

Please note: this English version is not a legally binding document, only the German version is legally binding.

**Study and examination regulations  
for the Bachelor programme International Mechanical Engineering at the  
Ostbayerische Technische Hochschule Regensburg**

**From 23 Mai 2024**

Based on Article 9, Sentence 1 in conjunction with Article 80, Paragraph 1, Sentence 1, Article 84, Paragraph 2, Sentence 1, Article 88, Paragraph 4, Sentence 1, and Article 96, Paragraph 3, Sentence 1 of the Bavarian Higher Education Innovation Act (BayHIG) of August 5, 2022 (GVBl. S. 414, BayRS 2210-1-3-WK), as last amended by Section 2 of the Law of July 24, 2023 (GVBl. S. 455), the East Bavarian Technical University of Regensburg (university) issues the following statute:

**§ 1**

The purpose of the study and examination regulations is to complement and supplement the General Examination Regulations of the East Bavarian Technical University of Regensburg (APO) as of August 10, 2023, in their respective valid version.

**§ 2**

(1) <sup>1</sup>The purpose of the study is to train application-oriented engineers who are capable of independently and responsibly applying their acquired theoretical knowledge and practical skills to various tasks in mechanical engineering. <sup>2</sup>Students acquire a broad and integrated knowledge, including the scientific foundations of mechanical engineering. <sup>3</sup>With this knowledge, they develop a critical understanding of key theories and methods and can apply and further develop them in practice. <sup>4</sup>This also includes interdisciplinary knowledge and competencies.

(2) <sup>1</sup>By offering subject-specific elective modules, students have the opportunity to choose modules that align with their interests and career expectations. <sup>2</sup>However, this does not necessarily lead to professional specialization.

(3) <sup>1</sup>Graduates are able to solve complex technical problems through independent and targeted application of scientific knowledge and methods. They can develop innovative technical solutions and evaluate these solutions considering different criteria, even in the face of frequently changing requirements. <sup>2</sup>Additionally, they are equipped to understand and apply relevant digitalization processes. <sup>3</sup>Throughout

their studies, a variety of computer-based methods for virtual product development are employed, building on the competencies gained in applied informatics.

(4) <sup>1</sup>Students are trained to take responsibility within a team. <sup>2</sup>At the end of their studies, they not only possess team competence but also have communicative qualifications, enabling them to argue for and develop solutions to technical problems in both German and English when interacting with experts. <sup>3</sup>Graduates are capable of working in both German and international work environments.

(5) <sup>1</sup>Graduates of the program can engage in scientific work, analyze and reflect on work processes to avoid adverse societal, ecological, and economic impacts. <sup>2</sup>They have acquired learning and work techniques that allow them to independently shape lifelong learning processes, recognize situational conditions for professional action, and justify decisions ethically.

(6) The acquired competencies qualify them for simple leadership tasks and serve as a foundation for further academic qualifications within a master's program.

### § 3

#### Qualification requirements

(1) Applicants for studies must meet the qualification requirements for university studies according to the Regulation on Qualification for Studies at State Universities and State-Recognized Non-State Universities (Qualification Regulation – QualV) in its currently valid version.

(2) Applicants provide evidence of sufficient English language skills at level B1 of the Common European Framework of Reference for Languages (CEFR) or an equivalent language certificate.

(3) Applicants who did not acquire their higher education entrance qualification at a German-speaking educational institution must provide evidence of sufficient German language skills at level A2 of the CEFR or an equivalent language certificate.

(4) <sup>1</sup>Applicants who have not completed relevant practical vocational training or have pursued a non-relevant educational track at a vocational high school must demonstrate relevant practical training or a practical activity corresponding to the chosen degree program (pre-study internship) before starting their studies. <sup>2</sup>The proof must be provided before commencing the studies, but no later than the start of the professional qualifying internship (Module No. 25).

(5) <sup>1</sup>For students, an alternative form of dual study is possible on an individual basis. <sup>2</sup>To do so, a contractual relationship between the student and a university-approved company or institution must be demonstrated.

