▲ Hochschule Harz

Hochschule für angewandte Wissenschaften

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On the basis of § 55 of the Higher Education Act/[Hochschulgesetz] of the State of Saxony-Anhalt in the version of the announcement dated 14.12.2010 (GVBI. LSA 2010 page 600 ff.), last amended on 13 June 2018 (GVBI. LSA p. 72, 118) in conjunction with § 67 Para. 3 No. 8 HSG LSA and § 77 Para. 2 No. 1 HSG LSA, the Faculty of Automation and Computer Science of the Harz University of Applied Sciences Wernigerode decided on the following study regulations on DD.MM.YYYY:

Study Regulations for the Programme

Option Technology and Innovation

Management

for the Master's Programme Technical Innovation Management (TIM)

dated DD.MM.YYYY

Version dated: 05.12.2018

Table of Contents

- §1 Scope of Application
 § 2 Qualification Level
 § 3 Specific Features
 § 4 Study Admission
 § 5 Standard Period of Study and Scope of Study
 § 6 Curriculum
 § 7 Master's Degree Examination
- § 8 Application and Entry into Force

Appendix 1: Curriculum ZZZ-YYY Regular Track (120 ECTS) Appendix 2: Curriculum ZZZ-YYZ Fast Track (90 ECTS)

§ 1 Scope of Application

These regulations regulate the content and structure of the study as well as the assignment of ECTS credit points to modules on the basis of the associated Examination Regulations of the Harz University of Applied Sciences.

§ 2 Qualification Level

After students pass the Master's examination, the Harz University of Applied Sciences awards the academic degree "**Master of Engineering**" (M.Eng.) to them. Completing the course of study attests to the ability to be self-employed in interdisciplinary contexts, based on continuing scientific knowledge.

§ 3 Specific Features

The international programme option is tailored to the needs of foreign applicants without knowledge of German and consists entirely of English-language teaching and learning opportunities. In lieu of the language proficiency for study purposes in German, the language proficiency for study purposes in English is a special prerequisite for admission. Further details are regulated by the regulations on admission. For those students, German as a foreign language is part of the curriculum.

There is transferability between the German-speaking Technisches Innovationsmanagement programme and its English-language programme option Technology and Innovation Management. Modules with the same content and competency goals will be credited to the Bachelor's and Master's programmes according to the regulations for recognition and crediting of learning outcomes.

§ 4 Study Admission

The programme can be begun in the winter semester or summer semester.

§ 5 Standard Period of Study and Scope of Study

Programme track YYY Regular Track:

The standard period of study, including the Master's degree examination, is **four semesters**. Students shall have a relevant first university degree with academic achievements of at least 180 ECTS credit points. For a successful Master's **degree**, 120 ECTS credit points must be gained. Study achievements from the first adaptation semester remain ungraded and are not included in the final grade.

Programme track YYZ Fast Track:

The standard period of study, including the Master's degree examination, is **three semesters**. Students shall have a relevant first university degree with academic achievements of at least 210 ECTS credit points. For a successful Master's **degree**, **90** ECTS credit points must be gained.

The degree programme concludes when the Master's degree examination is passed. When a first professionally qualifying university degree is included, a Master's degree requires a total of at least 300 ECTS credit points.

§ 6 Curriculum

The curriculum (see appendix) regulates the components of the modules, the assignment of the ECTS credit points to modules, the composition of the Master examination and the formation of the final grade of Master's degree.

§ 7 Master's Degree Examination

The Master thesis can be done at the Harz University of Applied Sciences in combination with a work placement in a company or external research institute. If the student decides to register for the Master thesis in combination with internship work placement, this becomes a compulsory part of his/her studies. The results of the Master thesis will be presented in a final colloquium.

§ 8 Application and Entry into Force

The study regulations apply to students who are newly enrolled in the programme option from the winter semester 2019/2020. The statutes come into force after approval by the rector of the Harz University of Applied Sciences with their university announcement in the Official Bulletin.

Issued on the basis of the decisions of the Faculty Board of the Faculty of Automation and Computer Sciences dated 28.11.2018 and the Academic Senate of the University of Harz dated DD.MM.JJJJ.

Wernigerode, DD.MM.YYYY

Prof. Dr. Folker Roland,

President of the Harz University of Applied Sciences Harz University of Applied Sciences Wernigerode

Appendix 1 Curriculum XXX-YYY – Regular Track for the Study Regulations for the programme option Technology and Innovation Management

Programme/pogramme option:	Technology and Innovati Master of Engineering (N	0
Abbreviation of the programme/		
pogramme option:	TIM	
Programme number:	777	
Programme Track:	Regular Track	
Programme Track number:	YYY	
Examination version:	2019	Valid from:

