

# Consolidated

# **Study and Examination Regulations**

# for the bachelor's degree programme

# Media Technology, B.Eng.

# at Deggendorf Institute of Technology

# dated 1 July 2019

## in their updated version of 1 October 2021

Study and Examination Regulations of 1 July 2019, as amended in acc. with the by-laws on 1 October 2021

Based on to Art. 13(2) Clause 2, 58(1), 61(2) Clause 1 of the Bavarian Higher Education Act (BayHSchG) of 23 May 2006 (GVBI. p. 245, Bay RS 2210-1-1-WK), last amended by Section 1 (186) of the Act adopted on 26 March 2019 (GVBI. p. 98), Deggendorf Institute of Technology hereby enacts the following by-laws:

### Section 1 Aim of the study programme

- (1) The Media Technology degree programme aims to teach all techniques, contents and design possibilities of modern media by practice-oriented tuition based on scientific and art theory findings and methods in order to enable students to make and create media products in accordance with engineering practice, develop new or refine existing media production technologies and methods and learn about media-aesthetic design concepts and processes. Their ability to act independently and responsibly on behalf of companies and society will be enhanced and expanded. Instruction is based on methods and findings drawn from modern media science, engineering disciplines, design theory and related scientific and artistic disciplines.
- (2) Based on technical and media culture knowledge, the degree programme imparts media competence, which is becoming increasingly necessary as a gateway to helping shape the globalising and integrative developments in the information society. To this end, knowledge from engineering science, computer science and digital media techniques will be combined with design and journalism as well as aspects of business management to enable students to pursue a career as an engineer in which they can act on their own responsibility.
- (3) Through extensive training in the basic subjects, students will be in a position to discern the main correlations between the respective knowledge domains and be able to apply engineering science know-how and methods. Moreover, they will acquire the level of flexibility required to keep pace with the ever-swifter advancement in technical development. Their training in the pertinent subjects will also enable students to recognise the impact

engineering activities have on the environment and society and to avoid any negative trends wherever possible. By acquiring this valuable knowledge, students will thus be able to lead projects, production activities, research and development work conducted in media technology in a responsible manner and to guide these to a successful conclusion.

The degree programme aims to qualify students for engineering activities in the following fields of work:

- Development and design
- Production and recording
- Quality assurance
- Project planning and project management
- Sales and marketing
- Service and consulting
- Editing and business management
- Monitoring and appraisal
- Research/development in the automotive, entertainment or equipment sectors
- Independent order processing
- (4) The programme is designed to deliver a broad-ranging, qualified and crossdisciplinary vocational education course that enables successful graduates to work in a variety of professions. Career opportunities span every field where media are employed and produced. This may be in media companies, but also in other commercial enterprises, the public sector or independent practice.

#### Section 2 Standard period of study, course structure

- (1) The standard period of study is seven semesters, six of which are theorybased and one is practical. The internship semester takes place in the sixth semester of the degree programme. A total of 210 ECTS credits may be awarded. One ECTS credit corresponds to the student working 30 whole hours (so-called full hours).
- (2) As of the fourth semester, the degree programme is split to offer the following specialisations:
  - Media Design (MD)
  - Media Informatics (MI).
- (3) Students are required to choose their specialisation after the 3rd semester. Students not making a choice will be assigned to a study specialisation.
- (4) Compulsory elective subjects of a general academic nature (AWP) and the subject-specific elective (FWP) courses may be taken in any semester. The subject-specific (FWP) course carries 4 semester hours per week (SWS) or at least 5 ECTS credits, but it can also consist of two courses, each worth 2 SWS or complementing each other to account for at least 5 ECTS credits. At least one of the two elective (AWP) courses must be a language.

#### Section 3 Modules and course assessment

- (1) The programme comprises modules that can be composed of thematically related courses. Each module is assigned ECTS credits, representing the time required by students to complete the module.
- (2) Compulsory and elective modules, courses, the number of hours for these, type of courses, examinations, and the ECTS credits are defined in the appendix to these by-laws. Regulations are supplemented by the curriculum for the general and subject-specific elective modules.
- (3) All modules consist of compulsory courses, compulsory elective courses or optional subjects:
  - 1. Compulsory courses are subjects of degree programme which are mandatory for all students.
  - 2. Compulsory elective courses are subjects that are offered as alternatives, either individually or in groups. Students are required to select a certain number of modules based on these Study and Examination Regulations. The selected subjects will then be treated as compulsory courses. A subject-specific (FWP) course may be replaced by a project assignment or a compulsory course of a different specialisation or a different degree programme, where the semester hours per week is either the same or higher.
  - 3. Optional courses are not mandatory for achieving the study objective. They can be selected in addition to the courses offered by the Institute.
- (4) Pursuant to a corresponding curriculum regulation, courses and examinations may be held in a foreign language. For compulsory subjects, this shall only be possible if the courses and examinations are also offered in German.
- (5) No rights or entitlements exist to all of the envisaged specialisation, compulsory elective subjects or optional subjects actually being offered. Likewise, no rights or entitlements exist to the related courses being held in the event of insufficient student numbers.

