



## **Annex SFB**

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

Responsible: Faculty of Physics and Astronomy Examination regulations version: 2020 Abbreviations used: Course types:  $\mathbf{E} = \text{field trip}$ ,  $\mathbf{K} = \text{colloquium}$ ,  $\mathbf{O} = \text{conversatorium}$ ,  $\mathbf{P} = \text{placement/lab course}$ ,  $\mathbf{R} = \text{project}$ ,  $\mathbf{S} = \text{seminar}$ ,  $\mathbf{T} = \text{tutorial}$ ,  $\mathbf{\ddot{U}} = \text{exercise}$ ,  $\mathbf{V}$ = 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) Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not cre-Conventions for the modules in this SFB: ditable for bonus. Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the me-Information on thod 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 assessment procedures: 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)):

### 22-Jan-2020 (2020-8)

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	D	uration	(in semesters)	Method of grading	Mo	odule level			
	Courses		To be sp	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 as	ssessmen	t							
	Only after su completion of		if applica	if applicable						
	Other prerequisites		if applica	if applicable						
	Participants and allocati- on of places		ati- if applica	if applicable						
	Additional information		n if applica	if applicable						
	Referred to in	n LPO I	if applica	ble (examination re	egulations for teaching	g-degree programmes)				

Compulsory Cours	es (118 ECTS cr	edits)									
Nanostructure Tec	hnology (27 EC	<b>FS</b> credits	)								
11-N-EIN-152-m01	Introduction t	o Nanosci	ence								
	ECTS 7 Duration		n 2	2 semester	Method of grading	g numerical grade	Modul level	undergraduate			
	Courses			V (2) + S (2) Module taught in: German or English							
	Method of ass	sessment			) with discussion an t: German and/or En	d b) written examination (app glish	prox. 120 minutes)				
	other prerequ	isites	Admiss	ion prerequisite t	o assessment: regul	lar attendance (minimum 85%	6 of sessions).				
	Additional Inf	ormation	conside neral ac the qua student for an a sessme	Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (general academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those students that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective assessment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment will not be considered.							
11-N-IP-152-m01	Industrial Internship										
	ECTS 10	Duratio		l semester	Method of grading	g numerical grade	Modul level	undergraduate			
	Courses		P (o) + 9	.,							
	Method of ass	sessment	a) report on practical course (approx. 15 pages) and b) presentation/talk (approx. 45 minutes), weighted 1:4 Language of assessment: German and/or English								
	Additional Inf	ormation	conside neral ac the qua student for an a sessme	Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (general academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those students that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective assessment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment will not be considered.							
o8-AC-Ex-	Experimental	Chemistry									
Chem-152-m01	ECTS 5			ı semester	Method of grading	g numerical grade	Modul level	undergraduate			
	Courses		V (4)								
	Method of ass	sessment			orox. 90 minutes) t: German and/or En	glish					

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 3 / 35

08-ACP-NF-152-	General	and Ar	alytical	Chemis	try for students of r	natural sciences (lab)				
m01	ECTS 2	2	Duratio	1	1 semester	Method of grading (not) successfully completed	Modul level	undergraduate		
	Courses			P (4)						
	Method of	ofasse	essment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each)					
					and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					
					Assessment offered: Once a year, summer semester					
	Modules successfully completed			08-AC	o8-AC-ExChem					
08-0C-NF-152-m01	Organic	Chemi	stry for s	tudent	s of medicine, biom	edicine, dental medicine and natural sciences				
	ECTS 3	3	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate		
	Courses			V (2)						
	Method of assessment				n examination (appl lage of assessment:	rox. 60 minutes) German and/or English				
Classical Physics (:	16 ECTS ci	redits)								
11-E-M-152-m01	Classical Physics 1 (Mechanics)									
	ECTS 8 Duratio			n	1 semester	Method of grading numerical grade	Modul level	undergraduate		
	Courses			V (4) + Ü (2)						
				Module taught in: Ü: German or English						
	Method o	ofasse	essment	written examination (approx. 120 minutes) Language of assessment: German and/or English						
	other pre	erequis	sites	Admission prerequisite to assessment: completion of exercises (approx. 13 exercise sheets per semester). Students who successfully completed approx. 50% of exercises will qualify for admission to assessment. The lecturer will inform students						
						ils at the beginning of the semester.	b assessment. I	ne lecturer will inform students		
	Addition	al Info	rmation	Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (ge-						
				neral academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those						
				students that meet the respective prerequisites can successfully register for an assessment. Students who did not register						
						use registration for an assessment was not put into e kes an assessment to which he/she has not been ac				
					ot be considered.		unnitteu, the gia	de achieved in this assessment		
	Referred	to in L	PO I		Nr. 1 a)					
				§ 77 I	Nr. 1 a)					

11-E-E-152-m01	Classical Physics 2 (Heat and Electromagnetism)											
	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			V (4) + Ü (2) Module taught in: Ü: German or English								
	Method o	fassessment	writt	written examination (approx. 120 minutes) Language of assessment: German and/or English								
	other prei	requisites	succ	Admission prerequisite to assessment: completion of exercises (approx. 13 exercise sheets per semester). Students who successfully completed approx. 50% of exercises will qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the semester.								
	Additiona	I Information	cons nera the c stud for a sess	registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be onsidered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (ge- eral academic and examination regulations). If the module coordinators subsequently find that the student has obtained he qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those tudents that meet the respective prerequisites can successfully register for an assessment. Students who did not register or an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective as- essment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment <i>v</i> ill not be considered.								
	Referred t	to in LPO I		Nr. 1 a)   Nr. 1 a)								
<b>Optics and Quantu</b>	m Physics I (6 ECTS credits)											
11-E-OAV-152-m01	Optics an	d Quantum P	hysics	.s								
	ECTS 6	Duratio	n	2 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V (4)	+ V (4)								
	Method o	f assessment		oral examination of one candidate each (approx. 30 minutes) Language of assessment: German and/or English								
<b>Optics and Quantu</b>	m Physics	ll (10 ECTS cr	edits)									
11-E-OA-152-m01	Optics an	d Waves - Exe	rcises									
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	·		Ü (2) Module taught in: Ü: German or English								
	Method o	fassessment	writt Lang	written examination (approx. 120 minutes) Language of assessment: German and/or English								
	Referred t	to in LPO I		Nr. 1 a)   Nr. 1 a)								

