Study and Examination Regulations for the Bachelor's degree program Mechanical Engineering at the Coburg University of Applied Sciences (SPO B ME) from 24/03/2025

Based on Art. 9 sentences 1 and 2, Art. 80 para. 1, Art. 84 para. 2, Art. 96 of the Bavarian Higher Education Innovation Act (BayHIG) of August 5, 2022 (GVBl. 2022, p. 414, BayRS 2210-1-3-WK), Coburg University of Applied Sciences issues the following statutes:

§ 1
Purpose of the Study and Examination Regulations

[1]These Study and Examination Regulations govern the Bachelor's degree program in Mechanical Engineering at Coburg University of Applied Sciences. [2]The regulations serve to implement and supplement the Bavarian Higher Education Innovation Act (BayHIG) of August 5, 2022 (BayRS 2210-1-3-WK) in the currently valid version and the General Examination Regulations of Coburg University of Applied Sciences (APO) of June 22, 2023 (Official Gazette 2023) in the currently valid version.

§ 2
Study objective

[1]The aim of the Bachelor's degree program in Mechanical Engineering is to provide students with the ability to independently apply scientific knowledge and methods on the basis of a scientific self-image and broad transfer knowledge. [2]The breadth and variety of activities at an academic qualification level in the field of mechanical engineering are covered on the one hand by a comprehensive basic education and on the other hand by the teaching of contemporary topics and methods in mechanical engineering-specific modules supplemented by various compulsory elective modules. [3] This enables students to quickly familiarize themselves with numerous areas of activity in the industry. [4]The mastery of the often interdisciplinary tasks of the profession, which require interdisciplinary specialist knowledge as well as a high level of social, communication and cooperation skills, is trained through appropriate teaching content and forms of learning. [5] In addition, the integration of scientific, technical, business and management-related content is a key feature of the course in terms of the professionalism of graduates. [6]The integrated acquisition of a sound knowledge of German makes it easier for non-German-speaking students to study in Germany and to start a career in a German company.

§ 3
Admission requirements for the degree program

(1) [1]An admissions committee decides on the admission of applicants. [2]The admissions committee is appointed by the Faculty Council of the Faculty of Mechanical and Automotive Engineering and is made up of three members of that faculty.

(2) [1]Applicants whose native language is not English must provide proof of English language proficiency at level B2 of the Common European Framework of Reference for Languages (CEFR) when applying for the Bachelor's degree program in Mechanical Engineering. [2]One of the language certificates recognized at the Coburg University of Applied Sciences serves as proof.

(3) [1]Applicants who are not Germans or persons of equivalent status to Germans within the meaning of Section 1 (2) sentence 2 of the University Admission Ordinance (HZV) of February 10, 2020 (GVBl. p. 87, BayRS 2210-8-2-1-1-WK), which was last amended by the ordinance of August 16, 2023 (GVBl. p. 564), in its current version, are “applicants from third countries”. [2]For this group, the total number of study places is limited to 25 for capacity reasons. [3]Applicants from third countries must provide proof of participation in the “TestAS” aptitude test in the “Core Test” and “Engineering Sciences” modules with an overall score (sum of the scores from both TestAS modules) of at least 90. [4]The overall score is used to

create country-specific ranking lists in order to achieve the highest possible diversity in the degree program. [5]Each nationality receives a quota of the 25 places in proportion to its number of applications to the total number of applications, but at least one place. [6]Women are preferred if equally qualified.

§ 4
Standard period of study and structure of the degree program

(1) [1]The course comprises a standard period of study of eight semesters, including seven theoretical semesters and one practical semester. [2]The language of instruction is English. [3]Compulsory elective modules can also be selected by students from a German-language module catalogue.
(2) [1]The course is divided into four study sections. [2]The first stage comprises one theoretical semester (introductory semester). [3]The second stage comprises two theoretical semesters. [4]The third stage comprises three theoretical semesters. [5]The fourth stage of study comprises a practical semester and the final semester, which includes the completion of a Bachelor's thesis.

§ 5
Modules and examinations, grading, overall examination grade

(1) [1]The compulsory and compulsory elective modules, their number of hours, the type of course, the examinations, their weighting for the formation of the final and overall examination grade and the divisor as well as the credit points (ECTS) are set out in the annex to these study and examination regulations. [2]The regulations for the modules are supplemented by the curriculum and examination plan.
(2) In addition to the overall examination grade, a relative grade is calculated in accordance with the ECTS Users' Guide as amended.

