

Important note: The Technical Engineering bachelor programme is legally regulated by the "Studien- und Prüfungsordnung" (Study and Examination Regulations). This document is a legally non-binding translation of the study and examination regulations.

Study and examination regulations for the Bachelor's degree programme in Technical Engineering at the Ostbayerische Technische Hochschule Amberg-Weiden

dated 10.10.2024

(these study and examination regulations are subject to the General Study and Examination Regulations (ASPO) of the Ostbayerische Technische Hochschule Amberg-Weiden dated 10 October 2024)

Based on Art. 9 sentence 1, Art. 80 para. 1 sentence 1 and sentence 2, Art 84 para. 2 sentence 1 of the Bavarian Higher Education Innovation Act (BayHIG) of 05 August 2022 (GVBl. p. 414, BayRS 2210-1-3-WK), which was amended by § 3 of the law of 23 December 2022 (GVBl. p. 709) , the East Bavarian Technical University Amberg-Weiden issues the following statutes:

§ 1

Purpose of the study and examination regulations

The study and examination regulations serve to complete and supplement the General Study and Examination Regulations (ASPO) of the Ostbayerische Technische Hochschule Amberg-Weiden dated 10 October 2024 in the currently valid version.

§ 2

Study objective

- (1) ¹The Technical Engineering (TE) degree programme in the Faculty of Mechanical/Environmental Engineering offers an interdisciplinary and English-language education at the intersection of materials engineering, process engineering, energy and electrical engineering, incorporating elements of mechanical engineering and business administration. ²The overarching goal is to acquire specialised and interdisciplinary skills. ³The specific and overarching qualification objectives include the ability to actively, critically, integratively and responsibly participate in the planning, development, realisation and operation of processes in internationally active companies and companies with a strong research and development focus.
- (2) ¹A further focus is on intercultural sensitisation and the ability to work multilingually in English, German and possibly in another language area. ²In addition, students are given the qualification for a subsequent technical Master's programme.

- (3) ¹Graduates of the degree programme are able to work both individually and as members of international and interdisciplinary groups, organise projects effectively and carry them out in an agile manner, as well as grow into corresponding management responsibility. ²In doing so, they communicate and cooperate with other specialists and non-specialists, taking cultural differences into account. ³They communicate in English at a level appropriate to the target group in a technical and academic context and have German language skills of at least level B2 according to the Common European Framework of Reference for Languages.
- (4) ¹The occupational field covers all areas of the value chain of manufacturing companies. ²This includes areas such as research, development and engineering, process and plant planning, production, quality management, logistics and support functions. ³Graduates of the course will find various career opportunities if they choose the right modules, particularly in process optimisation, plant planning and monitoring, quality management of production processes and in interface areas such as project management, production management and operational environmental protection. ⁴Due to the interdisciplinary nature of the degree programme and typical engineering issues, the professional field extends to all corporate functions in the value chain of manufacturing companies, from research, development and engineering to production, logistics and support functions.
- (5) In addition to subject and methodological competences, the degree programme should convey the joy of learning and the creative application of knowledge, promote the ability to criticise and reflect and encourage students to act responsibly in their profession and society.

§ 3

Admission requirements, standard period of study, start and structure of the degree programme

- (1) ¹Applicants with a school-leaving qualification from a foreign school are recommended to submit a certificate of recognition of the school-leaving qualification issued by a certified institution (e.g. uni-assist) by the end of the application period. ²The decision on admission to the degree programme is made by the examination board.
- (2) ¹Students who have not obtained their higher education entrance qualification in German should be given the technical and linguistic skills in the first two study sections to enable them to enter the German labour market at the beginning of the practical semester and to be able to complete the third study section partly in German if they choose appropriate specialisation modules. ²To this end, they use the German courses for students on technical degree programmes specified in more detail in the course catalogue. ³In order to enable this acquisition of skills within the first two study sections, sufficient knowledge of the German language must be demonstrated at the beginning of the programme by means of a language certificate corresponding to level A2 according to the Common European Framework of Reference for Languages (Section 3 (5) sentence in conjunction with (3) sentence 3 of the Statutes on the German Language Programme). para. 3 sentence 3 of the statutes on the enrolment, leave of absence, re-registration and de-registration procedure at the Ostbayerische Technische Hochschule Amberg-Weiden). ⁴Proof is not required if the university entrance qualification or an already acquired university degree was obtained in German.
- (3) Students who have obtained their higher education entrance qualification in German should be given the language skills to operate confidently in an international environment in the first two study sections and are therefore obliged to take the UNICert English courses specified in more detail in the course catalogue.
- (4) ¹All applicants must also provide proof of English language proficiency at B2 level according to the Common European Framework of Reference for Languages at the start of the programme. ²This proof can be provided by German students through the Abitur grade in English, alternatively by international applicants through a valid/current proof of sufficient knowledge