### Section 4 Transfer from other degree programmes

- (1) Transferring from comparable degree programmes at the institute or other institutions of higher education shall be permissible subject to places being available during the respective semesters.
- (2) Creditable achievements amounting to at least 8 ECTS credits must have been achieved for each preceding semester.

#### Section 5 Admission to the study specialisation and to the internship semester

- (1) Students require at least 70 ECTS credit points before they can commence their chosen specialisation.
- (2) Students require at least 120 ECTS credit points before they can commence the internship semester.

### Section 6 Curriculum

The responsible faculty draws up a curriculum detailing the progression of the degree programme to ensure that the relevant courses are offered and that students are duly informed. The curriculum is set by the Faculty Board and is to be made public at the Institute. Any new regulations to be announced must be made public no later than at the beginning of the lecture period for which the new regulations are to be applied. In particular, the curriculum includes regulations and information regarding:

- 1. the time distribution of weekly semester hours per module/course, class and semester
- names of specialisations offered, their compulsory and elective modules including their weekly semester hours, the type of instruction, the study objectives and the content of the individual modules/courses;
- 3. the subject-related compulsory elective modules, including the number of hours involved;
- 4. the catalogue of compulsory elective modules/courses of a general academic nature on offer;
- 5. the form of instruction used in each individual module, provided that this has not been conclusively specified in the appendix:
- 6. the study objectives and content of the individual modules including the time involved to complete them (module handbook);
- the goals and content of the internship and the practical courses taught as seminars during the internship semester, and how these are structured and organised;
- 8. more detailed provisions concerning the course assessments and attendance records;
- 9. the language in which the courses and examinations for specific subjects are held where it is not German.

### Section 7 Academic counselling

Students who have not yet attained 40 ECTS credits after two semesters are obliged to consult their academic advisor.

#### Section 8 Minimum ECTS score requirement (GOP)

By the end of the second semester, students must have sat the following end-ofcourse examinations:

- F1101 Mathematics 1
- F1102 Basics of Electrotechnology 1
- F1103 Physics 1

for the first time.

### Section 9 Internship semester

- (1) The internship semester is typically completed in the 6th semester and comprises at least 20 weeks. A written paper of at least 10 A4 pages is to be submitted, with the awarded grade determining whether the internship has been passed or not. A grade of 4.0 or better will result in the internship being passed. The internship may also be completed abroad. A preliminary internship or basic training is not required.
- (2) Complementary to the internship semester, a total of 4 practical courses taught as seminars (PLVs) are to be completed; these may be taken in any semester or during the semester breaks. One PLV comprises 3 semester hours per week and/or 2 ECTS credits. PLVs are graded courses. A grade of 4.0 or better will result in the PLV being passed.
- (3) In lieu of two PLVs, a research assignment of at least two weeks' duration or a research assignment comprising at least 6 semester hours per week or at least 4 ECTS credits may be completed. The research assignment should be of a scientific nature and will also be awarded a grade. A grade of 4.0 or better will result in a pass.
- (4) The title of the PLVs and/or research assignments will be included in the degree certificate.

### Section 10 Assessment of examination performance

- (1) Each module course has an assigned examination, to be taken at the end of the semester; the weighting of each subject as a component of the overall grade is outlined in the appendix. Depending on the examination format specified in the appendix, the grade awarded for a module course may consist of a written or oral examination or a graded project assignment or a combination of multiple individual examinations (e.g. practical experiments). End-of-module examinations are conducted as individual subject-specific examinations.
- (2) Grades relating to the industrial internship and the PLVs do not contribute to overall grade but are determinative for passing the internships and PLVs. The titles of PVLs and their grade are shown in the degree certificate.