11-E-AA-202-m01	Atoms a	nd Mol	ecules - I	Exercis	ies						
	ECTS g	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			Ü (2)							
				Module taught in: German or English							
	Method	ofasse	essment	nt written examination (approx. 120 minutes) Language of assessment: German and/or English							
			)	Langu	lage of assessment		glisti				
Solid State Physics			-		-						
11-E-F-152-m01					e Physics						
	ECTS 8		Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses				+ Ü (2) le taught in: Ü: Ger	man or English					
	Method of assessment				n examination (app age of assessment	orox. 120 minutes) t: German and/or Eng	glish				
Theoretical Physics	s I (6 ECTS	6 credit	ts)								
11-T-QS-152-m01			anics an	d Stati	Statistical Physics						
	ECTS 6	6	Duration	1	2 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses		V (4) +	+ V (4)							
	Method of assessment					candidate each (app t: German and/or Eng					
<b>Theoretical Physics</b>	5 II (10 EC	TS crea	lits)								
11-T-QA-152-m01	Quantum Mechanics - Exercises										
	ECTS 4	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			Ü (2) Module taught in: Ü: German or English							
	Method	ofasse	essment	written examination (approx. 120 minutes) Language of assessment: German and/or English							
	other pre	erequis	sites	Admission prerequisite to assessment: completion of exercises (approx. 13 exercise sheets per semester). Students who successfully completed approx. 50% of exercises will qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the semester.							
	Additional Information			Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (general academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those students that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective assessment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment will not be considered.							

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 6 / 35

11-T-SA-152-m01	Statistical Phy	sics - Exe	ercises								
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	<u>.</u>	Ü (2)								
			Module taught in: Ü: German or English								
	Method of asse	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English							
			Langu	lage of assessment:	German and/or Englis	511					
Mathematics (24 E											
10-M-PHY1-152-	Mathematics 1 for Students of Physics and Nanostructure Technology										
m01	ECTS 8	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses			+ Ü (2)							
				le taught in: Ü: Gern				-			
	Method of asse	essment		a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or							
			c) oral examination of one candidate each (approx. 20 minutes) of								
				Language of assessment: German and/or English							
			credit	able for bonus							
10-M-PHY2-152-	Mathematics 2	Mathematics 2 for Students of Physics and Nanostructure Technology									
m01	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (5) + Ü (2)								
		_	Module taught in: Ü: German or English								
	Method of asse	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or								
				b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate)							
			Language of assessment: German and/or English								
				able for bonus							
11-M-D-152-m01	Mathematics 3	for Stud	ents of	Physics and related	d Disciplines (Differen	tial Equations)					
	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		× 12	+ Ü (2)			•				
			Modu	le taught in: Ü: Gern	nan or English						
	Method of asse	essment		n examination (app							
			Langu	lage of assessment:	German and/or Englis	sh					

Laboratory Course	Physics	Physics (11 ECTS credits)										
11-P-PA-152-m01	Labora	tory Co	urse Phys	ics A (	Mechanics, Heat, El	Electromagnetism)						
	ECTS 3 Duratio		n	1 semester	Method of grading (not) successfully completed Modul level undergraduate							
	Courses			P (2)								
	Methoo	d of ass	essment	Prepa plete comp sics-r	practical assignment with talk (approx. 30 minutes) Preparing, performing and evaluating (record of readings or lab report) the experiments will be considered successfully com- pleted if a Testat (exam) is passed. Exactly one experiment that was not successfully completed can be repeated once. After completion of all experiments, talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the phy- sics-related contents of the module. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.							
11-P-NB-152-m01	Labora	tory Co	urse Phys	ics B (	Classical Physics, E	Electricity, Circuits)						
	ECTS	4	Duratio	n	1 semester	Method of grading (not) successfully completed Modul level undergraduate						
	Courses			P (2)	P (2)							
	Method of assessment			practical assignment with talk (approx. 30 minutes) Preparing, performing and evaluating (record of readings or lab report) the experiments will be considered successfully com- pleted if a Testat (exam) is passed. Exactly one experiment that was not successfully completed can be repeated once. After completion of all experiments, talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the phy- sics-related contents of the module. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.								
	other prerequisites			Students are highly recommended to complete modules 11-P-PA and 11-P-FR1 prior to completing module 11-P-NB.								
11-P-NC-152-m01	Advanced Laboratory Course Physics C (Modern Physics, Computer Aided Experiments)											
	ECTS	4	Duratio	n	1 semester	Method of grading (not) successfully completed Modul level undergraduate						
	Course	S		P (2)								
	Method	d of ass	essment	practical assignment with talk (approx. 30 minutes) Preparing, performing and evaluating (record of readings or lab report) the experiments will be considered successfully com- pleted if a Testat (exam) is passed. Exactly one experiment that was not successfully completed can be repeated once. After completion of all experiments, talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the phy- sics-related contents of the module. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.								
	other p	rerequi	sites	Stude	ents are highly recon	ommended to complete module 11-P-NB prior to completing module 11-P-NC.						

<b>Compulsory Electiv</b>	ves (32 ECTS cro	edits)							
Semiconductor Ele	ctronics (6 ECT	S credits)							
11-EL-152-m01	Electronic Cire	cuits							
	ECTS 6	Duratior	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		V (3) + R (1) Module taught in: German or English						
	Method of ass		<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>						
11-SPD-152-m01	Physics of Semiconductor Devices								
	ECTS 6	Duratior		1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		V (3) + R (1) Module taught in: German or English						
	Method of ass		<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>						

11-HLF-152-m01	Semico	onducto	or Lasers a	nd Photonics							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!5		V (3) + R (1) Module taught in: Ger	man or English						
				a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, summer semester							
11-HLP-152-m01				onductor Physics							
	ECTS	6	Duration		Method of grading	numerical grade	Modul level	undergraduate			
	Course	!S		V (3) + R (1) Module taught in: German or English							
	Method of assessment			<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>							
11-KDS-152-m01		_		ers and Lithography		1					
	ECTS	6	Duration		Method of grading	numerical grade	Modul level	undergraduate			
	Course	!5		V (3) + R (1) Module taught in: German or English							
	Metho	d of ass		<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, winter semester</li> </ul>							

Deckelaria with a major Manastructure Technology (acco)		1 ( )
Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 10 / 35

11-BXN6A-152-m01	Curren	t Topics	in Semic	onduct	or Electronics	,						
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	unknown			
	Course	S		V (3) +	- R (1)		÷	·				
					written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German or English							
	other p	rerequi	sites	Approval by examination committee required.								
Materials Science												
11-NAN-152-m01		nalytics	1									
	ECTS	6	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses Method of assessment				(3) + R (1) lodule taught in: German or English written examination (approx. 90 to 120 minutes) or							
				c) ora d) pro e) pre If a wr form c the le Langu	<ul> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is cha the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, winter semester</li> </ul>							
11-FK2B-202-m01		tate Ph					1					
	ECTS Course	8 s	Duration	V (4) +	1 semester + R (2) le taught in: Gerr		numerical grade	Modul level	undergraduate			
	Metho	d of ass	essment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: In the semester in which the course is offered and in the subsequent semester</li> </ul>								

	Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 11 / 35
--	---	---	--------------

11-ENT-152-m01	Principles of Energy Technologies											
	ECTS	6	Duratior	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (3) - Modu	+ R (1) le taught in: Germ	an or English		*				
	Methoo	d of ass	essment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes)</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, winter semester</li> </ul>								
	Referred to in LPO I			§ 22    Nr. 1 h) § 22    Nr. 2 f) § 22    Nr. 3 f)								
11-NTE-152-m01		-		gy Research								
	ECTS 6 Duration				1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (3) - Modu	+ R (1) le taught in: Germ	an or English						
	Methoo	d of ass		<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>								

11-PPT-152-m01	Labora	tory Cor										
	ECTS	8	Duratio	า	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate			
	Course	S		P (5) Modu	P (5) Module taught in: German or English							
	Methoo	1 of ass	essment	passe sed. A respe the m Langu	reparation of the experiment will be considered successfully completed if a pre-experiment oral test (approx. 15 minutes) is assed. Performing and evaluating the experiments will be considered successfully completed if a if a Testat (exam) is pas- ed. An experiment log (approx. 8 pages) must be prepared. Each component of the assessment can be repeated once in the espective semester. Only if both components of the assessment have been successfully completed in the same semester will be module component be considered successfully completed. anguage of assessment: German and/or English ssessment offered: Once a year, winter semester							
	-	orerequi			dents of Funktionswerkstoffe (Functional Materials, Bachelor's) are recommended to take module 11-P-FR1.							
11-BVG-202-m01		ī — —			n Vapour Depositior							
	ECTS	5	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V (3) + Modu	+ R (1) lle taught in: Germar	n or English						
				b) ora c) ora d) pro e) pre If a wr form c the le Langu Asses credit	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may ins form of an oral examination of one candidate each or an oral examination in groups. If the method of assessm the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, summer semester creditable for bonus							
o8-FU-Mo-	Molecu	<u>ılar Mat</u>	erials (Le	cture)								
MaV-152-m01	ECTS	5	Duratio	<u>า</u>	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V (3) +	+ S (1)							
	Method of assessment			exami (appro	ination in groups of ox. 30 minutes)] as v	up to 3 candidates (a	approx. 15 minutes per candid 30 minutes), weighted 3:1		each (20 to 30 minutes) or c) oral pprox. 20 pages) or e) presentation			

08-FU-NT-152-m01	Chemic	ally and	d bio-insp	ired N	red Nanotechnology for Material Synthesis							
	ECTS	5	Duration	l	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	5		V (4)								
	Method	l of asse	essment	a) wri	tten examination (ap	oprox. 90 to 180 min	utes) or					
					l examination of one							
				c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or								
				e) presentation (approx. 30 minutes)								
				Langu	Language of assessment: German and/or English							
08-PCM3-152-m01	Nanosc	ale Mat	erials									
	ECTS 5 Duration				1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		S (2) ·	$(2) + \ddot{U}(1)$							
	Method	l of asse			vritten examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) or talk (approx. 30							
				minutes) Language of assessment: German and/or English								
					able for bonus	German and/or Eng	usn					
o8-FU-Ma-	Materia	al Scien	ce 1 (Basio									
Wi1-152-m01	ECTS 5 Duratio		Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses			V (3) -	н Ü (1)			Г.	- K			
	Method	l of asse	essment	a) written examination (approx. 90 to 180 minutes) or								
				b) oral examination of one candidate each (20 to 30 minutes) or								
				c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or								
					e) presentation (approx. 30 minutes)							
				Language of assessment: German and/or English								
o8-FU-Ma-	Materia	al Scien	ce 2 (The	Material Groups)								
Wi2-152-m01	ECTS	5	Duration	l	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	5		V (3) -	⊦Ü (1)							
	Method of assessment				tten examination (ap							
				b) oral examination of one candidate each (20 to 30 minutes) or								
				c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or								
					sentation (approx. 3							
					lage of assessment:		lish					

08-FU-NT-AA-152-	Chemica	al Nanc	technolo	gy: An	alytics and Applicat	tions						
m01	ECTS	5	Duratio	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;		V (4)	V (4)							
	Method	of asse	essment	<ul> <li>a) written examination (approx. 90 to 180 minutes) or</li> <li>b) oral examination of one candidate each (20 to 30 minutes) or</li> <li>c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or</li> <li>d) log (approx. 20 pages) or</li> <li>e) presentation (approx. 30 minutes)</li> <li>Language of assessment: German and/or English</li> </ul>								
11-ZMB-152-m01	Method	s of No	n-Destru	ctive M	aterial Testing							
	ECTS 4 Duratio			า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses			V (2) + R (1) Module taught in: German or English								
	Method of assessment			<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, winter semester</li> </ul>								

07-4BF-	Membranebi	ology of Pl	ants for	Advanced Stude	nts					
PS2-152-mo1	ECTS 5	Duratio		1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses		V (1) +	Ü (5)		•				
	Method of as	sessment	<ul> <li>a) written examination (approx. 45 to 60 minutes) or</li> <li>b) log (approx. 10 to 20 pages) or</li> <li>c) oral examination of one candidate each (approx. 30 minutes) or</li> <li>d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or</li> <li>e) presentation (approx. 20 to 30 minutes) or</li> <li>f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours).</li> <li>Students will be informed about the method and length of the assessment prior to the course.</li> <li>creditable for bonus</li> </ul>							
	Participants a cation of place		Studer Should chelor located degree cation- availab quota. form re concer least o A waiti Selecti ments. rage gr cluding lows: F dits (q applica ding to king on Selecti numbe the san sters o lot. Qu	I the number of a nts of the Bachelo the module be u 's degree subject d to students of the subjects Compu- coriented subject oble in one quota of Should there be, egulation for the of ned will be alloca- ne other module ing list will be ma ion process group For this purpose rade of all assess g Chemie (Chemis 'irst, applicants w ualitative ranking o this third rankin r otherwise by lot ion process group er of ECTS credits me number of EC f the respective a ota 3 (25 % of pla d the module be u	2 (5%): Places will be allocated according to the already achieved in modules/module component IS credits achieved, places will be allocated by lo pplicant; among applicants with the same number	TS credits will be given of places will be given of places (a minimulation of places), each with 1800 er 'importing' subject places will be alloce with a restricted number laces on all courses plicants who alread an preferential considerial account of ECTS credits to the applicant of ECTS credits to components in the given of ECTS credits achieves two rankings, and es will be allocated following quotas: Course of the Faculty of Et. Quota 2 (25% of er of subject semes	ven preferential consideration. e allocated to students of the Ba- m of one place in total) will be al- and to students of the Bachelor's ECTS credits, as part of the appli- cts). Should the number of places tated to applicants from the other mber of places, there will be a uni- s of a module component that are y have successfully completed at deration. ts' previous academic achieve- hey have achieved and their ave- subject of Biologie (Biology) (ex- dication. This will be done as fol- rding to the number of ECTS cre- eved (quantitative ranking). The nd places will be allocated accor- according to the qualitative ran- Quota 1 (50 % of places): total Biology; among applicants with places): number of subject seme- ters, places will be allocated by			

