

## **Annex SFB**

## Studienfachbeschreibung (subject description, SFB) for the subject Functional Materials as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Medicine

Responsible: Faculty of Chemistry and Pharmacy

Responsible:

Responsible: Faculty of Physics and Astronomy

Responsible: University of Applied Sciences Würzburg- Schweinfurt (FHWS)

Examination regulations version: 2022

Abbreviations used: Course types:  $\mathbf{E} = \text{field trip}$ ,  $\mathbf{K} = \text{colloquium}$ ,  $\mathbf{O} = \text{conversatorium}$ ,  $\mathbf{P} = \text{placement/lab course}$ ,  $\mathbf{R} = \text{project}$ ,  $\mathbf{S} = \text{seminar}$ ,  $\mathbf{T} = \text{tutorial}$ ,  $\ddot{\mathbf{U}} = \text{exercise}$ ,  $\mathbf{V} = \mathbf{V} = \mathbf{V}$ 

= 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)

Conventions for the

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not cre-

modules in this SFB: ditable for bonus.

Information on Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the meassessment procedures: 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

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:

## ASP02015

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

## 22-Mar-2022 (2022-9)

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

Every module will be described using the following form:

Abbreviation	Module title							
	ECTS		Duration	(in semesters)	Method of grading		Module level	
	Courses		To be sp	ecified in the form X	(y) with course type )	abbreviated as specified abo	ove and number of we	ekly contact hours y
	Method of as	sessm	ent					
	Only after su completion o		ıl if applic	able				
	Other prereq	uisites	if applic	able				
	Participants on of places		ocati- if applic	able				
	Additional in	formati	ion if applic	able				
	Referred to in	า LPO I	if applic	able (examination re	gulations for teachin	g-degree programmes)		

Compulsory Cours	ses (40 E0	CTS cre	dits)									
11-FU-MTE-161-	Mecha	nical aı	nd Therma	l Mate	rial Properties							
mo1	ECTS	5	Duration	n	1 semester	Method of grading numer	ical grade	Modul level	graduate			
	Course	:S	`	V (3) -				-				
					le taught in: Ü: Ge				,			
	Metho	d of ass	essment		a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or							
				c) oral examination of one candidate each (approx. 30 minutes) or								
				d) project report (approx. 8 to 10 pages) or								
					sentation/talk (ap							
				form	ritten examination of an oral examina	was chosen as method of ass tion of one candidate each or	sessment, this may be c an oral examination in	nanged and as:	sessment may instead take the			
					orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, he 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										
11-FU-MOE-161-		lectron	ic Materia		erties							
mo1	ECTS	5	Duration		1 semester Method of grading numerical grade Modul level graduate							
	Courses			V (3) ·								
	0.0 (1)	<u> </u>			le taught in: Ü: Ge	<u>-</u>			_			
	Method	d of ass	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) pro	d) project report (approx. 8 to 10 pages) or							
				e) pre	sentation/talk (ap	prox. 30 minutes)	cocemont this may be s	hanged and acc	sessment may instead take the			
									nethod of assessment is changed,			
				the le	cturer must inform	students about this by four v						
				Langu	lage of assessmen	t: German and/or English						
o8-FU-Ma-	Materi				1			T				
Wi3-222-m01	ECTS	5	Duration		1 semester	Method of grading   numer	ical grade	Modul level	undergraduate			
	Course			V (2)								
	Method	lethod of assessment 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								
					sentation (approx							
				Langu	lage of assessmen	t: German and/or English						

