Study and examination regulations for the Bachelor's degree programme International Bachelor of Engineering at the Rosenheim campus at Rosenheim Technical University of Applied Sciences

of 6 May 2022

Amended on 27 February 2023

On the basis of Article 13 (1) Sentence 2, Art. 57 (1) Sentence 1, Art. 58, Art. 61 (2) Sentence 1 and (8) Sentence 2, and Art. 66 (1) Sentence 1 of the Bavarian Higher Education Act (BayHSchG), Rosenheim Technical University of Applied Sciences issues the following rules:

Section 1
Purpose of the study and examination regulations

These study and examination regulations serve as a supplement to the current versions of the Basic Examination Regulations for Universities of Applied Sciences in Bavaria (*Rahmenprüfungsordnung für die Fachhochschulen in Bayern* – RaPO) of 17 October 2001 and the General Examination Regulations of Rosenheim Technical University of Applied Sciences (*Allgemeine Prüfungsordnung der Technical Hochschule Rosenheim* - APO) of 2 August 2016.

Section 2
Study objectives

(1) The aim of the International Bachelor of Engineering is to train its students through application-oriented teaching based on scientific findings and methods. Graduates will be capable of professional independent work as engineers.

(2) The degree programme combines the basic principles of scientific engineering for engineers from the fields of mechanical engineering, electrical engineering and information technology and materials engineering, which are complemented by organisational and economic content. Depending on the choice of specialisation, students focus on one of the following areas: Energy and Building Technology, Electrical Engineering and Information Technology, Mechanical Engineering, Mechatronics, Medical Technology or Plastics Engineering/Sustainable Polymer Engineering. A broadly ranging offer of advanced modules gives students the opportunity to design their educational profile to suit their personal preferences and perfectly tailor it to meet their specific career requirements.

(3) The degree programme will enable graduates to work as engineers in a variety of professions, depending on their chosen specialisation, in companies, in the public service or as freelancers, in an advisory, planning or expert capacity.

(4) The degree programme can also be studied in in-depth practice.

Section 3
Admission requirements

(1) Admission to the degree programme requires level B2 English language skills under the Common European Framework of Reference for Languages (CEFR). These can be evidenced by:

1. Internet-based TOEFL with 72 or more points
2. IELTS with a band score of 6.0 or higher
3. Cambridge CEFR B2 First (FCE), Grade C or higher
4. Cambridge CEFR C1 Advanced (CAE) with level B2 or higher

Former No. 5 deleted.

Native English speaking applicants are not required to submit proof of adequate English language skills. In cases of doubt or non-submission of proof, applicants may be required additionally/alternatively to pass a language test comparable to those listed above at Rosenheim Technical University of Applied Sciences.

(2) Non-German native speakers without a German higher education entrance qualification must provide proof of German language skills at level A2 or higher in accordance with CEFR. The following apply as proof of required German language skills:

1. Deutsches Sprachdiplom DSD level 1 (level CEFR A2/B1)
2. Goethe certificate at level A2
3. TELC certificate at level A2
4. German language courses completed at a university worth at least 4 credit points at level A2 or higher in accordance with CEFR
5. Austrian Language Diploma in German ÖSD Zertifikat A2.

(3) The Examination Committee shall decide whether the admission requirements are met.

Section 4
Course structure

(1) The standard period of study for the Bachelor's degree programme is eight semesters. This includes seven theoretical semesters and one practical semester. The practical semester takes place in the 6th semester. As an alternative, and if possible in the selected degree programme, it can be divided up across several semesters as part of the so-called Rosenheim Model.

(2) Examinations in the modules "Mathematics 1" and "Physics 1" must be taken by the end of the second semester. If students miss this deadline for reasons for which they are responsible, the examinations shall be considered taken for the first time and failed. Only those students who have achieved the following are entitled to start the fourth semester and continue with further studies:

- at least 25 credit points from the subject-specific study basics in the sense of No. 2 in the Appendix, and
- at least 20 credit points from the "German as a foreign language" modules in the sense of No. 1 in the Appendix

Students must decide on one of the following areas of specialisation at the end of the first semester at the latest:

- Energy and Building Technology (Faculty of Applied Natural and Social Sciences)
- Electrical Engineering and Information Technology (Faculty of Engineering)
- Plastics Engineering / Sustainable Polymer Engineering (Faculty of Engineering)
- Mechanical Engineering (Faculty of Engineering)
- Mechatronics (Faculty of Engineering)
- Medical Technology (Faculty of Engineering)
- Industrial Engineering (Faculty of Industrial Engineering).