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 16 / 35
---	---	--------------

07-4S1AM-	Method	ds in Bio	otechnolo	gy									
B-152-m01	ECTS	5	Duratio										
	Course	Courses			V (2) + S (2)								
	Method	d of ass	essment	written examination (approx. 30 to 60 minutes) creditable for bonus									
		pants ar		Stude Shoul chelo locate degre catior availa quota form r conce least A wait Select ments rage g cludir lows: dits (d applid ding t king c Select numb the sa sters lot. Qi	Id the number of ap ents of the Bachelor Id the module be us r's degree subject B ed to students of the es subjects Computa h-oriented subject B able in one quota ex a. Should there be, v regulation for the co erned will be allocat one other module ca ting list will be main tion process group a s. For this purpose, a grade of all assessm ng Chemie (Chemist First, applicants wil qualitative ranking) cants' position in a t to this third ranking. or otherwise by lot. tion process group a to the respective ap uota 3 (25 % of plac Id the module be us	T's degree subject Biol sed in other subjects, Biologie (Biology) with e Bachelor's degree si ational Mathematics a Biology (as well as pot cceed the number of a within one module cor- burses of one module ted in the same proce- component of the resp ntained and places re- 1 (95%): Places will per applicants will be ran nents taken during the try), Physik (Physics), Il be ranked, firstly, ac and, secondly, accord third ranking will be c s. Among applicants w 2 (5%): Places will be already achieved in mo S credits achieved, pla oplicant; among applic ces): lottery.	a 180 ECTS credits and 5% of pl. ubject Biologie (Biology) with 6 and Mathematik (Mathematics) pentially to students of other 'in upplications, the remaining place monent, several courses with component. In this case, place dure. In this procedure, applicate edure. In this procedure, applicate edure as they become avait rimarily be allocated according ked according to the number of eir studies or of all module com Mathematik (Mathematics)) at coording to their average grade ding to their total number of EC alculated as the sum of these to ith the same ranking, places w allocated according to the follo odules/module components of aces will be allocated by lot. Que cants with the same number of or's degree subject Biologie (B	redits will be giv of places will be aces (a minimu to ECTS credits aces will be alloc a restricted nur es on all courses ants who alread eferential consider to the applican of ECTS credits the the time of app weighted accoust two rankings, and ill be allocated owing quotas: C the Faculty of E uota 2 (25 % of subject semest	ven preferential consideration. e allocated to students of the Ba- m of one place in total) will be al- and to students of the Bachelor's ECTS credits, as part of the appli- its). Should the number of places ated to applicants from the other nber of places, there will be a uni- of a module component that are y have successfully completed at deration. ts' previous academic achieve- ney have achieved and their ave- subject of Biologie (Biology) (ex- lication. This will be done as fol- rding to the number of ECTS cre- eved (quantitative ranking). The nd places will be allocated accor- according to the qualitative ran-				

Aspect	s of Mol	ecular Bio	techn	ology						
ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate		
Courses		1	V (2) + S (2)							
			creditable for bonus							
	ECTS Course Methoo Particip	ECTS 5 Courses Method of asse Participants an	ECTS 5 Duration Courses Method of assessment Participants and allo- cation of places	ECTS 5 Duration Courses V (2) - Method of assessment writte credit Participants and allo- cation of places Shoul Stude Shoul chelo locate degre cation availa quota form r conce least A wait Select ments rage g cludir lows: dits (c applic ding t king c Select numb the sa sters lot. Qi Shoul	CoursesV (2) + S (2)Method of assessmentwritten examination (app creditable for bonusParticipants and allo- cation of places25 places. Should the number of app Students of the Bachelor' Should the module be us chelor's degree subject B located to students of the degree subjects Computa cation-oriented subject B available in one quota ex quota. Should there be, w form regulation for the co concerned will be allocated least one other module ca A waiting list will be main Selection process group a ments. For this purpose, a rage grade of all assessm cluding Chemie (Chemist lows: First, applicants wil dits (qualitative ranking) applicants' position in a t ding to this third ranking. king or otherwise by lot. Selection process group a number of ECTS credits al the same number of ECTS sters of the respective ap lot. Quota 3 (25 % of plac Should the module be us	ECTS5Duration1 semesterMethod of gradingCoursesV (2) + S (2)Method of assessmentwritten examination (approx. 30 to 60 minutes creditable for bonusParticipants and allo- cation of places25 places.Should the number of applications exceed the Students of the Bachelor's degree subject Biologie (Biology) with located to students of the Bachelor's degree s degree subjects Computational Mathematics a cation-oriented subject Biology (as well as pot available in one quota exceed the number of a quota. Should there be, within one module co form regulation for the courses of one module concerned will be allocated in the same proce least one other module component of the resp A waiting list will be maintained and places re Selection process group 1 (95%): Places will be ments. For this purpose, applicants will be ran rage grade of all assessments taken during the cluding Chemie (Chemistry), Physik (Physics), lows: First, applicants will be ranked, firstly, a dits (qualitative ranking) and, secondly, accor applicants' position in a third ranking will be c ding to this third ranking. Among applicants w king or otherwise by lot. Selection process group 2 (5%): Places will be number of ECTS credits achieved, pla sters of the respective applicant; among appli lot. Quota 3 (25% of places): lottery. Should the module be used only in the Bachel	ECTS5Duration1 semesterMethod of gradingnumerical gradeCoursesV (2) + S (2)Method of assessmentwritten examination (approx. 30 to 60 minutes) creditable for bonusParticipants and allo- cation of places25 places.Should the number of applications exceed the number of available pla Students of the Bachelor's degree subject Biologie (Biology) with 180Should the module be used in other subjects, there will be two quotas: chelor's degree subject Biologie (Biology) degree subjects Computational Mathematics and Mathematik (Mathem cation-oriented subject Biology (a swell as potentially to students of to available in one quota exceed the number of applications, the remainin quota. Should there be, within one module component, net this procedure, a least one other module component of the respective module will be giv A waiting list will be allocated in the same procedure. In this procedure, a least one other module component of the respective module will be giv A waiting list will be ranked, firstly, according to their average dits (qualitative ranking) and, secondly, according to their average dits (to the third ranking. Among applicants with the same ranking, pla king or otherwise by lot.Selection process group 2 (5%): Places will be allocated according to th umber of ECTS credits anteady achieved in modules/module compone the same number of ECTS credits achieved, places will be allocated by sters of the respective applicants; mong applicants with the same num lot. Quota 3 (25 % of places): lottery.	ECTS         5         Duration         1 semester         Method of grading         numerical grade         Modul level           Courses         V (2) + S (2)         Written examination (approx. 30 to 60 minutes) creditable for bonus         creditable for bonus           Participants and allocation of places         25 places.         Should the number of applications exceed the number of available places, places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 480 ECTS credits will be give Should the module be used in other subjects, there will be two quotas: 95% of places (a minimu located to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and 46 erge subjects Computational Mathematics and Mathematics), each with 180 cation-oriented subject Biology (as well as potentially to students of other 'importing' subjec available in one quota exceed the number of applications, the remaining places will be allocated in the same procedure. In this procedure, applicants who alreadd least one other module component. In this case, places on all courses concerned will be allocated in the same procedure. In this procedure, applicants who alreadd least one other module component of the respective module will be given preferential consic A waiting list will be maintained and places re-allocated as they become available.           Selection process group 1 (95%): Places will periately cording to the number of ECTS credits at rage grade of all assessments taken during their studies or of all module components in the cluding Chemis (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of applicants' position in a third ranking will be calcutated as the sum of these two rankings, and ing to this indranking. Among applicants with the same ranking		

