

## Annex SFB

### Studienfachbeschreibung (subject description, SFB) for the subject Human-Computer Systems as a Bachelor's with 1 major with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Faculty of Human Sciences  
Responsible: Institute of Human Computer Media

Examination regulations version: 2018  
Examination regulations version: 2018

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)):

**07-Mar-2018 (2018-14)**

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	<b>Module title</b>						
	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 (126 ECTS credits)							
o6-MCS-GL-AP-152-m01	<b>Foundations of Human-Computer-Systems and Cognitive Psychology</b>						
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (2) + V (3) + Ü (1)					
	Method of assessment	written examination (approx. 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus					
10-MCS-EinP-161-m01	<b>Introduction to Programming (MCS)</b>						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (2) + Ü (2)					
	Method of assessment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). creditable for bonus					
o6-PSY-STAT-1-152-m01	<b>Statistics 1</b>						
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	S (4) + Ü (2)					
	Method of assessment	written examination (approx. 120 minutes) Language of assessment: German and/or English creditable for bonus					
10-MCS-GADS-161-m01	<b>Foundations Algorithms and Data Structures (MCS)</b>						
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (4) + Ü (2)					
	Method of assessment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). creditable for bonus					
o6-PSY-STAT-2-152-m01	<b>Statistics 2</b>						
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	S (4) + Ü (2)					
	Method of assessment	written examination (approx. 120 minutes) Language of assessment: German and/or English creditable for bonus					

10-MCS-ST-161-mo1	<b>Software Technology (MCS)</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (4) + Ü (2)						
	Method of assessment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). creditable for bonus						
10-MCS-EPP-161-mo1	<b>Introductory Programming Course (MCS)</b>							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (6)						
	Method of assessment	practical examination (programming exercises, approx. 240 hours) and written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).						
06-MCS-SGP-152-mo1	<b>Selected Areas of Psychology</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1)						
	Method of assessment	written examination (approx. 90 minutes) Language of assessment: German and/or English creditable for bonus						
10-MCS-SPSE-152-mo1	<b>Programming Course Interface Development</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	Ü (4)						
	Method of assessment	presentation of project results (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus						
10-MCS-SQ-152-mo1	<b>Software Quality</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2)						
	Method of assessment	written examination (approx. 60 to 120 minutes) Language of assessment: German and/or English creditable for bonus						

o6-MCS-Usab-152-mo1	<b>Usability and Software Ergonomics</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (4)						
	Method of assessment	project report (approx. 12 pages) Language of assessment: German and/or English creditable for bonus						
Participants and allocation of places	3 places. The indicated number of places will be allocated to students of the subject Digital Humanities (Master of Arts with 120 ECTS credits). Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot.							
o6-MCS-Meth-1-152-mo1	<b>Research Methods</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (2)						
	Method of assessment	written examination (approx. 90 minutes) Language of assessment: German and/or English creditable for bonus						
o6-MCS-Meth-2-152-mo1	<b>Experience as a tester or subject in experiments</b>							
	ECTS	1	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (o)						
	Method of assessment	Acting as a participant in experiments (30 hours)						
10-MCS-ICGV-152-mo1	<b>Interactive Computer Graphics</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2)						
	Method of assessment	written examination (approx. 60 to 120 minutes) Language of assessment: German and/or English creditable for bonus						
10-MCS-ICGT-152-mo1	<b>Interactive Computer Graphics Exercise</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	Ü (1) + T (2)						
	Method of assessment	presentation of project results (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus						
o6-MCS-MBG-152-mo1	<b>Methods for User-Centered Design</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (4)						
	Method of assessment	project report (approx. 12 pages) Language of assessment: German and/or English creditable for bonus						

o6-MCS-IDA-152-mo1	<b>Inclusive Design &amp; Accessibility</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <p>a) written examination (approx. 90 minutes) or  b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or  c) presentation of project results (approx. 30 minutes) or  d) presentation (approx. 45 minutes) or  e) oral examination of one candidate each (approx. 30 minutes) or  f) term paper (approx. 10 pages).</p> <p>Language of assessment: German and/or English  credible for bonus</p>						
o6-MCS-AT-152-mo1	<b>Current Trends of Human-Computer Systems</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>presentation (approx. 20 minutes) with handout (approx. 5 pages)  Language of assessment: German and/or English  credible for bonus</p>						
o6-MCS-IGL-152-mo1	<b>Interaction Guidelines</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <p>a) written examination (approx. 90 minutes) or  b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or  c) presentation of project results (approx. 30 minutes) or  d) presentation (approx. 45 minutes) or  e) oral examination of one candidate each (approx. 30 minutes) or  f) term paper (approx. 10 pages).</p> <p>Language of assessment: German and/or English  credible for bonus</p>						