### Section 11 Bachelor's thesis

- (1) In their bachelor's thesis, students are required to demonstrate their ability to independently apply the knowledge of media technology that they have acquired during their studies to complex tasks.
- (2) The bachelor's thesis is to be completed unassistedly and may be written both at or outside the Institute.
- (3) Students having acquired at least 150 ECTS credits are eligible to register for their bachelor's thesis. The bachelor's thesis carries 12 ECTS credits. It will be assessed by a faculty professor and must achieve a minimum grade of 4.0. Students shall briefly present the content and outcomes of their bachelor's thesis in a colloquium.
- (4) A colloquium, in form of a seminar (oral presentation), will be held as part of the thesis. In this seminar, students are required to defend their thesis.

### Section 12 Overall grade

- (1) ECTS credits are awarded for each successfully passed examination. The number of attainable credits per examination is shown in the appendix.
- (2) A student's overall examination grade is calculated using a weighted arithmetic average of their individual grades. The weighting of each individual grade is defined in the "Weighting" column in the list of subjects found in the appendix. Examinations for which no grades are awarded are not included in the overall grade but must be passed successfully.
- (3) In addition to the overall grade assigned as per Para. 2, a relative grade is awarded based on the numerical value attained, in keeping with the ECTS User Guide, as per the provisions of Section 8(6) of the General Examination Regulations of Deggendorf Institute of Technology.

### Section 13 Certificate

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

### Section 14 Academic degree and diploma supplement

- (1) Upon successful completion of the bachelor's examination, the academic degree "Bachelor of Engineering", in short: "B.Eng." is awarded.
- (2) A certificate granting the academic degree will be issued in accordance with the sample shown in the appendix to the General Examination Regulations of Deggendorf Institute of Technology.
- (3) The certificate will be accompanied by a Diploma Supplement primarily outlining the essential course content forming the basis of the degree, the progression of the studies, and the qualification obtained by virtue of the degree.

#### Section 15 Coming into effect and transitional arrangements

- (1) These Study and Examination Regulations shall come into effect on 01 October 2021. They apply to all students commencing the degree programme as of the 2021/22 winter semester.
- (2) The competent Faculty Board may, in consultation with the examinations board, adopt specific regulations in general or in specific cases for the degree programme, likewise the examinations board, in consultation with the incumbent examination committee in respect of examinations, provided that this is necessary in order to avoid any hardships in connection with the new study regulations.

#### Appendix 1 to the Study and Examination Regulations for the Bachelor's Degree Programme in Media Technology at Deggendorf Institute of Technology

Overview of modules, courses and course assessments

#### **1.** Theoretical semesters

No.	Module	No.	Course	Format	ECTS	sws	Weig ht- ing	Admission requirements <sup>1)</sup> Type of examination Duration in min.
F-01	Engineering Mathematics	F1101	Mathematics 1	SU/Ü	5	4	1	- schrP 90
		F2101	Mathematics 2	SU/Ü	5	4	1	- schrP 90
F-02	Electrical Engineering	F1102	Basics of Electrical Engineering 1	SU/Ü	5	4	1	- schrP 90
		F2102	Basics of Electrical Engineering 2	SU/Ü	5	4	1	- schrP 90
F-03	Physics	F1103	Physics 1	SU/Ü	5	4	1	- schrP 90
		F2103	Physics 2	SU/Ü	5	4	1	- schrP 60
F-04	Basics of Computer Science	F1104	Computer Science 1	SU/Ü	5	4	1	- schrP 90
		F3103	Web Programming	SU/Ü/PA	4	4	1	- schrP 90
F-05	Applied Computer Science	F3102	Computer Science 2	SU/Ü/Pr	5	4	1	ÜL passed schrP 90
		F4102	Computer Science 3	SU/Ü/PA	4	4	1	- schrP 90
F-06	Basics of Audio Engineering	F2105	Sound Engineering	SU/Ü	4	4	1	- schrP 90
		F3104	Sound Engineering Practicals	SU/Ü/Pr	5	4	1	- EP 8×10 <sup>5)</sup>
F-07	Media Technology	F3101	Digital Media 1	SU/Ü/Pr	5	4	1	passed Vers. schrP 90
		F4101	Digital Media 2	SU/Ü/Pr	5	4	1	passed Vers. schrP 90

