Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Space Science and Technology as a Master's with 1 major

with the degree "Master of Science" (120 ECTS credits)

Responsible: Institute of Computer Science

Examination regulations version: 2012

Abbreviations used:

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB:

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures:

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

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associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

10-Oct-2012 (2012-177)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

Abbreviation	**Module title**							
	ECTS		Duration	(in semesters)	Method of grading		Module level	
	Courses	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y						
	Method of assessment							
	Only after successful completion of	if applicable						
	Other prerequisites	if applicable						
	Participants and allocation of places	if applicable						
	Additional information	if applicable						
	Referred to in LPO I	if applicable (examination regulations for teaching-degree programmes)						

Compulsory Courses (56 ECTS credits)								
Space Science (30 ECTS credits)								
10-I=ISP-122-m01	**Space Physics (Introduction)**							
	ECTS	7	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=ORO-122-m01	**Optics- and Radar-based Observations**							
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + P + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=SP-122-m01	**Image Processing and Remote Sensing (Space Physics)**							
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + P + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=SEI-122-m01	**Spacecraft Environment Interactions**							
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
Space Technology (30 ECTS credits)								
10-I=CSD-122-m01	**CanSat Design Workshop**							
	ECTS	7	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) project (approx. 20 pages) or c) oral examination of one candidate each or oral examination in groups (15 to 30 minutes per candidate) Language of assessment: English					
10-I=SSD-122-m01	**Spacecraft System Design**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					

10-I=SD-122-m01	**Space Dynamics**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=EIS-122-m01	**Electronics in Space**							
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
Compulsory Electives (34 ECTS credits)								
Space Robotics and Control (30 ECTS credits)								
10-I=TDP-122-m01	**Team Design Project**							
	ECTS	9	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) project (approx. 20 pages) or c) oral examination of one candidate each or oral examination in groups (15 to 30 minutes per candidate) Language of assessment: English					
10-I=AA-122-m01	**Advanced Automation**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=RO1-122-m01	**Robotics 1**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=RO2-122-m01	**Robotics 2**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					

10-I=SA-122-m01	**Aerospace Seminar**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		seminar paper (approx. 20 pages) Language of assessment: English					
10-I=CCN-122-m01	**Computer and Communication Networks**							
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=TNS-122-m01	**Telecommunication Networks in Space**							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) Language of assessment: English					
10-I=GP-122-m01	**Group Project**							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		project (approx. 20 pages)					
Space Technology (4 ECTS credits)								
10-I=JA-VA-122-m01	**Java Programming**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) or oral examination of one candidate each or oral examination in groups (15 minutes per candidate)					
10-I=IT-122-m01	**Internet Technologies**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) or oral examination of one candidate each or oral examination in groups (15 minutes per candidate)					
10-I=DBA-122-m01	**Advanced Databases**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + T (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 to 90 minutes) or oral examination of one candidate each or oral examination in groups (15 minutes per candidate)					

Thesis (30 ECTS credits)								
10-I=The-sisSST-122-m01	**Master's Thesis Space Science and Technology**							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		no courses assigned					
	Method of assessment							