08-0CM-FM-161-	Organic	Organic Functional Materials											
mo1	ECTS	5	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		S (3)	•	•	•	·	•				
	Method	of asso	essment	b) ora c) ora d) log e) pre	al examination of c al examination in g g (approx. 20 page esentation (approx	s) or	o to 30 minutes) or dates (approx. 15 minu	ites per candidate) or					
08-FU-PR1-161-	Researc	h Proje	ect 1		<del>-</del>	<del>_</del>		'					
mo1	ECTS 10 Duration			n 1 semester		Method of grading	Method of grading   numerical grade		graduate				
	Courses			R (10)					-				
	Method of assessment				eport (approx. 25 pages) anguage of assessment: German and/or English								
08-FU-PR2-161-	Researc	:h Proje	ect 2					'					
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		R (10)				,	<b>'</b>				
	Method	of asso	of assessment report (approx. 25 pages) Language of assessment: German and/or English										
<b>Compulsory Elect</b>	ives (50 E0	CTS cre	dits)										
Subfield Focus To Two focus topics a				iich m	odules of 15 ECTS (	credits each are to be	completed.						
Focus Topic I: Fun	ctional Ma	aterials	in Biolog	y and	Medicine (15 ECTS	credits)							
03-BIO-	Biopoly	mers											
POL-222-m01		5	Duration	n .	1 semester	Method of grading	numerical grade	Modul level					
	Courses	5	•		+ Ü (1) + P (1) ıle taught in: V, Ü:	English							
	Method	of asso	essment	b) ora c) tal									
03-BIO-	Biofabri	ication	-										
FAB-222-m01	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	•		V (2) + Ü (1) + P (1) Module taught in: V, Ü: English								
	Method	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) talk (approx. 30 minutes) Language of assessment: English								
Master's with 1 major F	unctional Mate	erials (202	(2)				JMU Würzburg • generat	ed 19-Apr-2025 • exam. reg. data r	record 88 g81 - - H 2022	page 4 / 34			

o3-FU-IM-	Functio	nal Ma	terials in	Implar	ntology				,			
PL-222-m01	ECTS	5	Duration	n	1 semester	Method of grading num	erical grade	Modul level				
	Course	:S		V (3)	+ P (1)				•			
	Method	d of ass	essment	a) rep	ort on work place	ment (approx. 10 pages) or						
					esentation (approx							
				c) wri	tten examination	(approx. 60 minutes)						
EU DDE!				Langi	lage of assessme	nt: German and/or English						
03-FU-DDEL-222- m01	Nano4		1		T .				1			
11101	ECTS 5 Duratio			3 5			Modul level					
	Course			· ` ´	$(1) + \ddot{U}(1) + P(1)$							
	Method of assessment			techn	placement report / fieldwork report / report on practical training / report on practical course / project report / report on echnical course (approx. 10 pages) and b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes) anguage of assessment: German and/or English							
o3-GEW-	Tissue	cells m	eet mater	ials								
MAT-222-m01	ECTS	5	Duration	n	1 semester	Method of grading num	erical grade	Modul level				
	Courses			V (2)	+ P (2)							
	Method	d of ass	essment	techn	a) placement report / fieldwork report / report on practical training / report on practical course / project report / report on rechnical course (approx. 10 pages) and b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes)  Language of assessment: German and/or English							
Focus Topic II: Poly	mer Fun	ctional	Materials	(15 E	CTS credits)							
03-BIO-	Biofabrication											
FAB-222-m01	ECTS	5	Duration	1 semester Method of grading numerical grade				Modul level	graduate			
	Course	S	'		+ Ü (1) + P (1) ıle taught in: V, Ü:	English						
	Method	d of ass	essment	b) ora			o minutes) or					
o8-FU-PW1-161-	Polyme	er Mate	rials 1: Te	chnolo	gy of Polymer Mo	dification		,				
mo1	ECTS	5	Duration	n	1 semester	Method of grading num	erical grade	Modul level	graduate			
	Course	:S	<u> </u>	V (2)	+ P (2)			•	-			
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, winter semester P: creditable for bonus								

