

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: Faculty of Mathematics and Computer Science
Responsible: Institute of Computer Science

Examination regulations version: 2015
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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:

ASPO2015

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

13-Jul-2015 (2015-24)

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 (60 ECTS credits)							
Space Science (30,50 ECTS credits)							
10-l=ISP-152-m01	Space Physics (Introduction)						
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V (4) + Ü (2)					
	Method of assessment	written examination (approx. 60 to 120 minutes) creditable for bonus					
10-l=ORO-152-m01	Optics- and Radar-based Observations						
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V (o) + P (o) + T (o) In Lulea/Sweden					
	Method of assessment	written examination (approx. 60 to 120 minutes)					
10-l=SP-152-m01	Image Processing and Remote Sensing (Space Physics)						
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V (o) + P (o) + T (o) In Lulea/Sweden					
	Method of assessment	written examination (approx. 60 to 120 minutes)					
10-l=SEI-152-m01	Spacecraft Environment Interactions						
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V (o) + P (o) In Lulea/Sweden					
	Method of assessment	written examination (approx. 60 to 120 minutes)					
Space Technology (29,50 ECTS credits)							
10-l=CSD-152-m01	CanSat / FloatSat Design Workshop						
	ECTS	9	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	R (6)					
	Method of assessment	project and oral presentation delivered by one candidate each, weighted 4:1					
10-l=SSD-152-m01	Spacecraft System Design						
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V (4) + Ü (2)					
	Method of assessment	written examination (approx. 60 to 120 minutes) creditable for bonus					
	Additional Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): ES, LR					
	Referred to in LPO I	§ 22 II Nr. 3 b)					

10-l=SD-152-m01	Space Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (2) + Ü (2)						
	Method of assessment	written examination (approx. 60 to 120 minutes) creditable for bonus						
10-l=EIS-152-m01	Electronics in Space							
	ECTS	7,50	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (0) + P (0) In Lulea/Sweden						
	Method of assessment	written examination (approx. 60 to 120 minutes)						
Compulsory Electives (30 ECTS credits)								
10-l=TDP-152-m01	Team Design Project							
	ECTS	9	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	R (6)						
	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)						
10-l=AA-152-m01	Advanced Automation							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (4) + Ü (2)						
	Method of assessment	written examination (approx. 60 to 120 minutes) creditable for bonus						
	Additional Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT,IS,ES,LR,GE						
	Referred to in LPO I	§ 22 II Nr. 3 b)						
10-l=RO1-152-m01	Robotics 1							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (4) + Ü (2)						
	Method of assessment	written examination (approx. 60 to 90 minutes) creditable for bonus						
	Additional Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IS,ES,LR,HCI						
	Referred to in LPO I	§ 22 II Nr. 3 b)						

10-l=RO2-152-m01	Robotics 2							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (4) + Ü (2)						
	Method of assessment	written examination (approx. 60 to 90 minutes) creditable for bonus						
	Additional Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT, ES, LR						
Referred to in LPO I	§ 22 II Nr. 3 b)							
10-l=SA-152-m01	Aerospace Seminar							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2)						
	Method of assessment	Seminar paper (approx. 20 pages)						
Referred to in LPO I	§ 22 II Nr. 3 b)							
10-l=ATAI-152-m01	Advanced Topics in Aerospace and Informatics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (2) + Ü (2)						
	Method of assessment	written examination (60 to 120 minutes) Language of assessment: English creditable for bonus						
Thesis (30 ECTS credits)								
10-l=The- sisSST-152-m01	Master's Thesis Space Science and Technology							
	ECTS	25	Duration		Method of grading	numerical grade	Modul level	graduate
	Courses	No courses assigned to module						
	Method of assessment	written thesis (50 to 100 pages)						
Additional Information	Time to complete: 6 months							
10-l=DEF-152-m01	Oral Examination Space Science and Technology							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	K (0)						
	Method of assessment	final colloquium (approx. 60 minutes) comprising: talk on thesis (45 minutes) and subsequent defence of thesis (15 minutes); defence usually public						
	Modules successfully completed	10-l=ThesisSST						