**Compulsory Electives (22 ECTS credits)**

One of the following modules must be taken: MCS-Projekt Psychologie (MCS Project Psychology), MCS-Projekt Informatik (MCS Project Computer Science), MCS-Projekt Interdisziplinär (MCS Project Interdisciplinary).

**MCS Specialization (10 ECTS credits)**

o6-MCS-V1-152-m01	<b>Specialization MCS 1</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <ul style="list-style-type: none"> <li>a) written examination (approx. 90 minutes) or</li> <li>b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or</li> <li>c) presentation of project results (approx. 30 minutes) or</li> <li>d) presentation (approx. 45 minutes) or</li> <li>e) oral examination of one candidate each (approx. 30 minutes) or</li> <li>f) term paper (approx. 10 pages).</li> </ul> <p>Language of assessment: German and/or English creditable for bonus</p>						
o6-MCS-V2-152-m01	<b>Specialization MCS 2</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <ul style="list-style-type: none"> <li>a) written examination (approx. 90 minutes) or</li> <li>b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or</li> <li>c) presentation of project results (approx. 30 minutes) or</li> <li>d) presentation (approx. 45 minutes) or</li> <li>e) oral examination of one candidate each (approx. 30 minutes) or</li> <li>f) term paper (approx. 10 pages).</li> </ul> <p>Language of assessment: German and/or English creditable for bonus</p>						

10-MCS-IS1-152-mo1	<b>Interactive Systems 1</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <ul style="list-style-type: none"> <li>a) written examination (approx. 90 minutes) or</li> <li>b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or</li> <li>c) presentation of project results (approx. 30 minutes) or</li> <li>d) presentation (approx. 45 minutes) or</li> <li>e) oral examination of one candidate each (approx. 30 minutes) or</li> <li>f) term paper (approx. 10 pages).</li> </ul> <p>Language of assessment: German and/or English creditable for bonus</p>						
10-MCS-IS2-152-mo1	<b>Interactive Systems 2</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <ul style="list-style-type: none"> <li>a) written examination (approx. 90 minutes) or</li> <li>b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or</li> <li>c) presentation of project results (approx. 30 minutes) or</li> <li>d) presentation (approx. 45 minutes) or</li> <li>e) oral examination of one candidate each (approx. 30 minutes) or</li> <li>f) term paper (approx. 10 pages).</li> </ul> <p>Language of assessment: German and/or English creditable for bonus</p>						
10-MCS-IS3-152-mo1	<b>Interactive Systems 3</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	R (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <ul style="list-style-type: none"> <li>a) written examination (approx. 90 minutes) or</li> <li>b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or</li> <li>c) presentation of project results (approx. 30 minutes) or</li> <li>d) presentation (approx. 45 minutes) or</li> <li>e) oral examination of one candidate each (approx. 30 minutes) or</li> <li>f) term paper (approx. 10 pages).</li> </ul> <p>Language of assessment: German and/or English creditable for bonus</p>						



10-MCS-Med-152-mo1	<b>Media Informatics for MCS</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 60 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) term paper (approx. 20 pages) or d) portfolio (approx. 20 pages) Language of assessment: German and/or English creditable for bonus						
10-MCS-AKI-152-mo1	<b>Selected topics of Computer Science</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1)						
	Method of assessment	Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems: a) written examination (approx. 90 minutes) or b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or c) presentation of project results (approx. 30 minutes) or d) presentation (approx. 45 minutes) or e) oral examination of one candidate each (approx. 30 minutes) or f) term paper (approx. 10 pages) Language of assessment: German and/or English creditable for bonus						
06-MCS-VU-sab-152-mo1	<b>Specialisation Usability</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems: a) written examination (approx. 90 minutes) or b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or c) presentation of project results (approx. 30 minutes) or d) presentation (approx. 45 minutes) or e) oral examination of one candidate each (approx. 30 minutes) or f) term paper (approx. 10 pages). Language of assessment: German and/or English creditable for bonus						

