

**Study and Examination Regulations for the
Bachelor's Degree Programme
Building Products and Processes (BPP) / Bauprodukte und -
prozesse
at Deggendorf Institute of Technology**

of 18 December 2024

Based on Art. 9, 80(1), 84(2) Clause 1 of the Bavarian Higher Education Innovation Act (BayHIG) of 5 August 2022 (German law and ordinance gazette (GVBl.) p. 414, BayRS 2210-1-3WK), last amended by Section 1 of the Act of 23 July 2024 (GVBl. p. 257), Deggendorf Institute of Technology enacts the following by-laws:

**§ 1
Aim of the study programme**

- (1) ¹The Bachelor degree programme "Building Products and Processes (BPP) / Bauprodukte und -prozesse" aims to provide, through practice-oriented teaching, the new spectrum of building and construction industry in terms of climate protection, digitalisation (incl. artificial Intelligence), efficiency of execution, sustainable orientation, innovative building materials, circular economy and architectural efficiency. ²The focus is on the engineering development of internationally marketable and sustainable building products and on the associated digital construction processes along the entire life cycle of these building products. ³This hybrid structure of engineering and management trains specialists and managerial staff to develop and market sustainable, recyclable building products and use the knowledge successfully in national and international projects. ⁴The top priority is to prepare the students for responsible tasks relating to the future challenges in the construction industry and thereby take account of the challenges in the area of societal problems and human needs in the world of work. ⁵The programme also aims to impart the technical, methodological and social skills that enable students to independently apply the acquired knowledge and skills, the scientific findings and procedures, and to act responsibly as engineers. ⁶As German language skills are a fundamental prerequisite for successful entry into the German labour market and an essential basis for long-term integration into German society, international students will also receive a sound knowledge in the German language in the first five semesters in addition to their subject-specific training.

(2) The bachelor's degree programme is intended to enable students for engineering and management activities in the following fields of work:

- Control of all process steps that are necessary within the scope of developing a building product in order to bring it to the national and international target market or to apply it in the construction sector
- Competence in data consistency on the basis of integrated CAD-3D planning throughout the entire construction process from the tender phase to construction invoicing (BIM 3D to 6D)
- Promotion of sustainable and energy-efficient buildings of tomorrow with recyclable building products and systems
- Competences in the area of intelligent building products and the incorporation of artificial intelligence
- Technical and commercial planning, management and execution of medium and large-scale building construction projects with complex building structure, building envelope, interior fit-out and technical finishing trades
- Lean management
- Working in domestic and international surroundings.

(3) 1Importance is placed on a wide-ranging and qualified, interdisciplinary, solution- and implementation-oriented education which enables graduates to seize a variety of career opportunities in all companies in the construction industry especially in building construction. 2More specifically, this includes companies that are active in the region (as construction product manufacturers or construction service providers) but also offer their services internationally. 3With the skill set they have acquired, graduates will also be ideally qualified for employment in engineering offices, planning offices, building authorities and building supervisory authorities. 4Furthermore, graduates should also be trained for future management tasks in companies as well as for their own independent work or company succession.

§ 2

Structure of the programme, standard period of study

- (1) The degree programme comprises a standard period of study of eight semesters with seven theoretical and one internship semester. ²The practical semester takes place in the seventh semester of the degree programme.
- (2) A total of 240 ECTS credits must be attained.
- (3) German courses offered in the first five semesters enable international students to reach level B2 language proficiency under the Common European Framework of Reference. ²Students whose native language is German are not required to take any additional language courses but may choose to take further language and additional qualifications at Deggendorf Institute of Technology.
- (4) ¹Classes held in the first five semesters will all be conducted in English. ²As from the sixth semester, the language of instruction is English, but German is integrated into the following lectures:
 - Sustainable Building (German and English content combined)
 - Project Seminar (German and English content combined)
 - Law: Building Product Regulations (German and English content combined)
 - Building in Existing Structures and Deconstruction (German only)
 - Management Systems (German only)

§ 3

Admission and language requirements

- (1) For the bachelor's degree programme Building Products and Processes (BPP), the general admission requirements for studying at a university must be met in accordance with Art. 43, 45 BayHSchG in conjunction with the Ordinance on Qualification for Studies at the Universities of the Free State of Bavaria and the state-recognised non-state institutions of higher education (Qualification Ordinance QualV) (BayRS 2210-1-1-3- UK/WFK) in the currently valid version.
- (2) If English is not the native language, proof of English language skills of level B2 as per the Common European Framework of Reference for Languages must be provided upon application for the programme. Regarding the proof, the regulations set out in § 3 of the general examination regulations for additional qualification in foreign languages and compulsory elective modules of a general academic nature (AWP) of Deggendorf Institute of Technology shall apply as amended.