07-4S1M-	Specia	al Bioinf	ormatics 1	1								
Z6-152-m01	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	es		V (1) + Ü (5)								
	Metho	d of ass	essment	Langu	Log (approx. 10 to 20 pages) Language of assessment: German or English creditable for bonus							
		pants ar	25	Stude Shoul chelo locate degre catior availa quota form r conce least of A wait Select ments rage g cludir lows: dits (c applic ding t king o Select numb the sa sters o lot. Qu Shoul	ents of the Bachelor' Id the module be use or's degree subject Bi ed to students of the ee subjects Computa n-oriented subject Bi able in one quota exe a. Should there be, w regulation for the co- erned will be allocate one other module co- ting list will be main the process group 1 s. For this purpose, a grade of all assessm ng Chemie (Chemistri First, applicants will qualitative ranking) a cants' position in a t to this third ranking. or otherwise by lot. this third ranking. or otherwise by lot. the respective applicants al ame number of ECTS of the respective applicants al ame number of place buota 3 (25 % of place Id the module be use	s degree subject Biol ed in other subjects, iologie (Biology) with Bachelor's degree su ational Mathematics a iology (as well as pote ceed the number of a vithin one module cor urses of one module ed in the same process omponent of the resp tained and places re- to (95%): Places will pr applicants will be ran tents taken during the ry), Physik (Physics), f l be ranked, firstly, ac and, secondly, accord third ranking will be con- third ranking will b	there will be two quotas: 95% 180 ECTS credits and 5% of pl ubject Biologie (Biology) with 6 and Mathematik (Mathematics) entially to students of other 'in pplications, the remaining pla mponent, several courses with component. In this case, place dure. In this procedure, applicate ective module will be given pro- allocated as they become avai- rimarily be allocated according ked according to the number of eir studies or of all module com Mathematik (Mathematics)) at coording to their average grade ding to their total number of EC alculated as the sum of these ith the same ranking, places w allocated according to the foll odules/module components of aces will be allocated by lot. Qu cants with the same number of or's degree subject Biologie (B	redits will be giv of places will be laces (a minimum 60 ECTS credits a ), each with 180 mporting' subject ces will be alloct a restricted nur es on all courses ants who alread eferential consid- ilable. g to the applican of ECTS credits the mponents in the t the time of app e weighted accord CTS credits achies two rankings, ar vill be allocated cowing quotas: C f the Faculty of B uota 2 (25 % of p f subject semest	ven preferential consideration. e allocated to students of the Ba- m of one place in total) will be al- and to students of the Bachelor's ECTS credits, as part of the appli- cts). Should the number of places cated to applicants from the other mber of places, there will be a uni- s of a module component that are y have successfully completed at deration. Ats' previous academic achieve- hey have achieved and their ave- subject of Biologie (Biology) (ex- plication. This will be done as fol- rding to the number of ECTS cre- eved (quantitative ranking). The nd places will be allocated accor- according to the qualitative ran-			

07-4S1M-	Basics in Ligh	t- and Elec	ctron-Microscopy								
Z1-152-m01	ECTS 5	Duration		Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V (1) + Ü (5)								
	Method of ass		written examination (approx. 30 to 60 minutes) creditable for bonus								
	Participants a cation of place	25	Students of the Bachel Should the module be chelor's degree subject located to students of degree subjects Comp cation-oriented subject available in one quota quota. Should there be form regulation for the concerned will be alloce least one other module A waiting list will be m Selection process grou ments. For this purpos rage grade of all asses cluding Chemie (Chem lows: First, applicants dits (qualitative rankin applicants' position in ding to this third ranki king or otherwise by lo Selection process grou number of ECTS credits the same number of EC sters of the respective lot. Quota 3 (25 % of p Should the module be	lor's degree subject Biol used in other subjects, t Biologie (Biology) with the Bachelor's degree s utational Mathematics a t Biology (as well as pot exceed the number of a e, within one module co courses of one module cated in the same proce e component of the resp aintained and places re p 1 (95%): Places will p e, applicants will be ran sments taken during the istry), Physik (Physics), will be ranked, firstly, ac g) and, secondly, accord a third ranking will be con g. Among applicants w t. p 2 (5%): Places will be salready achieved in mo CTS credits achieved, pla applicant; among appli laces): lottery.	there will be two quotas: 9, 180 ECTS credits and 5% of ubject Biologie (Biology) wi and Mathematik (Mathemati- tentially to students of othe applications, the remaining mponent, several courses w component. In this case, pi- dure. In this procedure, app- bective module will be giver- allocated as they become a rimarily be allocated accord ked according to the numb- eir studies or of all module Mathematik (Mathematics) ccording to their average gr ding to their total number of calculated as the sum of the with the same ranking, place allocated according to the odules/module component aces will be allocated by lot cants with the same number lor's degree subject Biologi	S credits will be given of places (a minimulation of places (a minimulation of places (a minimulation), each with 1800 r 'importing' subject places will be alloce with a restricted number of a construction of a	ven preferential consideration. e allocated to students of the Ba- im of one place in total) will be al- and to students of the Bachelor's o ECTS credits, as part of the appli- cts). Should the number of places cated to applicants from the other mber of places, there will be a uni- s of a module component that are ly have successfully completed at				