## § 4

## Structure of the Program and Standard Period of Study:

(1) <sup>1</sup>The program consists of a standard period of study spanning seven semesters, comprising six theoretical semesters and one practical semester. <sup>2</sup>It is divided into three sections: The first section covers the first and second semesters. <sup>3</sup>The second section encompasses the third to fifth semesters. The third section includes the sixth and seventh semesters.

(2) Program Structure Based on German Language Proficiency at Admission:

1. <sup>1</sup>Students who demonstrate German language proficiency at level B1 of the Common European Framework of Reference for Languages (CEFR) during the application process are assigned to Language Track B. <sup>2</sup>Within Modules Language Training 1 and 2 (Module No. 11B and 12B according to attachment), students choose two language offerings from the catalog of general scientific elective modules offered by the Faculty of Applied Natural and Cultural Sciences. <sup>3</sup>In Modules Language Training 3 and 4 (Module No. 23B and 24B according to attachment), students complete the corresponding mandatory modules.
2. Students who do not meet the requirements in the second sentence are assigned to Language Track A and must complete the corresponding mandatory modules (Module Nr. 11A, 12A, 23A, and 24A according to attachment) during the first four semesters.

(3) The program can only be commenced in the winter semester.

(4) For students pursuing an alternative form of dual study, alternative module descriptions apply to Modules “Construction 2” (Module No. 15), “Professional Qualifying Internship” (Module No. 25), and “Bachelor’s Thesis” (Module No. 38).

(5) Students planning an international study experience within the Bachelor’s program are advised to consider the sixth semester.

## § 5

## Practical study semester

(1) <sup>1</sup>The practical study semester occurs during the fifth semester of study. <sup>2</sup>It includes a professional internship, along with accompanying courses (Modules No 26 and 27), spanning a total of twenty weeks.

(2) <sup>1</sup>Successfully completing the professional internship is an examination requirement. <sup>2</sup>Students receive guidance from full-time teaching staff during the internship.

## § 6

## Modules and certificates

(1) <sup>1</sup> 1 ECTS credits <sup>1</sup> are awarded for the academic achievements. <sup>2</sup>One credit corresponds to an average workload of 30 hours of attendance and self-study.

(2) <sup>1</sup>The compulsory and compulsory elective modules, their number of semester hours per week (SWS), the type of courses, the examinations and examinations taken during the course of study, a different language of instruction and examination and the credits are specified in the annex to these study and examination regulations. <sup>2</sup>The regulations for compulsory elective modules are supplemented by the catalogue of compulsory elective modules.

(3) All modules are either compulsory modules, compulsory elective modules or elective modules.

1. compulsory modules are the modules of the degree programme that are compulsory for all students.

2. <sup>1</sup>Compulsory elective modules are modules that are offered as alternatives. <sup>2</sup>Students must make a specific selection from among them in accordance with these study and examination regulations. <sup>3</sup>The Faculty Council determines before the start of the semester which modules students are permitted to select. <sup>4</sup>The compulsory elective module catalogue regulates the details. <sup>5</sup>The selected modules are treated as compulsory modules.

3. <sup>1</sup>Elective modules are modules that are not mandatory for achieving the study objective. <sup>2</sup>They can be additionally selected by students from the range of courses offered by the university. <sup>3</sup>If the modules are outside the curriculum of the degree programme, the faculty offering them may object to their being taken.

## § 7

## Curriculum

(1) The Faculty of Mechanical Engineering draws up a curriculum in accordance with the regulations in § 6 of the APO (general examination regulations) to ensure the range of courses offered and to inform students.

(2) In particular, the curriculum also contains regulations and information on the language of instruction and examination, insofar as a choice of language is specified in the annex to these study and examination regulations.