§ 4 Modules and courses

- (1) 1The programme comprises modules that that can be composed of thematically-related courses. 2Each module is assigned ECTS credits that take into account the time required by students to complete the module.
- (2) The modules, the lectures, their number of hours, the type of courses, the examinations and the ECTS credits are set out in the annex to these by-laws.
- (3) All modules consist of compulsory modules or compulsory elective modules:
 1. Compulsory modules are those modules held during the degree programme which are binding for all students.
 2. Compulsory elective modules are alternative modules offered individually or in groups. Students must select a certain number of modules from these in accordance with these study and examination regulations. These selected modules are treated as compulsory modules.
- (4) Modules can also be taught in blocks.
- (5) 1There is no claim that all available specialisations and compulsory elective modules will actually be offered. 2Likewise, there is no claim that the accompanying courses will be held when the number of participants is insufficient.

§ 5 Study plan

1The responsible faculty, currently the Faculty European Campus Rottal-Inn (ECRI), prepares a study plan for the purpose of securing the teaching provision and to provide information to students. Details of the course of studies are derived from this study plan. 2The study plan is set by the Faculty Board and made public at the institute prior to the semester start. Changes and/or new regulations are announced at the latest at the beginning of the lecture period of the semester in which these changes are to be implemented for the first time. In particular, the study plan contains regulations and information regarding:

1. the time distribution for the weekly semester hours per module and study semester, including ECTS credits;
2. the subject-related compulsory elective modules, including the number of hours involved;
3. the names of the compulsory and compulsory elective modules as well as their respective number of weekly semester hours;
4. detailed provisions for proofs of performance and attendance.
5. the objectives and contents of the internship and of the courses accompanying the internship (PLV) as well as the form and organisation of these.

§ 6

Basic modules

Study and examination achievements up to a scope of 60 ECTS credits, which were acquired in a similarly named or related bachelor's degree programme at a state or state-recognised university of applied sciences in Bavaria in basic modules of the degree programme, shall be credited upon application without further examination to the basic modules in a bachelor's degree programme at the admitting university. The basic modules of this degree programme are marked with an * in the curriculum.

§ 7

Minimum ECTS score requirement (GOP)

¹By the end of the second semester, the students must have taken the module examination for the following modules for the first time:

- Engineering Mathematics
- Chemistry of Building Materials
- Building Material Characteristics
- Building Informatics and AI

²Should this deadline not be met, the aforementioned examination will be deemed to have been initially failed.

§ 8

Admission to various stages of the degree programme

- (1) Admission to the A2 German course and the examination is only permissible if the A1 German course and examination have been passed.
- (2) Admission to the German B1 / part 1+2 course and the examination is only permissible if the A2 German course and examination have been passed.
- (3) Admission to the B2 German course and the examination is only permissible if the German B1 / part 3+4 course and examination have been passed.
- (4) Admission to courses and examinations containing German language content from the sixth semester onwards is only permitted to students who have passed the course and the German B2 examination.

§ 9

Internship semester

- (1) The internship semester shall last at least 20 weeks to a maximum of 24 weeks, including courses accompanying the internship (PLV I/II) for a duration of two weeks.
- (2) ¹Students shall independently endeavour to find an appropriate topic from industry or public institutions. ²In doing so, care must be taken to ensure that the assignment is predominantly related to technical topics. ³The determination of suitability is made by the faculty internship officer.

- (3) ¹Unless attainment of the educational goal is compromised, missing practical periods caused by interruptions will, by way of exception, not need to be made up for at a later juncture where such interruptions are beyond the students' control (e.g. shutdowns, illness) and provided that no more than five working days are lost as a result of the interruption. ²Students performing military duty training will be exempt from the requirement to make up for the missing time provided that no more than ten (10) working days are lost due to such training. ³Students will be required to prove that the interruption was beyond their control. If the interruptions extend beyond five and ten working days respectively, students must make up for the total number of lost days. ⁴ Work completed as overtime can compensate interruptions.
- (4) Admission to the practical study semester requires that at least 150 ECTS credits have been obtained.

§ 10

Assessment of examination performance; overall examination grade

- (1) ECTS points are awarded for each successfully passed examination. The number of attainable points per exam is shown in the annex.
- (2) The overall examination grade is calculated by taking the weighted arithmetic mean of individual grades. ²The weight of an individual grade is the same as the number of ECTS credits allocated to the subject for which the grade was awarded. Ungraded examinations do not count towards the overall examination grade, but must be successfully passed.
- (3) In addition to the overall grade in accordance with paragraph 2, a relative grade based on the numerical value attained is shown according to the ECTS User Guide as per the provisions of § 8 paragraph 6 of the general examination regulations of Deggendorf Institute of Technology.
- (4) If a module examination consists of several examinations, the grade "not sufficient" in one partial examination cannot be compensated by a better grade in another partial examination.

§ 11

Bachelor's thesis

- (1) In the Bachelor thesis, students should demonstrate their ability to independently apply the knowledge and skills which they have acquired during their studies to complex tasks.
- (2) Students who have obtained at least 180 ECTS credits can register for the Bachelor thesis.