of English in accordance with § 3 para. 6 sentence 2 of the statutes on the enrolment, leave of absence, re-registration and de-registration procedure of OTH Amberg-Weiden. ³Proof is not required if the university entrance qualification or a university degree was obtained in English.

- (5) ¹This Bachelor's degree programme is offered as a full-time course. ²The programme comprises a standard period of study of seven semesters with a total of 210 ECTS credits. ³It includes a practical semester.
- (6) ¹As a rule, the degree programme begins in the winter semester. ²If the programme is also scheduled to begin in the summer semester, this will be publicly announced before the start of the application procedure. ³announced before the start of the application procedure.
- (7) The degree programme is divided into
- the first study phase with the semesters 1 and 2,
 - the second study section with semesters 3 and 4,
 - the third study section with semesters 5 to 7
- (8) From the second The following specialisations are offered from which students can individually compile their curriculum:
- Classical Engineering
 - Process Technology and Environmental Engineering
 - Energy Technology and Information Processing
 - Chemistry and Materials
- (9) ¹The modules in the first stage of the programme and the language modules are compulsory modules. ²From the second study section onwards, the specialised modules are offered as compulsory elective modules. ³Students can choose freely from these compulsory elective modules, whereby at least 5 ECTS credits must be earned from each specialisation per study section. ⁴As a rule, a total of 30 ECTS must be taken per semester.
- (10) Detailed information on the structure of the programme and the timetable can be found in the course catalogue.

§ 4

Curricular structure, modules and certificates of achievement

- (1) The degree programme has the following curricular structure:

Mathematics, computer science and basic research methods	11,9%
Basic modules Classical Engineering	7,1%
Basic modules Chemistry and Materials	4,8%
Compulsory elective catalogue extended basics (2nd year of study)	21,4%
Compulsory elective catalogue of specialisation modules (3rd year)	28,6%
Language training and international expertise	11,9%
Practical work	8,6%
Bachelor thesis	5,7%

- (2) ¹The modules, their ECTS credits and number of hours, the type of courses as well as the examinations and course-related assessments are set out in Annex 1 to these statutes. ²The corresponding regulations for the compulsory elective modules are set out in the course catalogue.

- (3) ¹The learning objectives and content of the compulsory and elective modules as well as the practical semester are specified in the course catalogue. ²The compulsory elective modules serve to deepen the content of the compulsory modules.
- (4) ¹There is no entitlement to all compulsory elective modules and elective modules being offered. ²Similarly, there is no entitlement to courses being offered if the number of participants is insufficient.
- (5) As a rule, one ECTS point corresponds to an effort of 30 hours.

§ 5 **Practical semester**

- (1) ¹The practical semester comprises the modules Practical Work and Bachelor's Thesis, which are linked by a cross-module internship. ²As part of the work placement, students work on specific business problems or research tasks and thus produce a practical assignment and the Bachelor's thesis. ³The deadline for completing the Bachelor's thesis is three months.
- (2) ¹As a rule, the internship comprises a continuous period of at least 20 weeks with the normal working hours of full-time employees. ²The completion of the internship must be documented by a certificate of attendance from the training centre that meets the requirements of the university.
- (3) Further details are regulated in the course catalogue.