o6-MCS-VU- sEx-152-mo1	<b>Specialisation User Experience</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <p>a) written examination (approx. 90 minutes) or  b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or  c) presentation of project results (approx. 30 minutes) or  d) presentation (approx. 45 minutes) or  e) oral examination of one candidate each (approx. 30 minutes) or  f) term paper (approx. 10 pages).</p> <p>Language of assessment: German and/or English  credible for bonus</p>						
o6-MCS-VHu- Fa-152-mo1	<b>Specialisation Human Factors</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (2)						
	Method of assessment	<p>Unless otherwise specified, the following methods can be chosen from for assessment in the specialisations Human-Computer Systems:</p> <p>a) written examination (approx. 90 minutes) or  b) presentation (approx. 20 minutes) and handout (approx. 5 pages) or  c) presentation of project results (approx. 30 minutes) or  d) presentation (approx. 45 minutes) or  e) oral examination of one candidate each (approx. 30 minutes) or  f) term paper (approx. 10 pages).</p> <p>Language of assessment: German and/or English  credible for bonus</p>						
o6-MCS-Med- Psy-152-mo1	<b>Media Psychology for MCS</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2)						
	Method of assessment	<p>a) written examination (approx. 50 minutes) or  b) oral examination of one candidate each (approx. 20 minutes)</p> <p>Language of assessment: German and/or English  credible for bonus</p>						
o6-MK-OMK1-162- mo1	<b>Psychology of Online and Mobile Communication 1</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (2) + S (2)						
	Method of assessment	<p>a) written examination (approx. 50 minutes) or  b) oral examination of one candidate each (approx. 20 minutes)</p> <p>Language of assessment: German and/or English  credible for bonus</p>						

<b>MCS Project (12 ECTS credits)</b>							
o6-MCS-Proj-Psy-152-m01	<b>MCS Project Psychology</b>						
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	Ü (2)					
	Method of assessment	report (approx. 10 pages) Language of assessment: German and/or English creditable for bonus					
10-MCS-Proj-In-fo-152-m01	<b>MCS Project Computer Science</b>						
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	Ü (2)					
	Method of assessment	report (approx. 10 pages) Language of assessment: German and/or English creditable for bonus					
o6-MCS-Proj-Int-152-m01	<b>MCS Project Interdisciplinary</b>						
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	Ü (2)					
	Method of assessment	report (approx. 10 pages) Language of assessment: German and/or English creditable for bonus					
<b>Key Skills Area (20 ECTS credits)</b>							
<b>General Key Skills (5 ECTS credits)</b>							
<b>General Key Skills (subject-specific)</b>							
In addition to the modules listed below, students may also take modules offered by JMU as part of the pool of general transferable skills (ASQ).							
o6-MCS-ASQ-152-m01	<b>Work experience as a research and teaching assistant</b>						
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level   undergraduate
	Courses	P (o)					
	Method of assessment	Experience report (approx. 2 pages)					
<b>Subject-specific Key Skills (15 ECTS credits)</b>							
o6-MCS-Ex-hib-152-m01	<b>Exhibition MCS Thesis</b>						
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level   undergraduate
	Courses	S (1)					
	Method of assessment	presentation of results of Bachelor's thesis (approx. 15 minutes) Language of assessment: German and/or English					

o6-MCS-BPrakt-152-m01	<b>Practice/Job-oriented Internship</b>							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (o)						
	Method of assessment	report on work placement (approx. 2 pages)						
	Additional Information	Additional information on module duration: no less than 10 weeks.						
<b>Thesis (12 ECTS credits)</b>								
o6-MCS-The-sis-152-m01	<b>Bachelor's Thesis</b>							
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	No courses assigned to module						
	Method of assessment	Bachelor's thesis (approx. 30 pages) Language of assessment: German or English						
	Additional Information	Time to complete: 12 weeks.						