(3) The choice can be changed up until the start of the practical semester by application to the Examination Committee.

(4) Projects to be carried out at the partner companies are envisaged for dual students. These will be awarded up to 15 ECTS credit points from the specialist required elective modules group. The specialist content of a project is based on the teaching content of the respective stage of the course in which the project is carried out.

(5) The degree programme includes a Bachelor's thesis.

(6) The teaching language in the first and second semester is English. As from the third semester, lectures can also be offered in German.

Section 5
Modules and examinations

The modules, their number of hours, credit points, type of lecture as well as type and scope of examinations are set out in the Appendix to these rules. The regulations defined in these rules are supplemented by the study plan.

Section 6
Study plan

(1) The relevant faculties involved at Rosenheim Technical University of Applied Sciences produce a study plan detailing the course structure for the students' information and to ensure compliance with the curriculum. It is approved by the Faculty Councils concerned and is published within the university. New regulations must be published at the latest at the start of the semester in which the regulations come into force for the first time. In particular, the study plan includes regulations and information on:

1. Objectives, content, hours per week per semester, credit points and types of lecture used in individual modules, if this is not regulated conclusively in these rules, and, in particular, a list of current required elective modules, including conditions and restrictions regarding student numbers.
2. Objectives and content of the practical semester and the parallel lecture course as well as the form, organisation and number of credit points.
3. The objectives and contents of the dual degree programme in terms of the content-related, time-related and organisational interlocking between theory and practice, designing the practical relevance and the number of credit points.
4. More detailed conditions relating to examinations, the language of examinations, certificates of attendance and admission requirements.
5. Allocation of the modules to specialist fields.

(2) No assertion is made that all specialist fields, required elective modules and elective modules shall actually be available. Equally, no assertion is made that associated lectures shall be conducted if there are insufficient attendees. The Examination Committee can also set requirements for attendance as well as maximum numbers of attendees for certain lectures.

Section 7
Practical internship in parallel to your studies

(1) The practical internship in parallel to your studies comprises a supervised work experience-based practical activity of 18 weeks in total to be spent at a relevant company. It can be completed in one block in a practical semester, which is envisaged for the 6th semester. It is also possible, as an alternative, to complete the practical internship as from the 5th semester in practical phases during the lecture-free periods, whereby one practical block lasts at least 4 weeks. The practical internship is supplemented by a lecture. Details are set out in the study plan.

(2) The practical internship in parallel to your studies is considered successfully completed if the individual practical periods covering the required content are evidenced by a certificate from the place of training based on the template provided by Rosenheim Technical University of Applied Sciences, a valid practical report is submitted on time and is graded as passed by a supervisor.

Section 8
Bachelor's thesis

(1) Students must successfully complete their practical semester in order to request a topic for a Bachelor's thesis.

(2) The Bachelor's thesis must be submitted at the latest 5 months after the topic is issued.

(3) The Bachelor's thesis is assessed and graded by two examiners. At least one of these two examiners should be a full-time professor at one of the faculties involved at Rosenheim Technical University of Applied Sciences.

(4) The Bachelor's thesis may be written in German or, upon application, also in English. A summary in German must be included, however.

Section 9
Academic Advising

If a student does not obtain at least 25 credit points after two semesters, he or she must seek assistance from Academic Advising.

Section 10
Examination Committee

The Examination Committee consists of at least three professors from the faculties involved, whereby each of the faculties involved provides at least one member.

Section 11
Overall examination grade

(1) The overall examination grade is the arithmetic average of significant individual grades weighted with credit points, rounded off to one decimal point. Ungraded practical periods are not considered.

(2) The area of specialisation is mentioned on the certificate.

Section 12
Academic title

On passing the Bachelor's examination, the student shall be awarded the academic title of "Bachelor of Engineering", in short: "B.Eng.".

Section 13
Effective date, transitional regulations

These study and examination regulations come into force on 15 March 2023.