03-AD-	Additiv	Additive Manufacturing												
FER-222-m01	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level						
	Courses	S			+ Ü (1) + P (1) le taught in: V, Ü:	English		,						
	Method	l of asse	essment	b) ora c) talk										
08-FU-PW2-161-	Polyme	r Mater	ials 2: Te	chnolo	gy of Filler Modif	ication for Polymer Ma	aterials	,						
mo1	ECTS	5	Duration	n 1 semester Method of grading numerical grade A				Modul level	graduate					
	Courses			V (2) +										
	Method	l of asse	essment	b) ora c) ora Langu Asses	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, summer semester P: creditable for bonus									
03-FU-PM2-222-	Polyme	rs II												
mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses	S		V (2) + P (2)										
	Method	l of asse	essment	b) ora c) talk Langu Asses	l examination of a (approx. 30 minuage of assessme	(approx. 90 minutes) (one candidate each (2 utes) nt: German and/or Eng nce a year, winter sem	o to 30 minutes) or glish							
Focus Topic III: Ene	rgy Tech	nologie	s (15 ECT	S cred	its)									
08-FU-EEW-222-	Electro	chemica	l Energy	Storag	e and Conversion	1								
mo1	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	S		V (2) + S (2) Module taught in: German or English										
	Method	l of asse	essment	a) written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 30 minutes) and b) talk (approx. 30 minutes); (weighted 65:35)  Language of assessment: German and/or English Assessment offered: Once a year, summer semester										

08-FU-MW-222-	Structu	re-Proj	perties Co	rrelati	ons of Light Mate	rials - Experiments and Numerical Simulati	ons					
mo1	ECTS	5	Duration	า	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S	,		V (2) + S (2) Module taught in: German or English							
	Method of assessment			a) written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 30 minutes) and b) talk (approx. 30 minutes); (weighted 60:40) Language of assessment: German and/or English Assessment offered: Once a year, summer semester								
99-HIS-222-m01	Materia	als for I	ligh Volta	ge ins	ulation and High	Voltage Systems	'					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (3)	+ Ü (1)							
	Method	d of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total) Language of assessment: German and/or English								
11-NTE-152-m01	Nanote	chnolo	gy in Ener	rgy Research								
	ECTS	6	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S			+ R (1) ile taught in: Germ	nan or English						
	Method	d of ass	essment	b) ora c) ora d) pro e) pro If a w form the le Langu	al examination of onlexamination in good of the control of the con	(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or groups (groups of 2, approx. 30 minutes per ox. 8 to 10 pages) or pprox. 30 minutes).  In was chosen as method of assessment, thi ation of one candidate each or an oral exament students about this by four weeks prior to nt: German and/or English nce a year, summer semester	r candidate) or is may be changed and as nination in groups. If the m	nethod of assessment is changed,				

11-ENT-152-m01	Princip	les of E	nergy Tec	hnolog	gies	,							
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (3) +				`					
					le taught in: Germa								
	Method	d of ass	essment	a) writ	a) written examination (approx. 90 to 120 minutes) or on 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) pre	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,								
				If a wr									
				the le	oran oran examinat cturer must inform	students about this b	v four weeks prior to the origina	groups. If the in- al examination (	date at the latest.				
				Langu	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								
						ce a year, winter seme	ester						
	Referre	d to in I	-		Nr. 1 h)								
				§ 22    Nr. 2 f) § 22    Nr. 3 f)									
11-HNS-161-mo1	Optical	Proper		emiconductor Nanostructures									
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (3) +									
					le taught in: Germa								
	Method	d of ass				approx. 90 to 120 min							
						ne candidate each (ap	prox. 30 minutes) or prox. 30 minutes per candidate	) or					
					ject report (approx		orom jo minutes per eumanaute	, 0.					
				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									
							the course is offered and in the	subsequent se	mester				

Focus Topic IV: Sen	niconduct	or Nan	ostructu	res (15	ECTS credits)								
11-HPH-201-m01	Semicon	ductor	Physics										
	ECTS 6	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) - Modu	+ R (1) le taught in: Germa	n or English							
	Method	of asse	ssment	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: In the semester in which the course is offered and in the subsequent semester									
11-SPD-152-m01	Physics	of Sem	iconduct	or Devices									
	ECTS 6	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			V (3) - Modu	+ R (1) lle taught in: Germa	n or English							
	Method of assessment			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									