- (3) 1Students shall independently endeavour to find an appropriate topic from industry or public institutions. 2It must be ensured that the assignment is predominantly related to technical topics. 3The topics to be worked on are finally specified by the supervising lecturers of the faculty in agreement with the supervisors from industry or public institutions.
- (4) The Bachelor thesis must be completed within 6 months.
- (5) The bachelor's thesis can be written in English or German. The abstract must be submitted in both languages.

§ 12 Certificate

On passing the bachelor's examination, a corresponding certificate is issued in line with the sample shown in the annex to the General Examination Regulations of Deggendorf Institute of Technology.

§ 13 Academic degree and diploma supplement

- (1) On successful completion of the Bachelor examination, the academic degree of "Bachelor of Engineering", abbreviated "B. Eng.", is awarded.
- (2) A certificate granting the academic degree is issued in accordance with the respective sample in the annex to the General Examination Regulations of Deggendorf Institute of Technology.
- (3) The certificate is bilingual. A diploma supplement, which particularly describes the essential course content underlying the degree, the course of studies and the qualification obtained with the degree, is additionally included.

§ 14 Coming into effect

These study and examination regulations come into effect from 15 March 2025. They shall apply to all students who start their studies in the winter semester 2025/26 or later.

Abbreviation

st	Basic module	TN %	Participation (Attendance in %)
*			
d	Language of tuition German	eTN	Successful participation
e	Language of tuition English	schrP	Written examination
ECTS	European Credit Transfer System	mP	Oral examination
SWS	Semester hours per week	Ber	Report, limited to 20 DIN-A4 pages
SU/Ü	Seminar-based teaching / Tutorial	PStA	Project assignment
S	Seminar	Präs	Presentation, limited to 30 minutes
Pr	Internship	PoP	Portfolio (several partial assignments to be completed throughout the semester)
Pro	Project	PB	Internship report, limited to 20 DIN-A4 pages
		BA	Bachelor's thesis

"Pool of FWP subjects": (students must acquire 10 ECTS from the pool of subjects)

Architekturgeschichte und -theorie / *Architectural History and Theory* (schrP 90 min)

Gründungsmanagement / *Entrepreneurship* (Ber+Präs)

Strategische Planung und Projektmanagement / *Strategic Planning and Project Management* (Ber+Präs)

Finanzierung und Rechnungswesen / *Finance and Accounting* (Ber+Präs)

Technologie- und Schutzrechtsmanagement / *Technology and Intellectual Property Rights Management* (Ber+Präs)

Prozessoptimierung / *Process Optimization* (schrP 90 min)

Prozesssicherheit / *Process Safety* (schrP 90min)

Lebenszyklusanalyse und Ökobilanzen / *Life Cycle Analysis and Ecobalancing* (PoP)

SIVV-Schein / *SIVV Certificate* (schrP)

IFRS und Firmenrecht / *IFRS and Organizational Law* (schrP 90min)

Interdisziplinäre Produktentwicklung / *Interdisciplinary Product Development* (PoP)

Innovative Konstruktionen und Bauprodukte / *Innovative Constructions and Building Products* (Ber+Präs)

Angewandte KI im Bauprozess / *Applied AI in the Construction Process* (PoP)

Attendance requirements Bachelor's Programme "Building Products and Processes (BPP)"

BPP-05	German A1	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-08	CAD 2D / 3D (BIM)	The contents taught can only be conveyed sustainably in group work and with the participants present.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned.	Module will be assessed as failed
BPP-09	Intercultural skills and self-organisation	The contents taught can only be conveyed sustainably in group work and with the participants present.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned.	Module will be assessed as failed
BPP-10	German A2	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-15	Scientific Working Methods	The successful preparation and presentation of the project reports and the Bachelor thesis requires communication skills that can only be practised when the students are present.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned	Module will be assessed as failed
BPP-16	English: Negotiations	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-17	German B1/ part 1+2	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-23	German B1/ part 3+4	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-28	German B2	Language skills can only be developed effectively when the participants are present.	At least for 75% of the classes offered.	Module will be assessed as failed
BPP-32	Seminar Product Development	Projects and practical interpretations can only be carried out if active participation is guaranteed.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned.	Module will be assessed as failed
BPP-33	Project seminar	Projects and practical interpretations can only be carried out if active participation is guaranteed.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned.	Module will be assessed as failed
BPP-38	Workshop Architecture	The case studies studied can only be carried out in group work and when the participants are present.	At least for 75% of the classes offered. In justified cases of absence substitute tasks may be assigned.	Module will be assessed as failed

Issued based on the resolution of the Faculty Council dated 17 December 2024 and the Faculty Council of the ECRI Faculty of Deggendorf Institute of Technology dated 1 October 2024, and the approval of the university management dated 18 December 2024 and the regulatory approval of the Vice President of Deggendorf Institute of Technology dated 18 December 2024.

Signed
Prof. Dr. Marcus Herntrei
Vice President

These by-laws were recorded at Deggendorf Institute of Technology on 18 December 2024. The recorded by-laws were duly posted on the notice boards on 18 December 2024. Their day of announcement is therefore 18 December 2024.