§ 6 **Curriculum and course catalogue**

- (1) ¹The faculty Maschinenbau/Umwelttechnik shall draw up a course catalogue and a curriculum to supplement the study and examination regulations, which shall be adopted by the Faculty Council and publicised at the university. ²New regulations shall be published at the latest at the beginning of the lecture period of the semester they affect for the first time.
- (2) ¹The modules and the associated coursework and examinations are described in the course catalogue. ²In particular, the course catalogue contains the following information on the individual modules:
 - a) Name/description of the module (English/German)
 - b) Frequency of the offer
 - c) ECTS points (incl. distribution of the workload)
 - d) Teachers/module leaders
 - e) Admission requirements
 - f) Learning objectives
 - g) Teaching content
 - h) Study and examination achievements
 - i) the language of instruction and examination in the individual modules (English or German)
 - j) Applicability in the further course of study or university-wide
- (3) ¹The course of study is described in the curriculum. ²The curriculum contains the following information:
 - a) Timing of the programme, chronological order of the modules
 - b) Number of attendance hours (SWS) per module
 - c) ECTS points per module

§ 7

Study progress

- (1) ¹The examinations in the following modules must be taken for the first time by the end of the second semester (basic and orientation examinations in accordance with Section 39 (2) sentence 1 ASPO):
 - Mathematics I
 - Engineering Mechanics

²If the aforementioned examinations have not been taken by this date, they are deemed to have been taken for the first time and failed.
- (2) Admission to the second stage of the programme requires that at least 30 ECTS credits have been achieved in the modules of the first study phase.
- (3) Entry to the third stage of study requires that at least 80 ECTS credits have been achieved in the modules of the first and second stages of study.
- (4) ¹Entry to the practical semester requires that 160 ECTS have been achieved in the first three study sections. ²In order to ensure sufficient language skills to complete the practical semester, proof of sufficient knowledge of the German language corresponding to level B2 according to the Common European Framework of Reference for Languages must be provided before the start of the internship. ³Proof is not required if the German courses of the Language Centre specified in § 3 para. 2 have been successfully attended. ⁴Proof is also not required if the university entrance qualification or the university degree was obtained in German.
- (5) In justified exceptional cases, the Examination Board may make different arrangements upon request.

§ 8

Study counselling

Students who, by the end of the 2nd semester, have less than 30 ECTS credits by the end of the second semester must visit the Student Advisory Service.

§ 9

Bachelor thesis

- (1) The Bachelor's thesis is written as part of the practical semester within the meaning of Section 5 (1).
- (2) ¹The processing time for the Bachelor's thesis is a maximum of three months. ²It may be extended by two months by the Examination Board if the reasons for the extension are not the responsibility of the respective student.
- (3) The Bachelor's thesis must be written in German or English.

§ 10

Assessment of examination results and overall examination grade

- (1) ECTS points are awarded in full in accordance with Annex 1 for each module graded at least "sufficient" and for the Bachelor's thesis graded at least "sufficient".
- (2) The degree programme is successfully completed when all coursework and examinations have been successfully completed.

- (3) ¹The grade weighting for the overall grade is based on the weighting according to the ECTS points of the modules as per the appendix. ²The grade of the Bachelor's thesis is weighted twice.

§ 11

Academic degrees

¹On successful completion of the Bachelor's examination, the academic degree "Bachelor of Engineering", short form "B.Eng." is awarded. ²If more than 50 ECTS credits have been earned in a specialisation, the specialisation is named as the "main focus area" in the degree certificate. ³If the student has earned more than 50 ECTS credits in several specialisations, he/she can choose the specialisation to be named.

§ 12

Examination board

The examination board responsible for the degree programme is the examination board of the faculty Maschinenbau/Umwelttechnik with a chairperson and two further members appointed by the Faculty Council.

§ 13

Entry into force

These study and examination regulations enter into force on 15.03.2025 and apply to students enrolled in the Sommersemester 2025 or later commence their studies.

Issued on the basis of the resolution of the Senate of the Ostbayerische Technische Hochschule Amberg-Weiden of 2 October 2024 and the legal supervisory approval by the President.

Amberg, 10 October 2024

Prof Dr med Clemens Bulitta
President

The study and examination regulations for the Bachelor's degree programme in Technical Engineering at the Ostbayerische Technische Hochschule Amberg-Weiden were announced on 11 October 2024 via the Internet by posting on the homepage of the Ostbayerische Technische Hochschule Amberg-Weiden (at www.oth-aw.de). The date of the announcement is 11/10/2024.

