Second Amending Statutes of the *Studienordnung* (Study Regulations) for the Master's Degree Course Simulation and System Design at Hochschule Stralsund University of Applied Sciences

from 13 October 2020

Based on § 2(1) in conjunction with § 39(1) of the *Landeshochschulgesetz* - LHG M-V (State Higher Education Law), in the version announced on 25 January 2011 (Law and Ordinance Gazette of Mecklenburg-Vorpommern (GVOBI. M-V) p. 18), last amended by Article 1 of the law of 28 September 2020 (GVOBI. M-V p. 878), Hochschule Stralsund, University of Applied Sciences (hereinafter UAS Stralsund) hereby passes the following amending statutes:

Article 1

1. § 8 will be amended as follows:

a) Paragraph 1 will be amended as follows:

"The course schedule for the 3-semester master's degree course Simulation and System Design is made up of the following compulsory and compulsory elective modules:

Modules, Courses (contact hours Modules, courses (contact hours	s per week: Lecture / Tutorial / S s per week: Lecture / Tutorial / S	eminar-Styl eminar/ Lab	e Lecture/ La oratory or Se	boratory or S	Seminar)		
Module Code and Name (module code and name)	Lehrveranstaltung (course)	1. Sem.* (1 st Sem.)	2. Sem.* (2 nd Sem.)	3. Sem. (3 rd Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Credits (credits)
Compulsory Modules for Consolidating Basic Mathematical, Scientific and Engineering Knowledge						8	12
SSDM 1000 Selected Chapters of Mathematics	Selected Chapters of Mathematics	0/1/3/0			WE 120	4	6
SSDM 1200 Applied Computer Science	Applied Computer Science	0/0/2/2			K 120	4	6
Compulsory Modules for Consolidating Engineering Application						12	18
SSDM 2300 Applied Computational Fluid Dynamics	Applied Computational Fluid Dynamics		0/1/2/1		WE 120	4	6
SSDM 2400 Simulation in Mechanics & Processes	Simulation in Mechanics & Processes	0/1/3/0			WE 120	4	6
SSDM 5400 Vehicle Management Systems (incl. Simulation)	Vehicle Management Systems (incl. Simulation)		0/1/2/1		WE 120	4	6

Compulsory Modules with Interdisciplinary Content						12	18
SSDM 3200 International Economics & Trade	International Economics & Trade		0/0/4/0		CS 116	4	6
SSDM 3500 International Accounting	International Accounting	2/2/0/0			WE120	4	6
SSDM 6000 Scientific Work	Scientific Work		2/0/0/2		B 90	4	6
Compulsory Elective/Elective Modules for Consolidating Knowledge, Specialisation						8	12
WMSSDM XXXX Compulsory Elective module		see below			see below	4	6
WMSSDM XXXX Compulsory Elective module			see below		see below	4	6
Compulsory Modules Degree Completion						0	30
SSDM 9000 Master's Dissertation	Master's Dissertation			Х	see FPO		27
and Colloquium	Master's Dissertation Colloquium			Х	see FPO		3
Total SWS (Contact Hours per Week)		20	20			40	
ECTS Credits		30	30	30			90

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Modules, Courses (conta Modules, courses (conta	nct hours per week: Lecture / Tutorial / ct hours per week: Lecture / Tutorial /	Seminar-Styl Seminar/ Lab	le Lecture/ La oratory or Se	boratory or Seminar) minar)		
Wahipi (ele	flicht / Wahlmodule active modules)	1. Sem.* (1 st Sem.)	2. Sem.* (2 nd Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Punkte (points)
Module Code and Name (module code and name)	Lehrveranstaltung (course)				8	12
WMSSDM 2000 Lightweight Materials and Materials Selection	Lightweight Materials and Materials Selection		0/0/3/1	WE 120	4	6
WMSSDM 2100 Renewable Energy Technology	Renewable Energy Technology	0/0/4/0		Pr 30	4	6
WMSSDM 2200 Project work	Project work	0/0/0/4		Pr 30	4	6
WMSSDM 2500 Automotive Lighting Engineering	Automotive Lighting Engineering		0/0/2/2	WE 90	4	6
WMSSDM 2700 Thermodynamics of Multicomponent Systems	Thermodynamics of Multicomponent Systems	0/0/4/0		WE 120	4	6
WMSSDM 2800 Stability of Floating Systems	Stability of Floating Systems	0/0/3/1		WE 120	4	6
WMSSDM 3000 Human Resources Management	Human Resources Management	0/0/4/0		CS 116	4	6
WMSSDM 3600 Quality in Automotive Industry	Quality in Automotive Industry	0/0/3/1		WE 120	4	6
WMSSDM 5100 Production	Production		0/0/4/0	WE 120	4	6
WMSSDM 5500 Vehicle Simulation & Test Drive	Vehicle Simulation & Test Drive		0/0/2/2	WA 30	4	6
WMSSDM 5600 Simulation in Logistics and Production	Simulation in Logistics and Production		0/0/0/4	Pr 45	4	6