: 1.3.2019

		Madula		At	Attendance		Semes ter	Type of	Weighting	Credit		
Module	Module code	number	Unit	number	Semester	emester V		Р	hours per week	examination	[%]	Points (ECTS)
Elective course 1 (business s	tudies) ¹				1	4	0	0	4	HA/RF/PA/K9 0/K60 6	100	5
[according to the offer for incomings]												
Elective course 2 (business s	tudies) ¹				1	4	0	0	4	HA/RF/PA/K9 0/K60 6	100	5
[according to the offer for incomings]												
Introduction to Industry 4.0	AI_ITIM_19_001		Introduction to Industry 4.0 (lecture)		1	2	1		3	EA/PA/BE ⁶	100	5
Introduction to industry 4.0	AI_ITIM_19_001		Introduction to Industry 4.0 (lab)					1	1	Т	0	5
Engineering project	AI_ITIM_19_002				1			4	4	EA/PA/BE ⁶	100	5
Introduction to Research Fields in Computer Science	AI_ITIM_19_003				1	2	2		4	EA/PA/BE ⁶	100	5

Elective course 3 (foreign lan	guage) ⁵			1	4			4	K120/RF+MP/ K90+MP ⁶	100	5
[Option 1] German as a Foreign Language A1	AI_ITIM_19_004										
[Option 2] German as a Foreign Language	AI_ITIM_19_005										
[Option 3] English as a Foreign Language	AI_ITIM_19_006										
			1		1					Subtotal	30
					At	tendan	ice	Semes			Credit
Module		v	Ü	Ρ	ter hours per week	Type of examination	Weighting [%]	Points (ECTS)			
Chrotonia Innovation Managament	WW_BWL_16_1	Strategic Planning		2 3	2			2		100	F
Strategic Innovation Management	1000	Innovation Management		23	2			2	K120/ RF / HA		5
Operations Research and IT Security		Operations Research (English)		2 3	2			2	K120/HA/RF	100	F
Risk Assessment	AI_ITIM_19_007	IT Security Risk Assessment		Ζ3	2			2	/MP	100	5
Agile Requirements Engineering and	AI_ITIM_19_008	Agile Requirements Engineering and Digital Transformation (lecture)		2 ³	2	1		3	HA /MP	100	5
Digital Transformation		Agile Requirements Engineering and Digital Transformation (lab)					1	1	Т	0	
lafe an effer Debievel Technologi	AI_ITIM_18_009	Information Retrieval Technology (lecture)		2 ³	2	1		3	K120/EA/MP/ RF	100	5
Information Retrieval Technology	AI_IIIIII_I0_009	Information Retrieval Technology (lab)		2 °			1	1	Т	0	0
Elective course 4 (current tech	nologies) ²			2							5
[Option 1:] Virtual Reality/Augmented Reality and Mixed Reality Design	[AI_MUSK]			2 ³	2	1	1	4	EA/RF/PA	100	

[Option 2:] Smart Buildings: Smart Metering and Building Automation	AI_ITIM_18_010			2 ³	2	1	1	4	K90/EA/MP/ RF	100													
Digital Business Models and			Idea Engineering	2 ³	2			2	K120/ HA /	100	F												
Idea Engineering	AI_ITIM_18_012		Digital Business Modelling		1	0,5	0,5	2	MP	100	5												
Functional Colety			Functional Safety (lecture)	3 ⁴	1	1		2	HA / MP	100	F												
Functional Safety	AI_ITIM_18_011		Functional Safety (lab)	3 1			2	2	Т	0	5												
Technology Assessment and		Technology Assessment 1 1 1	2		100	F																	
Sustainability	AI_ITIM_18_005		Sustainability	3 4	1	1		2	HA/RF/PA	100	5												
Big Data and															Big Data	3 4	2			2		400	-
Geoinformation	AI_ITIM_18_006	AI_IIIIVI_10_000	AI_ITIM_10_000	AI_ITIIVI_10_000		Geoinformation	3 4	2			2	HA/RF/PA/MP	100	5									
			Project Work				4	4	HA	50													
Research and Development Project (English)	AI_ITIM_18_013		Research Methods and Academic Writing	3 4	1	1		2	RF	25	15												
			Paper Reading Group		2			2	RF	25													
										Subtotal	60												
Master's Thesis	AI_ITIM_18_201	8000		4					MA	100	23												
Colloquium (Thesis defense)	ALTHIN_10_201	8010		4					KO	100	7												
				 						Subtotal	30												
Master Degree		9000								Total	120												

¹ Courses amounting to 4 contact hours per week are to be selected from the current offer.

² Choose one of the options.

³ The course is offered only in the winter semester.

⁴ The course is offered only in the summer semester.

⁵ Choose one of the options. If the student has previous knowledge of the foreign language, the student is assigned to the course level by the Language Centre according to the result of the entrance test.

⁶ This performance is not graded and is not included in the final grade.

Examination Components

The Master thesis contributes with a weighting of 27% and the Master's colloquium with a weighting of 8% to the final grade. All other module grades are weighted according to CP (ECTS) and contribute a total of 65% of the final grade.

Symbol Explanation Where there are multiple examinations separated by a slash (/), only <u>one</u> examination is sat. The examination to be held will be determined by the lecturer at the beginning of the semester.