No.	Module	No.	Course	Format	ECTS	SWS	Wei ght- ing	Admission require-ments <sup>1)</sup> Exam format Duration in min.
F-08	Basics of Design	F1106	Basics of Design 1	SU/Ü/PA	6	6	1	- PA
		F2106	Basics of Design 2	SU/Ü/PA	4	4	1	- PA
		F2104	Photography	SU/Ü/PA	3	2	0,5	- PA
F-09	Media Design 1	F4104	Media Design 1	SU/Ü/PA	4	4	1	- PA
F-10	Basics of Animation	F3106	Basics of Animation	SU/Ü/PA	4	4	1	- PA
F-11	Basics of Film/Video Design	F1105	Camera and Editing Techniques	SU/Ü/PA	2	2	0,5	- PA
		F2107	Film/Video Design 1	SU/Ü/PA	4	4	1	- PA
F-12	Applied Film/Video Design	F3107	Film/Video Design 2	SU/Ü/PA	5	4	1	- PA
	Design	F4105	Film/Video Design 3	SU/Ü/PA	6	6	1	- PA
F-13	Business	F1107	Business Administration	SU/Ü	2	2	0,5	- schrP 90
		F4106	Project Management	SU/Ü/PA	2	2	0,5	- PA
		F7101	Media Marketing	SU/Ü	3	2	0,5	- schrP 90
F-14	Journalism	F3105	Journalism 1	SU/Ü	2	2	0,5	- schrP 60
F-15	Modelling	F4103	3D Modelling	SU/Ü/PA	4	4	1	- PA
F-16	Media Statistics	F5101	Media Statistics	SU/Ü/PA	5	4	1	- schrP 90
F-17	Media Law	F7102	Media Law	SU/Ü	2	2	0,5	- schrP 90
F-18	Elective Module	Z3100	Compulsory Elective of a General Academic Nature (AWP) 1 <sup>3)</sup>	SU/Ü/PA	2	2	0,5	- schrP 60-90
		Z5100	Compulsory Elective of a General Academic Nature (AWP) 2 <sup>3)</sup>	SU/Ü/PA	2	2	0,5	- schrP 60-90
		F7100	Subject-Specific Compulsory Elective <sup>4)</sup>	SU/Ü/PA	5	4	1	
F-19	Bachelor's Thesis	F7105 F7106	Bachelor's Thesis Bachelor's Seminar		12 3	2	3	- mdIP
	Total				149	120		

No.	Module	No.	Course	Format	ECTS	SWS	Wei ght- ing	Admission require- ments <sup>1)</sup> Exam format Duration in min.
F-20	Applied Audio Engineering	F4107	Applied Audio Engineering 1	SU/Ü	5	4	1	- PA
		F5103	Applied Audio Engineering 2	SU/Ü	5	4	1	- PA
F-21	Interactive Media	F5104	Interactive Media	SU/Ü/PA	5	4	1	- PA
F-22	Media Design 2	F5105	Media Design 2	SU/Ü/PA	5	4	1	- PA
F-23	Internet Television	F5106	Film/Video Design 4	SU/Ü/PA	6	6	1	- PA
F-24	Visualisation and Animation	F7103	3D Visualisation and Animation	SU/Ü/PA	5	4	1	- PA
	Total				180	146		

# Media Informatics (MI) Specialisation

No.	Module	No.	Course	Format	ECTS	SWS	Wei ght- ing	Admission require- ments <sup>1)</sup>
								Exam format
								Duration in min.
F-25	Software Engineering	F5109	Basics of Software Engineering	SU/Ü/PA	4	4	2/3	- schrP 90
		F5109	Software Engineering Project	SU/Ü/PA	2	2	1/3	- PA
F-26	Database Systems	F5110	Database Systems	SU/Ü/PA	5	4	1	- schrP 90
F-27	Computer Network Systems	F5108	Computer Network Systems	SU/Ü/PA	5	4	1	schrP 90
F-28	Elective Subject	F4108	Elective Subject 1	SU/Ü/PA	5	4	1	- PA
F-29	Elective Subject 2	F5107	Elective Subject 2	SU/Ü/PA	5	4	1	- 50% PA, 50% schrP 60
F-30	Elective Subject 3	F7104	Elective Subject 3	SU/Ü/PA	5	4	1	- PA
	Total				180	146		

The selectable courses for modules F-28 to F-30 will each be announced at the beginning of the semester via the curriculum.