Legend:

WE 120	Written examination, 120 minutes
WA 30	Written assignment, 30 hours
Pr 45	Presentation, 45 minutes
CS 116	Case study 116 hours
	Fachprüfungsordnung (Subject-Specific Examination
FPO	Regulations)

* 1st Semester = summer semester SoSe

* 2nd Semester = winter semester WiSe

The examinations and regular examination dates are stipulated in § 7(2) of the Subject-Specific Examination Regulations."

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b) Paragraph 2 will be amended as follows:

"The course schedule for the 4-semester master's degree course Simulation and System Design is made up of the following compulsory and compulsory elective modules:

a) If t	ne internship	semester is	planned for	the first sub	iect semester:
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Modules, Courses (contact Modules, courses (contact	hours per week: Lecture /	Tutorial / Se Tutorial / Se	eminar-Style	Lecture/ La	boratory or S minar)	Seminar)		
Module Code and Name (module code and name)	Lehrveranstaltung (course)	1. Sem. (1 st Sem.)	2. Sem. (2 nd Sem.)	3. Sem. (3 rd Sem.)	4 th Sem. (4 th Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Credits (credit s)
Compulsory Modules Intern	nship						2	30
SSDM 8000 Internship Semester	Internship Semester (Internship semester)	х				see Internship Guidelines	2	30
Compulsory Modules for Co Mathematical, Scientific and Knowledge	onsolidating Basic d Engineering						8	12
SSDM 1000 Selected Chapters of Mathematics	Selected Chapters of Mathematics			0/1/3/0		WE 120	4	6
SSDM 1200 Applied Computer Science	Applied Computer Science			0/0/0/2		WE 120	4	6
Compulsory Modules for C Application	onsolidating Engineering						12	18
SSDM 2300 Applied Computational Fluid Dynamics	Applied Computational Fluid Dynamics		0/1/2/1			WE 120	4	6
SSDM 2400 Simulation in Mechanics & Processes	Simulation in Mechanics & Processes			0/1/3/0		WE 120	4	6
SSDM 5400 Vehicle Management Systems (incl. Simulation)	Vehicle Management Systems (incl. Simulation)		0/1/2/1			WE 120	4	6
Compulsory Modules with	Interdisciplinary Content						12	18
SSDM 3200 International Economics & Trade	International Economics & Trade		0/0/4/0			CS 116	4	6
SSDM 3500 International Accounting	International Accounting			2/2/0/0		WE120	4	6
SSDM 6000 Scientific Work	Scientific Work		2/0/0/2			B 90	4	6
Compulsory Elective/Electi Consolidating Knowledge,	ve Modules for Specialisation						8	12
WMSSDM XXXX Compulsory Elective module			see below					
WMSSDM XXXX Compulsory Elective module				see below				
Compulsory Modules Degree	ee Completion						0	30
SSDM 9000 Master's	Master's Dissertation				Х	see FPO		27
Dissertation and Colloquium	Master's Dissertation Colloquium				Х	see FPO		3
Total SWS (Contact Hours	per Week)	2	20	20			42	
ECTS Credits		30	30	30	30			120