07-5S2M-	Specif	ic Biote	chnology	2							
Z4-152-m01	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Course	es			+ S (1) ule taught in: Gerr	nan and/or English	,				
			sessment	<ul> <li>a) written examination (approx. 45 to 60 minutes) or</li> <li>b) log (approx. 10 to 20 pages) or</li> <li>c) oral examination of one candidate each (approx. 30 minutes) or</li> <li>d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or</li> <li>e) presentation (approx. 20 to 30 minutes) or</li> <li>f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours).</li> <li>Students will be informed about the method and length of the assessment prior to the course.</li> <li>Language of assessment: German and/or English creditable for bonus</li> </ul>							
		pants a of plac	ind allo- es	Shou Stud Shou cheld locat degre catio avail quot form conc least A wa Selec ment rage cludi lows dits ( appli ding king Selec numi the s sters lot. C Shou	ents of the Bache ald the module be or's degree subject eed to students of ee subjects Comp on-oriented subject able in one quota a. Should there be regulation for the erned will be allow one other module iting list will be m ction process grou ts. For this purpos grade of all asses ng Chemie (Chem : First, applicants (qualitative rankin icants' position in to this third ranki or otherwise by lo ction process grou ber of ECTS credit: ame number of EC of the respective Quota 3 (25 % of p ald the module be	up 2 (5%): Places will be allocated according to t s already achieved in modules/module compon CTS credits achieved, places will be allocated by applicant; among applicants with the same nur	ECTS credits will be gives: 95% of places (a minimu b) with 60 ECTS credits matics), each with 180 other 'importing' subjecting places will be allocted es with a restricted nur- e, places on all courses applicants who alread iven preferential considered iven preferential considered in the time of applicant and the time of applicant in the time of applicant in the time of applicant is the set wo rankings, and acces will be allocated the following quotas: Considered in the following duotas: Considered in the following duotas: Considered in the	ven preferential consideration. e allocated to students of the Ba- m of one place in total) will be al- and to students of the Bachelor's ECTS credits, as part of the appli- tts). Should the number of places tated to applicants from the other mber of places, there will be a uni- s of a module component that are y have successfully completed at deration. ts' previous academic achieve- hey have achieved and their ave- subject of Biologie (Biology) (ex- lication. This will be done as fol- rding to the number of ECTS cre- eved (quantitative ranking). The nd places will be allocated accor- according to the qualitative ran- Quota 1 (50 % of places): total Biology; among applicants with places): number of subject seme- ters, places will be allocated by			

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 21 / 35
---	---	--------------

11-LMB-152-m01	Labora	tory and	Measur	ement	Technology in Bioph	nysics					
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S			V (3) + R (1) Module taught in: German or English						
	Methoo	l of ass	essment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>							
Mathematics, The	ory and C	Compute	er Aided M	Nethod							
11-QUI-202-m01	Introdu	ction to	Quantur	n Computing and Quantum Information							
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S			V (3) + R (1) Module taught in: German or English						
	Methoo	l of ass	essment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: In the semester in which the course is offered and in the subsequent semester</li> </ul>							

11-RRF-202-m01	Introdu	ction to	Relativis	tic Phy	ysics and Classical F	Field Theory								
	ECTS	6	Duratior	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	S			V (3) + R (1) Module taught in: German or English									
	Method	l of asse	Ssment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>										
11-SDC-152-m01	L				nd Computer Physics									
	ECTS	4	Duratior		1 semester         Method of grading         numerical grade         Modul level         graduate									
	Courses	S		V (2) + R (1) Module taught in: German or English										
				b) ora c) oral d) pro e) pre lf a wr form c the leo Langu Asses	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead ta form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, winter semester									
10-M-NUM1af-152-	Numeri	cal Mat	hematics	1 for s	tudents of other sub	ojects								
m01	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	s		V (4) +										
	Method	l of asse	essment	a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										

10-M-NUM2af-152-	Numer	ical Mat	hematics	2 for s	tudents of other sul	bjects					
m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	es		V (4) -	V (4) + Ü (2)						
	Metho	d of asso	essment	a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus							
10-M-PRG-152-m01	Progra	mming	course fo	r stude	nts of Mathematics	and other subjects					
	ECTS	3	Duratio	n	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate		
	Course	s		P (2)							
	Metho	d of asso	essment	Langu	project in the form of programming exercises (approx. 20 to 25 hours) anguage of assessment: German and/or English Assessment offered: Once a year, summer semester						
	Referre	ed to in L	.PO I	§ 22	I Nr. 3 f)						
10-M-COM-152-	Compu	Itationa	Mathem	atics							
m01	ECTS	4	Duratio		1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate		
	Course	S		V (1) +							
	Metho	d of asso	essment	Langu	project in the form of programming exercises (approx. 20 to 25 hours) Language of assessment: German and/or English Assessment offered: Once a year, winter semester						
	Referre	ed to in L	.PO I	§ 22	I Nr. 3 f)						
11-M-F-152-m01	Mathe	matics 4	for Stud	ents of	Physics and related	l Disciplines (Compl	ex Analysis)				
	ECTS 8 Duration				1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	!S		V (4) + Ü (2) Module taught in: Ü: German or English							
	Metho	d of ass	essment	written examination (approx. 120 minutes) Language of assessment: German and/or English							

11-T-M-152-m01	Theore	tical Me	echanics									
	ECTS	8	Duratior	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	5		V (4) + Ü (2) Module taught in: Ü: German or English								
	Method	l of asse										
	other p	rerequis	sites	Admission prerequisite to assessment: completion of exercises (approx. 13 exercise sheets per semester). Students who successfully completed approx. 50% of exercises will qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the semester.								
	Additio	nal Info		considered neral the que stude for an sessn	egistration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be onsidered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (ge- eral academic and examination regulations). If the module coordinators subsequently find that the student has obtained he qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those cudents that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective as- essment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment ill not be considered.							
11-T-E-152-m01	Electro	<u> </u>	cs									
	ECTS	ECTS 8 Duration			1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	5		V (4) + Ü (2) Module taught in: Ü: German or English								
	Method	l of asse	essment	written examination (approx. 120 minutes) Language of assessment: German and/or English								
<b>Applied Physics</b>												
11-ZDR-152-m01	Princip	les of T	wo- and T	hree-D	) imensional Röntge	n Imaging						
	ECTS	6	Duratior	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	5		V (3) - Modu	+ R (1) lle taught in: Germa	an or English						
	Method of assessment				<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>							