(3) <sup>1</sup> There is no entitlement to elective modules actually being offered. <sup>2</sup> Similarly, there is no entitlement to the associated courses being held if there are insufficient participants

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<sup>1</sup> Credit points according to the European Credit Transfer and Accumulation System (ECTS), hereinafter referred to as credits.

## § 8

## Study progress

(1) <sup>1</sup>The examinations in the modules 'Engineering Mathematics 1', 'Engineering Mechanics 1' and 'Language Track A - German as a Foreign Language 1' or 'Language Track B - Language Training 1' (module no. 1, 3 and 11A or 11B according to the annex) must be completed by the end of the second semester (foundation and orientation examination). <sup>2</sup>If they have not been taken by the end of the specified period, they are deemed to have been failed for the first time.

(2) <sup>1</sup> By the end of the second semester, examinations from the first year of study must be completed to the extent that at least 20 credits have been earned in the modules or sub-modules taken. <sup>2</sup>If students exceed this deadline, the Bachelor's examination is deemed to have been definitively failed.

(3) Only those who have achieved at least 30 credits in the first study phase are entitled to enter the second study phase.

(4) <sup>1</sup>Admission to the professional internship (module no. 25 according to the annex) requires that the pre-study internship and the first study phase have been successfully completed and that a total of at least 20 credits have been earned from the second study phase. <sup>2</sup> As part of the 20 credits mentioned in sentence 1, the examination in the module 'Language Track A - German as a Foreign Language 3' or 'Language Track B - Language Training 3' (module no. 23A or 23B according to the annex) must be completed.

(5) Students who have passed all examinations of the first study phase as well as the examination in the module 'Language Track A - German as a Foreign Language 3' or 'Language Track B - Language Training 3' (module no. 23A or 23B according to the appendix) and have earned a total of at least 100 credits may enter the third study phase.

## § 9

## Examination board

<sup>1</sup>An examination board is formed for the International Mechanical Engineering degree programme in accordance with Section 8 APO (general examination regulations). <sup>2</sup>It consists of the chairperson and two further members appointed by the Faculty Council. <sup>3</sup>The term of office is three years. <sup>4</sup>Reappointment is possible.

## § 10

## Bachelor thesis

(1) The topic of the Bachelor's thesis will be issued in the sixth semester at the earliest, provided that the professional internship has been successfully completed.

(2) <sup>1</sup>The processing time for the Bachelor's thesis is three months. <sup>2</sup>The examination board may extend the deadline if the student is not responsible for the reasons for exceeding the deadline.

(3) <sup>1</sup>The completion period may be up to five months if the Bachelor's thesis is submitted no later than five months before the end of a semester in which at least one other compulsory or compulsory elective examination is to be completed in addition to the Bachelor's thesis. <sup>2</sup>An application to this effect must be submitted to the chairperson of the Examination Board.

(4) <sup>1</sup>The Bachelor's thesis must be presented and explained orally. <sup>2</sup>The prerequisite for this is that the written version of the thesis has been assessed as at least 'sufficient'. <sup>3</sup>The examiner shall set the date for the oral presentation shortly after submission of the written thesis. <sup>4</sup>The registration for the oral presentation must be submitted to the examiner. <sup>5</sup>If the presentation is assessed as 'unsuccessful', it can be repeated once within one month of the announcement of the grade. <sup>6</sup>If the written part of the Bachelor's thesis or a repeated presentation is assessed as 'insufficient' or 'unsuccessful', the Bachelor's thesis as a whole is to be assessed as 'insufficient'. <sup>7</sup>The provisions on oral examinations in Section 14 APO shall apply accordingly to the oral presentation.

(5) Otherwise, the provisions of the APO (general examination regulations) on final theses shall apply accordingly.

## § 11

### Assessment of examinations and overall grade

(1) The assessment of examinations is carried out in the differentiated form in accordance with § 30 APO (general examination regulations).

(2) The Bachelor's examination has been passed if all examinations have been taken in accordance with the appendix and exactly 210 credits have been achieved.