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Modules, Courses (cont	act hours per week: Lecture / T	utorial / Seminar-	Style Lecture/ La	boratory or Seminar)		
Wahlpflic (electi	ht / Wahlmodule ve modules)	2. Sem (2 nd Sem.)	3. Sem. (3rd Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Punkte (points)
Module Code and Name (module code and name)	Lehrveranstaltung (course)				8	12
WMSSDM 2000 Lightweight Materials and Materials Selection	Lightweight Materials and Materials Selection	0/0/3/1		WE 120	4	6
WMSSDM 2100 Renewable Energy Technology	Renewable Energy Technology	0/0/4/0	0/0/4/0	Pr 30	4	6
WMSSDM 2200 Project work	Project work		0/0/0/4	Pr 30	4	6
WMSSDM 2500 Automotive Lighting Engineering	Automotive Lighting Engineering	0/0/2/2		WE 90	4	6
WMSSDM 2700 Thermodynamics of Multicomponent Systems	Thermodynamics of Multicomponent Systems		0/0/4/0	WE 120	4	6
WMSSDM 2800 Stability of Floating Systems	Stability of Floating Systems		0/0/3/1	WE 120	4	6
WMSSDM 3000 Human Resources Management	Human Resources Management	0/0/4/0	0/0/4/0	CS 116	4	6
WMSSDM 3600 Quality in Automotive Industry	Quality in Automotive Industry		0/0/3/1	WE 120	4	6
WMSSDM 5100 Production	Production	0/0/4/0		WE 120	4	6
WMSSDM 5500 Vehicle Simulation & Test Drive	Vehicle Simulation & Test Drive	0/0/2/2		WA 30	4	6
WMSSDM 5600 Simulation in Logistics and Production	Simulation in Logistics and Production	0/0/0/4		Pr 45	4	6

The examinations and regular examination dates are stipulated in § 7(3) of the Subject-Specific Examination Regulations.

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b) If the internship semester is taking place in the third subject semester:

Modules, Courses (contact hours per week: Lecture / Tutorial / Seminar-Style Lecture/ Laboratory or Seminar) Modules, courses (contact hours per week: Lecture / Tutorial / Seminar/ Laboratory or Seminar)								
Module Code and Name (module code and name)	Course (course)	1. Sem. (1 st Sem.)	2. Sem. (2 nd Sem.)	3. Sem. (3 rd Sem.)	4 th Sem. (4 th Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Credits (credits)
Compulsory Modules Inter	nship						2	30
SSDM 8000 Internship Semester	Internship Semester (Internship)			Х		see Internship Guideline s	2	30
Compulsory Modules for C Mathematical, Scientific an Knowledge	onsolidating Basic d Engineering						8	12
SSDM 1000 Selected Chapters of Mathematics	Selected Chapters of Mathematics	0/1/3/0				WE 120	4	6
SSDM 1200 Applied Computer Science	Applied Computer Science	0/0/2/2				WE 120	4	6
Compulsory Modules for C Engineering Application	onsolidating						12	18
SSDM 2300 Applied Computational Fluid Dynamics	Applied Computational Fluid Dynamics		0/1/2/1			WE 120	4	6
SSDM 2400 Simulation in Mechanics & Processes	Simulation in Mechanics & Processes	0/1/3/0				WE 120	4	6
SSDM 5400 Vehicle Management Systems (incl. Simulation)	Vehicle Management Systems (incl. Simulation)		0/1/2/1			WE 120	4	6
Compulsory Modules with Content	Interdisciplinary						12	18
SSDM 3200 International Economics & Trade	International Economics & Trade		0/0/4/0			CS 116	4	6
SSDM 3500 International Accounting	International Accounting	2/2/0/0				WE120	4	6
SSDM 6000 Scientific Work	Scientific Work		2/0/0/2			B 90	4	6
Compulsory Elective/Electi Consolidating Knowledge,	ve Modules for Specialisation						8	12
WMSSDM XXXX Compulsory Elective module		see below						
WMSSDM XXXX Compulsory Elective module			see below					
Compulsory Modules Degr	ee Completion						0	30
SSDM 9000 Master's	Master's Dissertation				Х	see FPO		27
Dissertation and Colloquium	Master's Dissertation Colloquium				Х	see FPO		3
Total SWS (Contact Hours	per Week)	20	20	2			42	
ECTS Credits		30	30	30	30			120