The regulations of the Amendment Statutes of 27 February 2023 marked in red come into force in the summer semester 2023 and apply to students who start their studies in this semester.

Issued on the basis of the resolution by the Senate of Rosenheim University of Applied Sciences of 27 April 2022 and the approval of the President of Rosenheim University of Applied Sciences.

Rosenheim, 6 May 2022

Represented by

Oliver Heller

Chancellor

These rules were laid down on 6 May 2022 at Rosenheim University of Applied Sciences. This was published within the university on 6 May 2022. The publication date is therefore 6 May 2022.

Anlage zur Studien- und Prüfungsordnung für den Bachelorstudiengang International Bachelor of Engineering an der Technischen Hochschule Rosenheim

Appendix to the Study and Examination Regulations for the Bachelor's Degree-Programme International Bachelor of Engineering at Rosenheim Technical University of Applied Sciences.

1. Sprachliche Studiengrundlagen

Language Study Basics

Modul Nr. *No*	**Modulbezeichnung** *Modules*	**SWS**	**Leistungs-punkte** *ECTS*	**Art der Lehrveranstaltung 1)** *Form of Course*	**Prüfungen Examination 1) 2)**		**Ergänzende Regelungen 1)** *Supplementary regulations*
					Art u. Dauer in Minuten *Type and Duration*	**ZV**	
IBR 11	Deutsch B1.1 *German B1.1*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 12	Deutsch B1.2 *German B1.2*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 21	Deutsch B2.1 *German B2.1*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 22	Deutsch B2.2 *German B2.2*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 31	Technisches Deutsch 1 *Technical German 1*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 32	Technisches Deutsch 2 *Technical German 2*	4	5	SU	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
			30				

2. Fachliche Studiengrundlagen

Subject-Specific Study Basics

Modul Nr. *No*	**Modulbezeichnung** *Modules*	**SWS**	**Leistungs-punkte** *ECTS*	**Art der Lehrver-anstaltung 1)** *Form of Course*	**Prüfungen Examination 1) 2)**		**Ergänzende Regelungen 1) 9)** *Supplementary regulations*
					Art u. Dauer in Minuten *Type and Duration*	**ZV**	
IBR 13	Mathematik 1.1 *Mathematics 1.1*	5	5	SU, Ü	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		5) (10 %)
IBR 23	Mathematik 1.2 *Mathematics 1.2*	5	5	SU, Ü	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		5) (10 %)
IBR 24	Physik 1 *Physics 1*	5	5	SU, Pr	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo	6)	5)
IBR 14	Elektrotechnik 1.1 *Electrical Engineering 1.1*	4	5	SU, Pr	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 15	Ingenieurinformatik *Applied Informatics*	4	5	SU, Pr	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		
IBR 25	Wahlpflichtmodulgruppe *Elective module group*		25	SU, Ü, Pr	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo	6)	4)
IBR 16	Technische Mechanik 1: Statik *Engineering Mechanics 1: Statics*	4	5	SU, Ü	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		3) 10)
IBR 33	Mathematik 2 *Mathematics 2*	5	5	SU, Ü	schrP 60-180 min, elP 20-180 min oder PStA 2-15 Wo		5) (10 %)
			60				

3. Studienschwerpunkte
Major fields of study

Modul Nr. *No*	**Modulbezeichnung** *Modules*	**SWS**	**Leistungs-punkte** *ECTS*	**Art der Lehrver-anstaltung 1)** *Form of Course*	**Prüfungen Examination 1) 2)** **Art u. Dauer in Minuten**	**ZV**	**Ergänzende Regelungen 1) 7) 8)** *Supplementary regulations*
IBR-EGT	Module des Studiengangs Energie- und Gebäudetechnologie *Modules of the degree programme Energy and Building Technology*	-	108	SU, Ü, Pr	P		
IBR-EIT	Module des Studiengangs Elektro- und Informationstechnik *Modules of the degree programme Electrical Engineering and Information Technology*	-	108	SU, Ü, Pr	P		
IBR-NP(KT)	Module des Studiengangs Nachhaltige Polymertechnik/ Kunststofftechnik *Modules of the degree programme Sustainable Polymer Engineering/Plastics Engineering*	-	108	SU, Ü, Pr	P		
IBR-MB	Module des Studiengangs Maschinenbau *Modules of the degree programme Mechanical Engineering*	-	108	SU, Ü, Pr	P		
IBR-MEC -	Module des Studiengangs Mechatronik *Modules of the degree programme Mechatronics*	-	108	SU, Ü, Pr	P		
IBR-MT	Module des Studiengangs Medizintechnik *Modules of the degree programme Medical Engineering*	-	108	SU, Ü, Pr	P		
IBR-WI	Module des Studiengangs Wirtschaftsingenieurwesen *Modules of the degree programme Engineering and Management*	-	108	SU, Ü, Pr	P		
BA	Bachelorarbeit *Bachelor`s Thesis*	-	12	BA	BA		
			120				