§ 6
Advancement authorizations

(1) Only those who have successfully completed the Academic English Skills and German Basics 1 (Level A1) modules in accordance with the annex to these Study and Examination Regulations are entitled to enter the second semester (second stage of study).
(2) Only those who have successfully completed all modules of the first study section and at least nine modules of the second study section in accordance with the annex to these study and examination regulations are entitled to enter the fourth study semester (third study section).
(3) Only those who have successfully completed all modules from the first and second study sections are entitled to enter the seventh study semester (fourth study section).
(4) Only those who have submitted a proper practical report on the “Industrial Internship” module are entitled to register for the Bachelor's thesis.

§ 7
Academic advising

[1]The student advisory service should explain to students the structure, options and procedures of the degree program as well as the courses offered. [2]In addition, it should inform and advise students on questions of professional aptitude and with regard to current professional developments.

§ 8
Practical semester

(1) [1]The practical semester comprises 20 weeks of full-time work experience and two practical courses. [2]It is successfully completed if

1. the completion of the practical phase is evidenced by a certificate from the training centre that corresponds to the model specified by the university,
2. a proper practical report has been recognized and
3. the courses accompanying the practical phase have been successfully completed.

[3]The examinations of the practical semester can be taken outside the examination period. [4]A practical report must be written in German or English in consultation with the practical supervisor.
(2) [1]As a rule, the practical semester should be completed in the Federal Republic of Germany. [2]If the practical semester is not completed in a company or is completed in whole or in part outside the Federal Republic of Germany, the examination board may make special arrangements.

§ 9
Bachelor thesis

(1) The degree program is completed with a Bachelor's thesis.

(2) [1]The Bachelor's thesis should demonstrate that the student is able to work independently on a problem from the field of mechanical engineering on a scientific basis. [2]The processing time is usually four months, taking into account the studies of the current semester. [3]As a rule, the Bachelor's thesis should be completed in the Federal Republic of Germany.

§ 10
Bachelor's examination certificate, Academic degree

[1]On successful completion of the degree program, a Bachelor's examination certificate and a certificate with the academic degree obtained are issued in accordance with the respective model in the appendix to the APO. [2]The Bachelor's examination certificate contains all modules of the degree program. [3]The academic degree “Bachelor of Engineering”, abbreviated to “(B.Eng.)”, is awarded on successful completion of the Bachelor's examination.

§ 11
Entry into force

These Study and Examination Regulations enter into force on 01/10/2025.

Issued on the basis of the resolution of the Senate of the Coburg University of Applied Sciences dated March 14, 2025 and the approval by the President dated March 24, 2025.

Coburg, March 24, 2025

signed
Prof. Dr. Gast
President

These Study and Examination Regulations were deposited at the Coburg University of Applied Sciences on March 24, 2025. The deposit was announced by notice on 24/03/2025. The date of the announcement is 24/03/2025.

Appendix: Overview of the modules and examinations for the Bachelor's degree program in Mechanical Engineering

1	2	3	4	5	6	7	8	9
lfd. Nr.	**Courses**			**Examinations**				
	Modules	SWS	Type of course [1]	Type of test [1]	Admission requirements [1]	Scope [1]	Factor of calculation towards degree grade [4]	ECTS
First study phase - theoretical semester 1								
1	Introduction to Advanced Mathematics	4	S, SU, Ü	schrP or Pf		60 – 90 minutes 10 – 20 pages	0,5	5
2	Scientific Basics	4	S, SU, Ü	schrP or Pf		60 – 90 minutes 10 – 20 pages	0,5	5
3	Academic English Skills	4	S, SU, Ü	schrP or Pf		60 – 90 minutes 10 – 20 pages	0,25	5
4	Soft Skills and Culture	2	SU, Ü	HA or Pf		10 – 20 pages 10 – 20 pages	0,25	3
5	German Basics 1 (Level A1)	6	SU, Ü	schrP	[1]	90 minutes	0,25	5
6	German Basics 2 (Level A2)	12	SU, Ü	schrP	[1]	90 minutes	0,25	7
Second study phase - theoretical semesters 2 and 3								
7	Technical Mathematics 1	6	SU, Ü	schrP		90 – 120 minutes	2	5
8	Technical Mathematics 2	6	SU, Ü	schrP		90 – 120 minutes	2	5
9	Mechanics 1	4	SU, Ü	schrP		90 – 120 minutes	2	5
10	Mechanics 2	4	SU, Ü	schrP		90 – 120 minutes	2	5
11	Engineering Design 1	4	SU, Ü, Pr	HA and schrP		[1] 30 – 60 minutes	2	5
12	Machine Elements 1	4	SU, Ü, Pr	schrP		90 – 120 minutes	2	5
13	Fundamentals of Electrical Engineering	4	SU, Ü	schrP		90 – 120 minutes	2	5
14	Programming	4	SU, Ü	schrP		90 – 120 minutes	2	5
15	Fundamentals of Business Administration	4	SU, Ü	schrP		90 – 120 minutes	2	5
16	Materials Science and Technology	4	SU, Ü	schrP		90 – 120 minutes	2	5
17	German Basics 3 (Level B1.1)	4	SU, Ü	schrP	[1]	90 - 120 minutes	0,5	5
18	Technical German (Level B1.2)	4	SU, Ü	schrP	[1]	90 - 120 minutes	0,5	5