(3) <sup>1</sup>To calculate the overall grade, the final grades of all modules are multiplied by their respective grade weighting, totalled and divided by the sum of all grade weightings. <sup>2</sup>The grade weighting of the individual modules can be found in the appendix.

## § 12

### Certificate and academic degree

(1) <sup>1</sup>A certificate will be issued for the passed Bachelor's examination in accordance with the APO. <sup>2</sup>The grades in the certificate are stated with one decimal place.

(2) <sup>1</sup>The academic degree 'Bachelor of Engineering', abbreviated to 'B.Eng.', is awarded on successful completion of the Bachelor's examination. <sup>2</sup>A certificate will be issued for the award of the academic degree in accordance with the model in the appendix to the APO. <sup>3</sup>The certificate shall state that the degree programme fulfils the

requirements to use the protected professional title 'Ingenieurin' or 'Ingenieur' in accordance with the Bavarian Engineering Act.

(3) <sup>1</sup>The English translation of the degree programme title is also 'International Mechanical Engineering'. <sup>2</sup>The English module names are given in the appendix.

## § 13

### Entry into force and transitional provisions

<sup>1</sup>These study and examination regulations shall enter into force on the day following their publication. <sup>2</sup>The regulations apply to all students who begin their studies after they come into force.

Issued on the basis of the resolution of the University Senate of 28 March 2024 and the legal supervisory approval of the President of the Ostbayerische Technische Hochschule Regensburg.

Regensburg, 23 May 2024

Professor Doktor Ralph Schneider

President

Articles of Association were deposited at the university on 23 May 2024. The resignation was announced on 23.05.2024 by announced on the notice board. The date of the announcement is 23/05/2024.

## Appendix:

## Overview of the modules, certificates of achievement and credits in the Bachelor's degree programme in International Mechanical Engineering

## I. Overview of modules, certificates of achievement and credits in the 1st study phase

1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
1	<b>Ingenieurmathematik 1</b> (Mathematics for Engineers 1)	5	4	SU	schrP, 90			1)	1
2	<b>Ingenieurmathematik 2</b> (Mathematics for Engineers 2)	5	4	SU	schrP, 90			1)	1
3	<b>Technische Mechanik 1</b> (Engineering Mechanics 1)	5	4	SU	schrP, 120			1)	1
4	<b>Technische Mechanik 2</b> (Engineering Mechanics 2)	5	4	SU	schrP, 120			1)	1
5	<b>Konstruktion 1</b> (Engineering Design 1)	5	2 2	SU Ü		Pf		1)	1
6	<b>Werkstofftechnik</b> (Materials Science)	5	4	SU	schrP, 90			1)	1
7	<b>Fertigungsverfahren</b> (Manufacturing Methods)	5	4	SU	schrP, 90			1)	1
8	<b>Thermodynamik 1</b> (Thermodynamics 1)	5	4	SU	schrP, 90			1)	1
9	<b>Maschinenelemente 1</b> (Design of Machine Elements 1)	5	4	SU	schrP, 120			1)	1
10	<b>Grundlagen der Programmierung</b> (Fundamentals of Programming)	5	4	SU	schrP, 90			1)	1



1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
11A	Language Track A – Deutsch als Fremdsprache 1 (Language Track A – German as a foreign language 1)	5	4	SU		Pf		1), 3)	1
11B	Language Track B – Sprachausbildung 1 (Language Track B – Language Training 1)	5	4	4)	4)	4)	4)	1), 3), 4)	1
12A	Language Track A – Deutsch als Fremdsprache 2 (Language Track A – German as a foreign language 2)	5	4	SU		Pf		1), 3)	1
12B	Language Track B – Sprachausbildung 2 (Language Track B – Language Training 2)	5	4	4)	4)	4)	4)	1), 3), 4)	1
<b>Totals for first stage of study:</b>		<b>60</b>	<b>52</b>						<b>12</b>

\*) Figures in brackets indicate the respective proportion of a sub-module in the overall module. The numbers below refer to the different types of courses according to column 5.