4. Praktisches Studiensemester / Praxisphasen

Practical Phase

Modul Nr. *No*	**Modulbezeichnung** *Modules*	**SWS**	**Leistungs-punkte** *ECTS*	**Art der Lehrver-anstaltung 1)** *Form of Course*	**Prüfungen Examination 1) 2)** **Art u. Dauer in Minuten**	**ZV**	**Ergänzende Regelungen 1)** *Supplementary regulations*
SP	Praxis Phase *Practical Internship*	-	24	Pr	PB		3)
IBR-PVL	Modulgruppe Praxisbegleitende Lehrveranstaltung *Lecture for Practical Internship*	6	6	SU	schrP 60-180 oder PStA 2-15 Wo oder PB oder SV oder mdlP		3)
		6	**30**				

1) Further details are regulated by the Faculty Council in the curriculum.

2) At least sufficient assessment of all examinations relevant to passing is a prerequisite for passing.

3) On-time submission is a prerequisite for passing.

4) The catalogue of subject-specific compulsory elective modules is decided by the Faculty Council for each semester in accordance with § 5 and laid down in the study plan at the beginning of each semester.

5) Midterm examinations (MTP): Bonus performances can be taken voluntarily, which contribute additively to the overall performance from which the grade of the "schrP", "elP" or "PStA" is calculated. The maximum achievable is the specified percentage of the overall performance. A grade of 1.0 can also be achieved without a bonus.

6) Prerequisite for admission to the examination is, if applicable, the successful completion of the practical course by means of tests (Leistungsnachweis mit Erfolg LNmE).

7) The catalogue of subjects in the major is decided by the Faculty Council for each semester in accordance with § 5 and laid down in the study plan at the beginning of each semester.

8) In the case of dual study, project work amounting to at least 10 ECTS shall be taken in the company.

9) The module only contributes half of the ECTS to the overall examination grade.

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5. Erklärung der Abkürzungen (*Abbreviations)*:

SWS = Semesterwochenstunden *hours per week per semester*
ECTS = European Credit Transfer System
V = Vorlesung *lecture*
Ü = Übung *practical exercise*
SU = Seminaristischer Unterricht *seminar-based lectures*
ZV = Zulassungsvoraussetzung *admission requirements*
BA = Bachelorarbeit *Bachelor's thesis*
P = Prüfungen *examination*
FWPM = Fachbezogenes Wahlpflichtmodul *Specialist required Elective Courses*
schrP = schriftliche Prüfung *written examination*
PStA = Prüfungsstudienarbeit *coursework (such as a work experience report, or a colloquium for group work with an additional, individual examination*)
mdlP = mündliche Prüfung *oral examination*
Ex = *Exkursion*
Kol = Kolloquium *colloquium*
AWPM = Allgemeinwissenschaftliches Wahlpflichtmodul General *required Elective Courses*
elP = elektronische Prüfung *electrical examination*
prP = praktische Prüfung *practical examination*
mE = mit Erfolg abgelegt *pass*
PA = Projektarbeit *project work*
PB = Praxisbericht *practice report*
Pr = Praktikum *work experience*
S = Seminar *seminar*
SV = Seminarvortrag *seminar presentation*
TN = Teilnahmenachweis *attendance*
EIT = Elektro- und Informationstechnik *Electrical Engineering and Information Technology*
EGT = Energie- und Gebäudetechnologie *Energy and Building Technology*
MB = Maschinenbau *Mechanical Engineering*
MEC = Mechatronic *Mechatronics*
MT = Medizintechnik *Medical Technology*
KT = Kunststofftechnik *Plastics Engineering.*