Third study phase - theoretical semesters 4, 5 and 6

19	Mathematical Applications	4	SU, Ü, Pr	prStA		20 – 30 pages	2	5
20	Simulation Methods 1	4	SU, Ü	schrP		90 – 120 minutes	2	5
21	Simulation Methods 2	4	SU, Ü	schrP		90 – 120 minutes	2	5
22	Strength of Materials	4	SU, Ü	schrP		90 – 120 minutes	2	5
23	Advanced Dynamics	4	SU, Ü	schrP		90 – 120 minutes	2	5
24	Scientific Work and Lab Workshops	4	SU, Ü, Pr	Pf		20 – 30 pages	4)	5
25	Engineering Design 2	4	SU, Ü	HA		1)	2	5
26	Machine Elements 2	4	SU, Ü	schrP		90 – 120 minutes	2	5
27	Digitalization of Production	4	SU, Ü	schrP		90 – 120 minutes	2	5
28	Control Systems	4	SU, Ü	schrP		90 – 120 minutes	2	5
29	Fluid Mechanics	4	SU, Ü	schrP		90 – 120 minutes	2	5
30	Thermodynamics	4	SU, Ü	schrP		90 – 120 minutes	2	5
31	Measurement Technology	4	SU, Ü	schrP		90 – 120 minutes	2	5
32	Production Technology	4	SU, Ü	schrP		90 – 120 minutes	2	5
33	Advanced Materials Science	4	SU, Ü	schrP		90 – 120 minutes	2	5
34	Industrial Organization and Quality Management	4	SU, Ü	schrP		90 – 120 minutes	2	5
35	Elective Subject 1	4	S, SU, Ü, Pr	6)	6)	6)	2	5
36	Elective Subject 2	4	S, SU, Ü, Pr	6)	6)	6)	2	5

Fourth study phase - practical semester 7

37	Industrial Internship	(20 Wo)	Pr	HA (Praxis-bericht)	1)	20 – 30 pages	4)	25
38	Industrial Internship accompanying Seminar 1	3	S, SU, Ü	mdlP or schrP	1)	15 min (mdlP) or 60 min	4)	3
39	Industrial Internship accompanying Seminar 2	2	S, SU, Ü	mdlP or schrP	1)	15 min (mdlP) or 60 min	4)	2

Fourth study phase - final semester 8

40	Elective Subject 3	4	S, SU, Ü, Pr	6)	6)	6)	2	5
41	Engineering Project	3)		HA		25 – 35 pages	2	10
42	Bachelor Colloquium			Präs		15 – 30 minutes	1	3
43	Bachelor Thesis			BA		50 – 70 pages	5	12

Summary	**165**	**67**	**240**

Abbrevations:

BA	= Bachelor thesis
Pr	= Internship
Präs	= Presentation
Pf	= Portfolio
wBer	= scientific report
HA	= Term paper
prStA	= Practical student research project
S	= Seminar
schrP	= Written examination
SU	= Lecture
SWS	= Semester periods per week
Ü	= Tutorial
ECTS	= European Credit Transfer System
mdlP	= Oral examination

Footnotes:

1) The specific details are determined by the Faculty Council of the Faculty of Mechanical and Automotive Engineering in the study and examination schedule and/or in the module manual.

2) Where several options are listed, the Faculty Council of the Faculty of Mechanical and Automotive Engineering shall specify the details in the study and examination schedule. In doing so, the Faculty Council shall ensure an appropriate variety of examination types.

3) As part of the Engineering Project, supervision is provided by teaching staff from the university. The scope of the supervision is 0.2 SWS per student.

4) The modules mentioned are assessed as “pass” or “fail” and are therefore not included in the final grade.

5) Weighting factor of the respective module examination grades for the overall examination grade of the Bachelor's degree

6) The course offerings are decided by Faculty Council at the end of the current semester for the following semester. The type and scope of the courses, as well as any admission requirements, are determined by the Faculty Council of the Faculty of Mechanical and Automotive Engineering in the Study and Examination schedule.