ECTS	Organic Semiconductors												
LCIS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
Course	es			+ R (1) ule taught in: Germ	nan or English		,						
Method	d of ass	essment	b) oracle) oracle) profession oracle. If a way the learning and a second control oracle.	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.									
Coatin	g Techr	ologies b	ased o	n Vapour Deposit	ion								
ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
Course	es												
			b) ora c) ora d) pro e) pro If a w form the le Lang Asse credi	al examination of cal examination in go bject report (appro esentation/talk (ap ritten examination of an oral examina ecturer must inforn uage of assessmen ssment offered: Or table for bonus	one candidate each (approups (groups of 2, approups) or opprox. 30 minutes). It was chosen as metholation of one candidate in students about this but. German and/or Engince a year, summer ser	oprox. 30 minutes) or prox. 30 minutes per cand of assessment, this meach or an oral examination four weeks prior to the lish	nay be changed and as ation in groups. If the m	nethod of assessment is changed,					
		_				1							
-		Duration			Method of grading	numerical grade	Modul level	graduate					
Course	es				nan or English								
Method	d of ass	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 change 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: In the semester in which the course is offered and in the subsequent semester										
-	Coatin ECTS Course Metho	Coating Techn ECTS 5 Courses Method of ass  Method of ass  Optical Prope ECTS 6 Courses	Method of assessment  Coating Technologies b  ECTS 5 Duration  Courses  Method of assessment  Optical Properties of Se  ECTS 6 Duration	Method of assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora c) ora d) properties of Semicon the learning Assessment a) wr b) ora d)	Method of assessment  Method of assessment	Method of assessment  All written examination (approx. 90 to 120 min b) oral examination in groups (groups of 2, ap d) project report (approx. 30 minutes) If a written examination was chosen as metho form of an oral examination of one candidate each (ap c) oral examination was chosen as metho form of an oral examination of one candidate the lecturer must inform students about this L Language of assessment: German and/or Eng Assessment offered: In the semester in which  Coating Technologies based on Vapour Deposition  ECTS 5 Duration 1 semester Method of grading  Courses V(3) + R(1)  Module taught in: German or English  Method of assessment and virtue examination (approx. 90 to 120 min b) oral examination in groups (groups of 2, ap d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as metho form of an oral examination of one candidate the lecturer must inform students about this b. Language of assessment: German and/or Eng Assessment offered: Once a year, summer ser creditable for bonus  Optical Properties of Semiconductor Nanostructures  ECTS 6 Duration 1 semester Method of grading  Courses V(3) + R(1)  Module taught in: German or English  A) written examination (approx. 90 to 120 min b) oral examination of one candidate each (ap c) oral examination in groups (groups of 2, ap d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination of one candidate each (ap c) oral examination of one cand	Method of assessment  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 ca 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 m form of an oral examination of one candidate each or an oral examination the lecturer must inform students about this by four weeks prior to the Language of assessment: German and/or English  Assessment offered: In the semester in which the course is offered and the lecturer must inform students about this by four weeks prior to the Language of assessment: German or English  Courses  V (3) + R (1)  Module taught in: German or English  Method of assessment  W is the examination (approx. 90 to 120 minutes) or b) oral examination on one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or e) presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this m form of an oral examination of one candidate each or an oral examination the lecturer must inform students about this by four weeks prior to the Language of assessment: German and/or English  Assessment offered: Once a year, summer semester creditable for bonus  Optical Properties of Semiconductor Nanostructures  ECTS 6 Duration 1 semester Method of grading numerical grade  Courses V (3) + R (1)  Module taught in: German or English  Method of assessment  a) written examination (approx. 90 to 120 minutes) or c) oral examination of one candidate each (approx. 30 minutes) or c) oral examination of one candidate each (approx. 30 minutes) or c) oral examination of one candidate each (approx. 30 minutes) or c) oral examination of one candidate each (approx. 30 minutes) or e) presentation/talk (approx. 30 minutes).  If a written examination of one candidate each or an oral examination for moral examination of one c	Method of assessment  a) written examination (approx. 9o to 120 minutes) or b) oral examination of one candidate each (approx. 3o minutes) or c) oral examination in groups (groups of 2, approx. 3o minutes) or e) presentation/talk (approx. 3o minutes)  If a written examination was chosen as method of assessment, this may be changed and assessment or an oral examination of one candidate each or an oral examination in groups. If the m the lecturer must inform students about this by four weeks prior to the original examination Language of assessment: German and/or English  Assessment offered: In the semester in which the course is offered and in the subsequent set.  Coating Technologies based on Vapour Deposition  ECTS 5 Duration 1 semester Method of grading numerical grade Modul level  Courses V(3) + R (1)  Module taught in: German or English  Method of assessment  Method of assessment  If a written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or e) presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assesoment of an oral examination of one candidate each or an oral examination in groups. If the m the lecturer must inform students about this by four weeks prior to the original examination Language of assessment: German and/or English  Assessment offered: Once a year, summer semester  Cottcal Properties of Semiconductor Nanostructures  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level  Courses V(3) + R (1)  Module taught in: German or English  Method of assessment  A written examination (approx. 90 to 120 minutes) or b) oral examination in groups. Graphox. 30 minutes) or c) oral examination of one candidate each oran oral examination or one can					