#### 2. Practical semester

No.	Module	No.	Course	Format	ECTS	sws	Examinations / course assessments at the end of the practical semester <sup>1)</sup>
F-31	Practical Courses Taught as Seminars (PLV) <sup>2)</sup>	F6101	PLV 1	SU/Ü/PA	2	3	- PA
		F6102	PLV 2	SU/Ü/PA	2	3	- PA
		F6103	PLV 3	SU/Ü/PA	2	3	- PA
		F6104	PLV 4	SU/Ü/PA	2	3	- PA
F-32	Industrial Internship	F6105	Internship	Pr	22		written report of at least 10 A4 pages
	Total				210	160	

<sup>1)</sup> The specific details will be set out in the curriculum by the Faculty Board. Practical exercises, project work (pro-rated) and/or other course transcripts in the second row of the last column of each table are organised by the lecturer in person and allocated to the individual end-of-module examination.

<sup>2)</sup> A student research project lasting at least two weeks may be conducted in lieu of two practical-based courses.
<sup>3)</sup> At least one of the elective (AWP) courses must be a language.

<sup>4)</sup> An elective (FWP) subject may be substituted for project work or a compulsory subject in a different major field of study or a different degree programme where the semester hours per week are either the same or more.

<sup>5)</sup> Successfully passing the practical is contingent on at least 7 of 8 experiments being conducted.

### **Abbreviations:**

mdl	= = =	Oral examination Examination
PB=PrB	=	Internship report
PL=PrL	=	Practical achievement
PLV	=	Practical course taught as seminar
Pr	=	Internship
Ref.	=	Presentation
S	=	Seminar
SA=StA	. =	Research assignment
schr	=	Written
schrP	=	Written examination (duration in min.)
SU	=	Seminar-based tuition
SWS	=	Semester hours per week
TN	=	Attendance record
Ü	=	Exercise class

## <u>Appendix 2</u> to the Study and Examination Regulations for the Bachelor's Degree Programme (Bachelor of Engineering) Media Technology at Deggendorf Institute of Technology

Exam	formats:		
Klau- sur = schrP	In-class exam, written examination	written	A proctored written examination, for which pre-defined aids/resources may be used, that is designed to test a pursued set of skills within a pre-defined timeframe. It may also be held as an online examination. An end-of-module examination typically lasts 90 minutes; in the case of sub-module tests in key skills courses, 60 minutes.
mdlP	Oral examination	oral	An oral examination is an oral discussion of examination topics over a defined time period designed to test a pursued set of skills by having the candidate give specific answers to the questions posed. Oral examinations can be held with one or a group of candidates. They last 15–20 min per candidate.
SA = StA	Researc h assignm ent	written	The pursued set of skills is examined in the course of a student research project on an assigned task over a defined time and is to be performed using appropriate tools. A student research project is a homework assignment that does not entail an oral presentation. As a text document, a homework assignment comprises approx. 8 to 15 pages or, as a presentation document, approx. 15 to 20 pages.
PA = PrA	Project work	written oral. pract	The envisaged skills profile is tested while students work on an assigned task within a project, which is to be completed within a defined timeframe, over several stages, and using appropriate tools. Project work is typically done in groups, with several students working as a team on a common task and presenting their findings/outcomes either orally and/or in writing, or submitting a practical work. Each student is required to make a personal contribution to the common task.
PL = PrL	Practical achievements	written oral pract.	During a practical course, the envisaged skills profile is tested based on the specialist area, using tests/trials, programming tasks, etc. Practical courses especially serve as a means of applying and evaluating theoretical principles in a practical scenario as part of a module and acquiring knowledge as a result. Practical tests can be supplemented by written papers. The specific components of the practical exercise in question and thus the competencies to be tested are outlined in the module description. Up to 10 different practicals may take place.
ÜL = ÜbL	Practical exercise s	written oral pract.	Practical exercises test the envisaged skills profile by having students work on assigned tasks (e.g. laboratory exercises, simulations, training tasks, case study work, context-specific searches). They serve to test factual and detailed knowledge as well as its application. Practical exercises may be conducted in writing, orally or electronically among other things. The specific components of the practical exercise in question and thus the competencies to be tested are outlined in the module description. Up to 10 practical exercises may take place. The practical exercise forms part of the final grade.
PB = PrB	Internship report	written	The internship report is a written paper through which students reflect on the internship and work-related activities that they have performed. The report must not exceed 15 pages.
BA	Bachelor's thesis	written	The purpose of this final written paper in the bachelor's degree programme is to enable students to demonstrate their ability to tackle a task relating to their studies and independently write a thesis within a prescribed period of time whilst applying scientific methods. Maximum completion time (= time between registering the bachelor's thesis and its submission): 6 months / length: 50–70 pages. If applicable, the length of the thesis may be extended by adding an appendix. The required workload is defined by the awardable number of ECTS credits. The bachelor's thesis includes the bachelor's seminar.