Appendix 1: Modules and examinations of the Bachelor's degree programme in Technical Engineering

1	2	3	4	5	6	7
No.	Module name	ECTS points	SWS	Type of Teaching event	Module examination ²⁾	Weight for examination grade overall grade
1	Study section 1					
1.1	Mathematics I	5	4	SU	Cl 90	
1.2	Mathematics II	5	4	SU/Ü	Cl 90	
1.3	Materials Engineering I Fundamentals	5	4	SU	Cl 90	
1.4	Electrical Engineering I	5	4	SU/Ü	Cl 90	
1.5	Computer Science I	5	4	SU/Ü	Cl 90	
1.6	Computer Science II	5	4	SU/Ü	Cl 90	
1.7	Engineering Mechanics	5	4	SU	Cl 90	
1.8	Strength of Materials I	5	4	SU	Cl 90	
1.9	Engineering Design and CAD	5	4	SU/Ü	ModA	
1.10	General and Inorganic Chemistry	5	4	SU/Ü	Cl 60	
1.11	Language					
1.11.1	German for Technical Studies 1	5	4	SU/Ü	SP	
1.12.2	German for Technical Studies 2	5	4	SU/Ü	SP	
or 1.13.3	English for Engineers UNIcert® II, Business English	5	4	SU/Ü	SP	
or 1.14.4	English for Engineers UNIcert® II, Technical English	5	4	SU/Ü	SP	
	Total ECTS / SWS	60	48			

1	2	3	4	5	6	7
No.	Module name	ECTS points	SWS	Type of Teaching event	Module examination ²⁾	Weight for examination grade overall grade
2	Study section 2					
2.1	Classical Engineering					
	Max. 6 programme-specific compulsory elective modules according to the module catalogue (at least 1) ³	5-30	see course catalogue ¹⁾			
2.2	Energy Technology and Information Processing					
	Max. 6 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³	5-30	see course catalogue ¹⁾			
2.3	Chemistry and Materials					
	Max. 6 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³	5-30	see course catalogue ¹⁾			
2.4	Process Technology and Environmental Engineering					
	Max. 6 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³	5-30	see course catalogue ¹⁾			
2.5	Language					
2.5.1	German for Technical Studies 3	5	4	SU/Ü	SP	
2.5.2	German for Technical Studies 4	5	4	SU/Ü	SP	
or 2.5.3	English for Engineers UNlcert® II, Business English	5	4	SU/Ü	SP	
or 2.5.4	English for Engineers UNlcert® II, Technical English	5	4	SU/Ü	SP	
2.5.5	International Competence	5	4	SU/Ü	Presentation	
	Total ECTS / SWS	60	48			

1	2	3	4	5	6	7
No.	Module name	ECTS points	SWS	Type of Teaching event	Module examination ²⁾	Weight for examination grade overall grade
3	Study section 3					
3.1	Classical Engineering					
	Max. 9 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³⁾	5-45	see course catalogue ¹⁾			
3.2	Energy Technology and Information Processing					
	Max. 9 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³⁾	5-45	see course catalogue ¹⁾			
3.3	Chemistry and Materials					
	Max. 9 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³⁾	5-45	see course catalogue ¹⁾			
3.4	Process Technology and Environmental Engineering					
	Max. 9 programme-specific compulsory elective modules according to the module catalogue (min. 1) ³⁾	5-45	see course catalogue ¹⁾			
4	Practical semester with practical and Bachelor's thesis					
4.1	Practical work	18		PP	PrB	
4.2	Bachelor thesis	12		BA	BA	
	Total ECTS / SWS	90	48			

¹⁾ Programme-specific compulsory elective modules:

This is a module group with several compulsory elective modules, for each of which ECTS points are earned upon successful completion of the respective module. In total, the ECTS points defined in the SPO must be earned for each group.

Compulsory elective modules for teaching specialist/methodological skills are closely related to the degree programme and serve to acquire specialist and methodological skills in selected areas (cf. HQR of 16.02.2017).

Compulsory elective modules for teaching social/self-competences serve to teach and deepen interdisciplinary skills and qualifications (cf. HQR of 16 February 2017).

The detailed qualification objectives of the compulsory elective modules can be found in the respective module descriptions.

²⁾ The module examinations can be supplemented on a voluntary basis via a bonus system (see General Study and Examination Regulations (ASPO) of OTH Amberg-Weiden).