherwise, the provisions of these Admission Regulations shall apply. In the event that equivalence exists, the Examination Board may admit the applicant subject to conditions that, together with the existing university degree, fulfil this equivalence. Admission is not possible if conditions amounting to more than a total of 30 ECTS would be required to fulfil the equivalence. The conditions must be fulfilled by the time the Master's thesis is registered.

(4) An applicant's professional aptitude shall be proven by means of relevant, good professional knowledge and skills. The applicant's professional aptitude shall be taken into consideration in the context of the assessment procedure pursuant to Sec 3. If no final transcript of records is available yet at the time of application, an unweighted average shall be calculated based on the grades of the certified transcript of records available at the time of the application deadline.

(5) An applicant's personal aptitude shall be demonstrated by a strong interest in the Master's degree programme Refinement of Polymer and Composite Products, a correspondingly high motivation and outstanding commitment, and shall be documented by a written presentation of the applicant's personal and professional career and the reasons for intending to commence the studies. The applicant's personal aptitude shall be taken into consideration in the context of the assessment procedure pursuant to Sec 3.

(6) All applicants whose native language is not German need to have German language skills, at least level B1, at the time of the application. Applicants whose native language is not English need to have good English language skills the latest at the time of application, at least level B2, TOEIC Listening and Reading 785; TOEIC Speaking and Writing 310; TOEFL iBT 87; TOEFL ITP 543; IELTS 6.0 or an equivalent level.

(7) Together with their application, applicants must submit certificates of recognised language tests for German and English as proof, which must not be older than 24 months.

(8) The Examination Board may admit applicants who demonstrate a lower level of language proficiency subject to conditions. These conditions can be fulfilled by successfully passing the recognised language tests specified in the application for admission. The Examination Board shall inform the admitted student in writing about the conditions. All conditions must be fulfilled the latest at the time the Master's thesis is registered.

Sec 2 Application for Admission, Application Deadline

(1) For the application for admission and the application deadline, the stipulations of the Regulations on the Enrolment of Students at the Kaiserslautern University of Applied Sciences (Enrolment Regulations) in their currently applicable version shall apply.

(2) The fulfilment of the special admission conditions stated in Sec 1 of these Regulations shall be proven by the submission of appropriate documents in German or in English together with the application for admission.

(3) Applications for the winter semester must be submitted by 31 May, for the summer semester by 30 November, respectively.

Sec 3 Assessment Procedure

(1) The Examination Board shall appoint at least two professors for the assessment of the application documents.

(2) The degree of aptitude shall be determined by means of a point system (Table A). The points for the professional aptitude shall be awarded in accordance with the degree of coverage of the required competences from the undergraduate degree programme (Table B), in accordance with the final grade of the undergraduate degree (Table C) and based on the existence of relevant work experience (Table D):

		Rating	Minimum rating required for admission
Professional aptitude	Coverage degree of undergraduate degree (Table B)	0 – 3 points	1 point
Professional aptitude	Final grade (Table C)	0 – 6 points	1 point
Professional aptitude	Work experience (Table D)	0 – 2 points	--
Personal aptitude	Presentation of personal career history	0 – 3 points	1 point
Personal aptitude	Motivational letter	0 – 3 points	1 point

Table A: Point system for assessment of aptitude and for admission

Competences in study areas	Points			
	Degree programmes of HS KL or identical ones	Strong overlap in content	Little overlap in content	Non-comparable degree programme
Plastics Engineering	3	2	1	0
Leather Processing and Shoe Engineering	3	2	1	0
Textile Engineering	3	2	1	0
Chemical Engineering	3	2	1	0
Mechanical Engineering	3	2	1	0

Table B: Degree of coverage of competences in the study area by the undergraduate degree

Grades better than	Up to and including	Points
	1.0	6
1.0	1.3	5
1.3	1.6	4
1.6	1.9	3
1.9	2.2	2
2.2	2.5	1

Table C: Final grade of undergraduate degree

Length of work experience	none	< one year	> one year
Points	0	1	2

Table D: Work experience

Sec 4 Admission

Applicants with a score of at least 10 points shall be admitted.