1) The language of instruction and examination is German or English.

2) The specific specifications are made semester by semester in the compulsory elective module catalogue.

3) Either the language modules of Track A or B must be taken. Assignment to Track B is only possible if German language skills at B1 level can be demonstrated at the time of application (cf. SPO § 4 Para. 2).

4) Further details can be found in the catalogue for general science elective modules offered by the Faculty of Natural and Cultural Sciences.

## II. Overview of modules, certificates of achievement and credits in the 2nd stage of the programme

1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
13	<b>Ingenieurmathematik 3</b> (Mathematics for Engineers 3)	5	4	SU	schrP, 90			1)	2
14	<b>Technische Mechanik 3</b> (Engineering Mechanics 3)	5	4	SU	schrP, 120			1)	2
15	<b>Konstruktion 2</b> (Engineering Design 2)	5	4	Ü		prLN		m.E. <sup>1)</sup>	—
16	<b>Konstruktion 3</b> (Engineering Design 3)	5	4	S		Pf		1)	2
17	<b>Maschinenelemente 2</b> (Design of Machine Elements 2)	5	4	SU	schrP, 90			1)	2
18	<b>Grundlagen der Elektrotechnik und Elektronik</b> (Fundamentals of Electrical Engineering and Electronics)	5	4	SU	schrP, 90			1)	2
19	<b>Messtechnik mit Praktikum</b> (Measurement Techniques with Laboratory Exercises)	5	4					1)	2
19.1	Messtechnik (Measurement Techniques)	(2)	(2)	SU	schrP, 90			1)	(1)
19.2	Praktikum Messtechnik (Laboratory Exercises: Measurement Techniques)	(3)	(2)	Pr		prLN	TN	m.E. <sup>1)</sup>	—
20	<b>Strömungsmechanik</b> (Fluid Mechanics)	5	4	SU	schrP, 90			1)	2
21	<b>Thermodynamik 2</b> (Thermodynamics 2)	5	4	SU	schrP, 90			1)	2

1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
22	Ingenieurinformatik (Computer Science for Engineers)	5	4	SU	schrP, 90			1)	2
23A	Language Track A – Deutsch als Fremdsprache 3 (Language Track A – German as a foreign language 3)	5	2 2	SU Pr		Pf		1), 3)	1
23B	Language Track B – Sprachausbildung 3 (Language Track B – Language Training 3)	5	2 2	SU Pr		Pf		1), 3)	1
24A	Language Track A – Deutsch als Fremdsprache 4 (Language Track A – German as a foreign language 4)	5	4	SU		Pf		1), 3)	1
24B	Language Track B – Sprachausbildung 4 (Language Track B – Language Training 4)	5	4	SU		Pf		1), 3)	1
25	Berufsqualifizierendes Praktikum (Industrial Placement)	22				schrB	TN	m.E. <sup>4)</sup>	—
26	Projektmanagement und Qualitätssicherung (Project Management and Quality Assurance)	4	4	SU	schrP, 90			1), 4)	2
27	Nachhaltigkeit, Ökobilanz und Betriebswirtschaft (Sustainability, Life Cycle Assessment, Business Administration)	4	3 1	S Ü		Pf		1), 4)	2
<b>Totals for second stage of study:</b>		<b>90</b>	<b>60</b>						<b>24</b>

\*) Figures in brackets indicate the respective proportion of a sub-module in the overall module. The numbers below refer to the different types of courses according to column 5.

1) The language of instruction and examination is German or English.

2) The specific specifications are made semester by semester in the compulsory elective module catalogue.

3) Either the language modules of Track A or B must be taken. Assignment to Track B is only possible if German language skills at B1 level can be demonstrated at the time of application (cf. SPO § 4 Para. 2).

4) The curriculum regulates the language of instruction and examination.