Abbreviations

K60, K90, K120	60 minute, 90 minute, 120 minute written exams	EA	Software draft
HA	Assignments (possibly including presentation)	RF	Presentation
PA	Project work (possibly including presentation)	MP	Oral examination
Т	Attestation	BE	Report (possibly including presentation)
MA	Master Thesis	KO	Colloquium
SWS	Contact hours per week	CP (ECTS)	ECTS credit points
V	Lecture	Ü	Exercise
L	Laboratory	WiSe/SoSe	Winter semester/Summer semester

Appendix 2

Curriculum XXX-YYZ – Fast Track

for the Study Regulations for the Study Variant Technology and Innovation Management

Master of Engineering (M.Eng.)

Programme/prgramme variant: Technology and Innovation Management

Degree:

Abbreviation of the

programme/programme option: iTIM

Programme number: ZZZ

Programme Track: Fast Track

Programme Track number: YYY Examination version: 2019

Valid from: 1.3.2019

				Unit	Attendance		nce	Semes ter			Credit				
Module	Module Module code Module number		Unit	Unit number	Semester	v	Ü	Ρ	hours per week	Type of examination	Weighting [%]	Points (ECTS)			
Stratogic Ippovation Management	WW_BWL_16_1		Strategic Planning		- 1 ³	2	2	2	2		2	K120/ RF / HA	400	5	
Strategic Innovation Management	1000		Innovation Management		13	2			2	K 120/ RF / HA	100	5			
Operations Research and IT Security	AI_ITIM_19_007			Operations Research (English)		- 1 ³	2			2	K120HA/RF//	100	5		
Risk Assessment	AI_111101_19_007		IT Security Risk Assessment		1.	2			2	MP	100	5			
Agile Requirements Engineering and	AI_ITIM_19_008		Agile Requirements Engineering and Digital Transformation (lecture)		1 ³	2	1		3	HA /MP	100	5			
Digital Transformation			Agile Requirements Engineering and Digital Transformation (lab)					1	1	Т	0				
Information Retrieval Technology			AI_ITIM_18_009			Information Retrieval Technology (lecture)		13	2	1		3	K120/EA/MP/ RF	100	5
	A_1110_009		Information Retrieval Technology (lab)		1-			1	1	Т	0	5			
Elective course 4 (current tech	nologies) ²				1							5			

[Option 1:] Virtual Reality/Augmented Reality and Mixed Reality Design	[AI_MUSK_]			1 ³	2	1	1	4	EA/RF/PA	100							
[Option 2:] Smart Buildings: Smart Metering and Building Automation	AI_ITIM_18_010			1 ³	2	1	1	4	K90/EA/MP/ RF	100							
Digital Business Models and	AI_ITIM_18_012		Idea Engineering	1 ³	2			2	K 120/ HA /	100	5						
Idea Engineering	AI_111W_10_012		Digital Business Modelling	1.	1	0,5	0,5	2	MP	100	5						
Functional Safety	AI_ITIM_18_011		Functional Safety (lecture)	2 4	1	1		2	HA / MP	100	5						
T unctional Salety	AI_1110_011		Functional Safety (lab)	Ζ.			2	2	Т	0	5						
Technology Assessment and			Technology Assessment	2 4	1	1		2	HA/RF/PA	100	5						
Sustainability	AI_ITIW_10_000	AI_ITIM_18_005	AI_ITIWI_10_005	AI_ITIM_10_003		Sustainability	Ζ.	1	1		2		100	5			
Big Data and	AI_ITIM_18_006		Big Data	2 ⁴	2			2	HA/RF/PA/MP	100	5						
Geoinformation	AI_1110_000		Geoinformation	2 4	2			2		100	5						
			Project Work				4	4	HA	50							
Research and Development Project (English)	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	AI_ITIM_18_013	18_013	Research Methods and Academic Writing	2 4	1	1	2	RF	25	15
			Paper Reading Group		2			2	RF	25							
										Zwischen- summe	60						
Master's Thesis	AI_ITIM_18_201	8000		3					MA	100	23						
Colloquium		8010		.					KO	100	7						
										Zwischen- summe	30						
Master Degree		9000								Gesamt	90						

¹ Courses amounting to 4 contact hours per week are to be selected from the current offer.

²Choose **one** of the options.

³The course is offered only in the winter semester.

⁴ The course is offered only in the summer semester.

⁵ Choose one of the options. If the student has previous knowledge of the foreign language, the student is assigned to the course level by the Language Centre according to the result of the entrance test.

Examination Components

The Master thesis contributes with a weighting of 27% and the Master's colloquium with a weighting of 8% to the final grade. All other module grades are weighted according to ECTS credit points and contribute a total of 65% of the final grade.

Courses

Certain courses are offered either exclusively in the winter semester or exclusively in the summer semester.

Symbol Explanation

Where there are multiple examinations separated by a slash (/), only **<u>one</u>** examination is sat. The examination to be held will be determined by the lecturer at the beginning of the semester.

Abbreviations

K60, K90, K120	60 minute, 90 minute, 120 minute written exams	EA	Software draft
HA	Assignments (possibly including presentation)	RF	Presentation
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Т	Attestation	BE	Report (possibly including presentation)
MA	Master Thesis	KO	Colloquium
SWS	Contact hours per week	CP (ECTS)	ECTS credit points
V	Lecture	Ü	Exercise
L	Laboratory		
WiSe	Winter semester		
0.0			

SoSe Summer semester