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Modules, Courses (conta Modules, courses (conta	act hours per week: Lecture / To oct hours per week: Lecture / Tu	utorial / Seminar torial / Seminar/	-Style Lecture/ La Laboratory or Se	boratory or Seminar) minar)		
Wahlpflich (electiv	nt / Wahlmodule ve modules)	1. Sem. (1 st Sem.)	2. Sem. (2 nd Sem.)	Prüfung (exam)	SWS (contact hours per week)	ECTS Punkte (points)
Module Code and Name (module code and name)	Lehrveranstaltung (course)				8	12
WMSSDM 2000 Lightweight Materials and Materials Selection	Lightweight Materials and Materials Selection		0/0/3/1	WE 120	4	6
WMSSDM 2100 Renewable Energy Technology	Renewable Energy Technology	0/0/4/0		Pr 30	4	6
WMSSDM 2200 Project work	Project work	0/0/0/4		Pr 30	4	6
WMSSDM 2500 Automotive Lighting Engineering	Automotive Lighting Engineering		0/0/2/2	WE 90	4	6
WMSSDM 2700 Thermodynamics of Multicomponent Systems	Thermodynamics of Multicomponent Systems	0/0/4/0		WE 120	4	6
WMSSDM 2800 Stability of Floating Systems	Stability of Floating Systems		0/0/3/1	WE 120	4	6
WMSSDM 3000 Human Resources Management	Human Resources Management	0/0/4/0		CS 116	4	6
WMSSDM 3600 Quality in Automotive Industry	Quality in Automotive Industry	0/0/3/1		WE 120	4	6
WMSSDM 5100 Production	Production		0/0/4/0	WE 120	4	6
WMSSDM 5500 Vehicle Simulation & Test Drive	Vehicle Simulation & Test Drive		0/0/2/2	WA 30	4	6
WMSSDM 5600 Simulation in Logistics and Production	Simulation in Logistics and Production		0/0/0/4	Pr 45	4	6

Legend:

WE 120	Written examination, 120 minutes
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Pr 45	Presentation, 45 minutes
CS 116	Case study 116 hours
	Fachprüfungsordnung (Subject-Specific Examination
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The examinations and regular examination dates are stipulated in § 7(3) of the Subject-Specific Examination Regulations."

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c) Paragraph 3 in the version being amended will be amended as follows:

"Students may choose the two required compulsory elective modules freely from the list of compulsory elective modules for the master's degree course Simulation and System Design. On submission of a written request to the examination board of the Faculty of Engineering, students may select one compulsory elective module taught in English as part of another master's degree course at UAS Stralsund to obtain the required 12 ECTS credits. Please refer to the stipulations pertaining to § 3(5) of the Subject-Specific Examination Regulations."

2. Appendix 2 (module handbook) will be amended as follows:

a) In the compulsory module section, the text "For the master's degree with a standard length of study of four subject semesters with the internship semester in the first subject semester, the semester provided next to 'Studiensemester/semester(s), in which module is taught' must be increased by one semester" will be replaced by the text "For the master's degree with a standard length of study of four subject semesters with the internship semester in the first subject semester, the modules from the first semester are moved to the third semester."

Studiengang / Course of studies	Simulation and System Design (master's)
Modulbezeichnung / Module name	Scientific work
Code	SSDM6000
Lehrveranstaltungen, falls verfügbar / Courses, if applicable	
Studiensemester / Semester, in which module is taught	second
Dauer des Moduls / Duration of module	1 semester
Häufigkeit des Moduls / Frequency of module	Annually, each in the winter semester
Modulverantwortlicher / Person responsible for the module	Prof. Dr. Jan-Christian Kuhr
Dozent/ Lecturer	Prof. Dr. Jan-Christian Kuhr
Sprache / Language	English
Zuordnung zum Curriculum / Part of curriculum	Compulsory
Lehrform (Type of teaching) / SWS / contact hours per week	Lecture: 2 SWS Seminar / exercise: 2 SWS
Arbeitsaufwand / Work load	180 h (60 h classroom study + 120 h self study)
Kreditpunkte/ Credit points	6
Voraussetzungen nach Prüfungsordnung / Requirements according to examination regulations	None

b) The "compulsory module" section will also be expanded to include the following module:

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Empfohlene Voraussetzungen / Recommended prerequisites	
	 Expertise: The students know the basics, standards and methods of scientific work know the requirements placed on written scientific work (e.g. theses, research reports, publications) know the requirements placed on delivering scientific lectures
Modulziele (Module objectives) /angestrebte Lernziele (intended learning outcomes)	 Methodological skills: The students are able to design and organise engineering work according to academic standards are able to independently produce technical documents that meet the high standards of scientific work can give a scientific lecture in free speech and are well prepared for the subsequent discussion are able to create a literature base of citable sources for a given topic can communicate technical issues precisely, technically correctly and unambiguously are able to use presentation tools for effective, efficient knowledge transfer
	 Other competencies: The students are familiar with the high quality standards that are placed on academic work have internalised the code of scientific publishing
Inhalt / Content	Competence is imparted to work scientifically, to write, to talk, and to present. On the one hand, this includes the methodical procedure for the implementation of the master's dissertation and similar academic projects. On the other hand, the preparation of the written dissertation is dealt with in detail, as is the writing of peer-reviewed articles. Another focus is on the scientific lecture, such as that required as an oral colloquium of a dissertation. A final part is devoted to the presentation of scientific results in the form of posters.
Studien- Prüfungsleistungen Prüfungsformen (study and examination requirements and forms of examination)	Documentary work, 20 pages
Literatur / Literature	M. Alley : The Craft of Scientific Writing (2018) 4 th edition; M. Alley : The Craft of Scientific Presentation (2013) 2 nd edition N. Rowe : Academic & Scientific Poster Presentation (2017)