### III Overview of modules, certificates of achievement and credits in the 3rd stage of the programme

1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
28	<b>Fachwissenschaftliches Wahlpflichtmodul I-1</b> (Mandatory Elective Module 1)	5	4	3)	3)	3)	3)	Two modules must be selected from the compulsory elective module catalogue I of the Faculty of M. <small>3), 4)</small>	2
29	<b>Fachwissenschaftliches Wahlpflichtmodul I-2</b> (Mandatory Elective Module 2)	5	4	3)	3)	3)	3)		2
30	<b>Fachwissenschaftliches Wahlpflichtmodul II-3</b> (Mandatory Elective Module 3)	5	4	3)	3)	3)	3)	Two modules must be selected from the compulsory elective module catalogue II of the Faculty of M. <small>3), 4)</small>	2
31	<b>Fachwissenschaftliches Wahlpflichtmodul II-4</b> (Mandatory Elective Module 4)	5	4	3)	3)	3)	3)		2
32	<b>Regelungstechnik</b> (Control Engineering)	5	4					2)	2
32.1	Regelungstechnik mit Praktikum (Control Engineering with Laboratory Exercises)	(4)	(2) (1)	V Ü	schrP, 90			2)	(1)
32.2	Praktikum Regelungstechnik (Laboratory Exercises: Control Engineering)	(1)	(1)	Pr		prLN	TN	m.E. <sup>2)</sup>	(—)
33	<b>Maschinendynamik</b> (Machine Dynamics)	5	3 1	SU Ü	schrP, 90			2)	2
34	<b>Grundlagen der Antriebstechnik</b> (Fundamentals of Electric Machines and Drives)	5	3 1	SU Ü	schrP, 90			2)	2

1	2	3	4	5	6	7	8	9	10
Module No.	Module name (in English language)	Credits*)	SWS*)	Type of LV	Examinations			Supplementary regulations	Note weight*)
					in the semester examination period (duration in min.)	Study-accompanying LN	Authorisation requirements		
35	<b>Maschinentechnisches Praktikum</b> (Laboratory Exercises: Plants and Engines)	5	4	Pr		prLN	TN	2), 4)	2
36	<b>Projektarbeit</b> (Student Research Project)	6	4	Pro		StA m.P.		2), 4)	2
37	<b>Allgemeinwissenschaftliches Wahlpflichtmodul</b> (General Scientific Elective Module)	2	2	5)	5)	5)	5)	2), 5)	1
38	<b>Bachelorarbeit</b> (Bachelor's Thesis)	12				BA		including presentation, m.E. <sup>4)</sup>	4
<b>Totals for third stage of study:</b>		<b>60</b>	<b>38</b>						<b>23</b>

\*) Figures in brackets indicate the respective proportion of a sub-module in the overall module. The numbers below refer to the different types of courses according to column 5.

1) The language of instruction and examination is German or English.

2) The specific specifications are made semester by semester in the compulsory elective module catalogue.

3) Further details are set out in the catalogue of compulsory elective modules for the Bachelor's degree course in International Mechanical Engineering at the Faculty of Mechanical Engineering.

4) The curriculum regulates the language of instruction and examination.

5) Further details are regulated by the catalogue for general science compulsory elective modules of the Faculty of Natural and Cultural Sciences.

## Abbreviations

### Forms of Examination

BA	Bachelor thesis	Kol	Colloquium	m.P.	With presentation
MA	Master thesis	prLN	Practical proof of Performance	m.E.	Evaluation with/without success
THE	Take-Home-Exam	Pf	Portfolio review	TN	Participation
schrP	Written examination	Prä	Presentation		
mdIP	Oral examination	STA	Student research project		
elektrP	Electronic testing	schrB	Written report*		

### Type of teaching

EX	Excursion	Pr	Practical course	Pro	Project work
S	Seminar	SU	Seminar teaching	SUW	Seminar-based teaching for subject-specific compulsory elective modules
Ü	Exercise				
V	Lecture				

### Other

UE	Teaching units	LV	Course	SWS	Semester hours per week
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\* This can only be selected as an examination for the module 'Internship'.