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 25 / 35

11-BMS-152-m01	Imagin	g Meth	ods at the	Synch	iroton						
	ECTS	6	Duratior		1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S			+ R (1) Ile taught in: Germa	an or English					
				a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, summer semester							
11-ASI-152-m01		g Sense	ors in Infra		~			<u>.</u>			
	ECTS	3	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		V (2) Modu	lle taught in: Germa	an or English					
				b) ora c) ora d) pro e) pre lf a wi form o the le Langu	al examination of or l examination in gro oject report (approx esentation/talk (app ritten examination v of an oral examinat cturer must inform uage of assessment	prox. 30 minutes). was chosen as metho	sessment may instead take the ethod of assessment is changed, date at the latest.				
11-EBV-152-m01		les of li	mage Proc	essin	3		-				
	ECTS	3	Duratior		1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		V (2) Modu	lle taught in: Germa	an or English					
	Methoo	d of ass	essment	<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, winter semester</li> </ul>							

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 26 / 35

11-LMT-152-m01	Labora	tory and	d Measure	ement	Technology								
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	!S	_	V (3) + R (1) Module taught in: German or English									
	Methoo	d of asso	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, winter semester									
11-LVW-152-m01	Introdu	uction to	o Labview	,									
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S			V (1) + R (3) Module taught in: German or English								
				b) ora c) ora d) pro e) pre If a wr form c the le Langu Asses	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is cha the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: Once a year, winter semester								
08-FU-EEW-152-		chemic	al Energy	Storag	ge and Conversion								
m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	!S		V (2) -	+ P (1) + E (1)								
	Methoo	d of asso	essment	prox. Langu	5 to 10 pages each lage of assessmer		oractical assignments ( lish	ent examination talks a (2 to 4 random examinat	pprox. 15 minutes each, log ap- ions), weighted 7:3				

Current Topics in N	anostruc	utre Te	chnology								
11-BXN5-152-m01	Current	Topics	in Nanos	tructure Tec	hnology						
	ECTS	5	Duratior	ı 1 ser	nester	Method of gradin	g numerical grade		Modul level	undergraduate	
	Courses	5	Ì	V(2) + R(2)							
	Method	l of ass	essment	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
	other p	rerequi	sites	Approval fro	om examin	ation committee requi	ired.				
11-BXN6-152-m01	Current	Topics	in Nanos	tructure Tec	hnology	· · ·					
	ECTS	6	Duratior	1 ser	nester	Method of gradin	g numerical grade		Modul level	undergraduate	
	Courses	5		V (3) + R (1)						·	
				amination i on/talk (ap If a written form of an o the lecturer Language o	n groups (g prox. 30 m examinatio oral examin must infor if assessme	groups of 2, approx. 3 inutes). In was chosen as mether thation of one candidat im students about this ent: German and/or Er	o minutes per candi nod of assessment, re each or an oral ex s by four weeks prio nglish	date) or project this may be cl amination in g	ct report (appro hanged and ass groups. If the m	(approx. 30 minutes) or oral ex- x. 8 to 10 pages) or presentati- sessment may instead take the ethod of assessment is changed, date at the latest.	
	other p			Approval from examination committee required.							
11-BXN8-152-m01			1	tructure Tec	hnology						
		8	Duratior		nester	Method of gradin	g numerical grade		Modul level	undergraduate	
	Courses	-		V (4) + R (2)							
	Method	l of ass	essment	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
	other p	rerequi	sites	Approval fro	om examin	ation committee requ	ired.				

11-BXP5-152-m01	Current	t Topics	Physics			_						
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V (2) ·	V(2) + R(2)							
	Methoo	d of ass	essment	amina on/ta If a wi form o the le	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
	other p	rerequi	sites	Appro	oval from examination	on committee require	d.					
11-BXP6-152-m01	Current	t Topics	in Physic	s								
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	s	•	V (3) ·	+ R (1)	•			•			
				on/ta If a wi form o the le Langu	amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
		rerequi		Approval from examination committee required.								
11-BXP8-152-m01		· ·	in Physic		~							
	ECTS	8	Duration	r	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course				V (4) + R (2)							
				written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English								
	other p	rerequi	sites	Appro	oval from examination	on committee require	d.					

11-CSN6-152-m01	Selected Topics in Nanostructure Technology												
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V (3) ·	+ R (1)								
	Methoo	d of ass	essment	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English									
	other p	rerequi	sites	Appro	oval from examination	on committee require	d.						
11-CSF6-152-m01	Selecte	ed Topic	s in Solid	State	Physics								
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	s		V (3) ·	+ R (1)			•	•				
				amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English									
	other p	rerequi	sites	Approval from examination committee required.									
11-CSEM6-152-m01	Selected Topics in Energy and Material Science												
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	s		V (3) ·	+ R (1)								
	Methoo	d of ass	essment	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral ex- amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentati- on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English									
	other p	rerequi	sites	Approval from examination committee required.									

11-NTP-152-m01	Novel 1	vel Transport Phenomena										
	ECTS	6	Duratior	۱	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V (3) + Modu	R (1) le taught in: Germa	an or English						
	Methoo	Method of assessment			<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> </ul>							
Key Skills Area (20	ECTS cr	edits)										
General Key Skills In addition to the m				lents n	nay also take mod	ules offered by JMU as	part of the pool of gene	ral transferable skills	(ASQ).			
General Key Skills	(subject	-specifi	c)									
11-P-VKM-202-m01	MINT P	reparat	ory Cours	se Mathematical Methods of Physics								
	ECTS	3	Duratior		1 semester	Method of grading	(not) successfully comp	pleted Modul level	undergraduate			
	Course	S		V (1) + Modu	· Ü (2) le taught in: Germa	an or English						
	Method of assessment Referred to in LPO I			a) exercises (successful completion of approx. 50% of approx. 6 exercise sheets) or b) talk (approx. 15 minutes) Assessment offered: Once a year, winter semester								
				§ 22	Nr. 1 h)   Nr. 2 f)   Nr. 3 f)							
11-FFI-202-m01	Fit for I	Industry	/									
	ECTS	3	Duration		1 semester	Method of grading	(not) successfully comp	pleted Modul level	undergraduate			
	Courses			V (1) + R (1) Module taught in: German or English								
	Method of assessment			<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: Once a year, summer semester</li> </ul>								