a) In the compulsory elective module section, the text "For the master's degree with a standard length of study of four subject semesters with the internship semester in the first subject semester, the semester provided next to 'Studiensemester/semester(s), in which module is taught' must be increased by one semester" will be replaced by the text "For the master's degree with a standard length of study of four subject semesters with the internship semester in the first subject semester, the modules from the first semester are moved to the third semester."

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(d) In addition, the module "WMSSDM 2600 Advanced Technical Mechanics" will be deleted and replaced by "WMSSDM 2800 Stability of Floating Systems."

Studiengang /course of studies	Master's Degree Simulation and System Design
Modulbezeichnung / module	Stability of Floating Systems
name	
Code	WMSSDM 2800
Courses, if applicable	
Studiensemester / semester(s),	
in which module is taught	1 st or 2 nd
Dauer des Moduls / Duration of	
the module	1 semester
Häufigkeit des Modulangebots /	
frequency of module offer	jährlich (annually)
Modulverantwortliche(r) / person	Prof. Dr. Frank-Maria Mestemacher
responsible for the module	
Dozent(in) / lecturer	Prof. Dr. Frank Maria Mestermacher
	Prof. Dr. Jens Ladisch
Sprache / language	English
Zuordnung zum Curriculum /	Elective
relation to curriculum	
Lehrform (type of teaching) /	Seminaristischer Unterricht (Seminar-style lecture): 3 SWS
SWS (contact hours per week)	Practical: 1 SWS
Arbeitsaufwand / workload	180 hours (64 h contact time + 116 h self-study)
ECTS-Punkte / ECTS credit	
points	6
Voraussetzungen nach	
Prüfungsordnung / requirements	
according to the examination	
regulation	
Empfohlene Voraussetzungen /	Technical Mechanics, Basic of Hydrostatics, Basics in MATLAB/
recommended prerequisites	SIMULINK
Modulziele (module objectives) /	Students are able to determine the stability of mono- and multihull-
angestrebte Lernergebnisse	bodies with classical and computational methods.
(intended learning outcomes)	
Inhalt / content	Geometrical description of floating bodies, heeling/list, centre of
	gravity/buoyancy, metacenter, righting lever/moment, pantocarene,
	free surface moments, trim, influence of ballast, influence of wind
	and waves, conditions of capsising.
Studien-Prufungsleistungen/	Klausur 120 Minuten; alternative Prufungsleistungen siehe
Prufungsformen (study and	Fachprufungsordnung
examination requirements and	(written exam 120 minutes; alternative examination performances
Nedianforman (turned of modia	See examination regulation
wedemonnen / types of media	transport rollen, Simulation software, Lenrsonware (panel painting,
Literatur (reading list	Direction At Coometry for Nevel Architector (0040)
Literatur / reading list	Diran A., Geometry for Navai Architects: 1 st edition (2018),
	Duller WUILIT-Define Indian Biran A. Lanaz Dulida D. Shin Hudrostation and Stability and adition
	2013) Butterworth-Heinemann
	(2013), bullet worth-membrind in

Second Amending Statutes of the *Studienordnung* (Study Regulations) for the Master's Degree Simulation & System Design

Article 2

1. These amending statutes enter into force on the day after they have been published on UAS Stralsund's website.

2. These amending statutes apply for the first time to students who enrolled for the master's degree course Simulation and System Design at UAS Stralsund in summer semester 2021.

Issued on the basis of the resolution made by the Academic Senate of UAS Stralsund of 29 September 2020 and following approval from the Rector of 13 October 2020.

Stralsund, 13 October 2020

The Rector of Hochschule Stralsund University of Applied Sciences, Prof.-Dr.-Ing Petra Maier

Publication note: These statutes were published on UAS Stralsund's website on 13 October 2020.

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