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 31 / 35

11-PMP-152-m01	Project Management in Practice											
	ECTS	3	Duratior	า	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Course	S		V (1) + R (1) Module taught in: German or English								
	Methoo	d of asse		<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes).</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> <li>Assessment offered: In the semester in which the course is offered and in the subsequent semester</li> </ul>								

07-SQF-BGA-152-	Biotechnology and Social Acceptance												
m01	ECTS	3	Duratior	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V (1) + S (2) Module taught in: German and/or English term paper or preparing educational materials (approx. 5 to 10 pages) Language of assessment: German and/or English creditable for bonus									
	Method	d of asse	essment										
		pants an of place		20 pla Shoul Stude Shoul chelo locate degre catior availa quota form r conce least of A wait Select ments rage g cludir lows: dits (d applid ding t king of Select numb the sa sters of lot. Qi	aces. Id the number of ents of the Bachel ld the module be or's degree subject ed to students of ee subjects Comp n-oriented subject able in one quota a. Should there be regulation for the erned will be alloc one other module ting list will be m tion process grou s. For this purpos grade of all asses ng Chemie (Chem First, applicants qualitative rankin cants' position in to this third ranki or otherwise by lo tion process grou ber of ECTS credits ame number of EC of the respective uota 3 (25 % of p ld the module be	a used in other subjects, i ct Biologie (Biology) with the Bachelor's degree su outational Mathematics a ct Biology (as well as pote a exceed the number of a e, within one module cor e courses of one module cated in the same procee e component of the resp naintained and places re- up 1 (95%): Places will pr se, applicants will be ran ssments taken during the histry), Physik (Physics), f will be ranked, firstly, ac ng) and, secondly, accord a third ranking will be ca ng. Among applicants wi ot. up 2 (5%): Places will be s already achieved in mo CTS credits achieved, place applicant; among applic places): lottery.	ogie (Biology) with 18 of there will be two quotas 180 ECTS credits and 59 ubject Biologie (Biology) and Mathematik (Mather entially to students of ot pplications, the remaini mponent, several course component. In this case dure. In this procedure, a ective module will be giv- allocated as they becom- rimarily be allocated acc ked according to the num- eir studies or of all modu Mathematik (Mathemati coording to their average ding to their total number alculated as the sum of ith the same ranking, pla allocated according to t odules/module compone aces will be allocated by cants with the same num- or's degree subject Biolo	ECTS credits will be given in the second state of the second state	ven preferential consideration. e allocated to students of the Ba- m of one place in total) will be al- and to students of the Bachelor's o ECTS credits, as part of the appli- cts). Should the number of places cated to applicants from the other mber of places, there will be a uni- s of a module component that are ly have successfully completed at				

11-NASQ5-152-m01	Genera	l Comp	etences fo	or Stud	lents of Nanostrue	cture Technology				
	ECTS 5 Duration				1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Method of assessment			V (2) ·	+ R (2)		•			
				<ul> <li>a) written examination (approx. 90 to 120 minutes) or</li> <li>b) oral examination of one candidate each (approx. 30 minutes) or</li> <li>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or</li> <li>d) project report (approx. 8 to 10 pages) or</li> <li>e) presentation/talk (approx. 30 minutes)</li> <li>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</li> <li>Language of assessment: German and/or English</li> </ul>						
	other p	rerequi	sites	Appro	oval from examina	tion committee require	ed.			
Subject-specific Ke	y Skills	(15 ECT	S credits)							
11-M-MR-202-m01	01 Mathematical Methods of Physics									
	ECTS 6 Duration		n	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate		
	Courses			V (2) + Ü (2) + V (2) + Ü (2) Module taught in: German or English						
	Method of assessment			a) Exercises (successful completion of approx. 50% of approx. 13 exercise sheets) or b) Talk (approx. 15 minutes)						
	Referred to in LPO I			§ 53   Nr. 1 a) § 77   Nr. 1 a)						
11-N-HS-152-m01	Seminar Nanostructure Technology									
	ECTS	5	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Course	S		S (2) Module taught in: German or English						
	Method	d of ass	essment	a) talk (30 to 45 minutes) with discussion and b) written examination (approx. 120 minutes)						
	other p	rerequi	sites	Admission prerequisite to assessment: regular attendance (minimum 85% of sessions).						
	Additional Information			Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (general academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those students that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective assessment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment will not be considered.						

Bachelor's with 1 major Nanostructure Technology (2020)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record 82 224 - - H 2020	page 34 / 35

11-P-FR1-152-m01	Data and Error Analysis											
	ECTS 2 Duration			1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate				
	Courses	S		V (1) + Modu	· Ü (1) le taught in: Ü: Gern	nan or English						
	Method	l of asse		written examination (approx. 120 minutes) Language of assessment: German and/or English								
	other p	rerequis		Admission prerequisite to assessment: completion of exercises (approx. 13 exercise sheets per semester). Students who successfully completed approx. 50% of exercises will qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the semester.								
	Additio	nal Info		consid neral a the qu stude for an sessm	Registration: If a student registers for the exercises and obtains the qualification for admission to assessment, this will be considered a declaration of will to seek admission to assessment pursuant to Section 20 Subsection 3 Sentence 4 ASPO (general academic and examination regulations). If the module coordinators subsequently find that the student has obtained the qualification for admission to assessment, they will put the student's registration for assessment into effect. Only those students that meet the respective prerequisites can successfully register for an assessment. Students who did not register for an assessment or whose registration for an assessment was not put into effect will not be admitted to the respective assessment. If a student takes an assessment to which he/she has not been admitted, the grade achieved in this assessment will not be considered.							
	Referred to in LPO I			§ 53   Nr. 1 c) § 77   Nr. 1 d)								
11-P-FR2-152-m01	Advanced and Computational Data Analysis											
	ECTS	2	Duration	1	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate			
	Courses	S		V (1) +	- Ü (1)							
	Method of assessment			Exercises (successful completion of approx. 50% of approx. 10 exercise sheets) Assessment offered: Once a year, summer semester								
	other prerequisites			Students are highly recommended to complete module 11-P-FR1 prior to completing module 11-P-FR2.								
Thesis (10 ECTS cre	edits)											
11-BA-N-152-m01	Bachelo	or Thesi	is Nanostr	ructure Technology								
	ECTS 10 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	s		No courses assigned to module								
	Method of assessment			Bachelor's thesis (approx. 25 pages) Language of assessment: German or English								
	Additional Information			Time to complete: 12 weeks.								

Bachelor's with 1 major Nanostructure Te	chnology (2020)
--	-----------------