Focus Topic V: Orga	anic Fun	ctional	Materials	and A	pplications (15 ECT	S credits)							
08-FU-NT-AA-152-	Chemi	cal Nanc	otechnolo	gy: An	alytics and Applica	itions							
mo1	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	!S	•	V (4)		·							
	Method of assessment			b) ora c) ora d) log e) pre Langu	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								
08-FU-PW1-161-	Polyme	er Matei	rials 1: Te	chnolo	gy of Polymer Mod	ification							
mo1	ECTS	5	Duration	1	1 semester	graduate							
	Course	:S		V (2) ·	+ P (2)								
				b) ora c) ora Langu Asses	ll examination of or l examination in gr uage of assessment	approx. 90 minutes) or ne candidate each (app oups (groups of 2, app t: German and/or Engli ce a year, winter semes	idate)						
o8-PCM3-161-mo1	Nanos	cale Ma	terials										
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	!S		S (2) · Modu	+ Ü (1) le taught in: Germa	an or English							
	Method of assessment			b) ora c) tall Langu	ll examination of or k (approx. 30 minut	ne candidate each (app							
08-FU-PW2-161-	Polyme	er Matei	rials 2: Te	chnolo	gy of Filler Modific	ation for Polymer Mat	erials						
mo1	ECTS 5 Duratio		n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses		V (2) ·	+ P (2)	<u>.</u>								
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, summer semester P: creditable for bonus									

08-SCM1-161-m01	Supran	nolecul	ar Chemis	try (Ba	sics)								
	ECTS	5	Duratio	1	1 semester	Method of grading numerical gra	ade	Modul level	graduate				
	Course	S		S (3) Modu	S (3) Module taught in: German or English								
	Method	d of ass	sessment	b) ora	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English								
08-PCM5-161-m01	Physica	al Chen	nistry of S	upram	pramolecular Assemblies								
	ECTS	5	Duratio	1	1 semester	Method of grading   numerical gra	ade	Modul level	graduate				
	Course	S			o (2) + Ü (1)  Module taught in: German or English								
	Method	d of ass	sessment	b) ora c) talk	<ul> <li>a) written examination (approx. 90 minutes) or</li> <li>b) oral examination of one candidate each (approx. 20 minutes) or</li> <li>c) talk (approx. 30 minutes)</li> <li>Language of assessment: German and/or English</li> </ul>								
Focus Topic VI: Ima	ging un	d Spect	troscopy (	15 ECT	S credits)								
11-ZDR-152-m01	Princip	les of 1	wo- and T	hree-D	imensional Röntg	en Imaging							
	ECTS	6	Duratio	1	1 semester	Method of grading   numerical gra	ade	Modul level	graduate				
	Course	S		V (3) +	+ R (1) le taught in: Germ	an or English							
	Method	d of ass	sessment	b) ora c) ora d) pro e) pre If a wr form o the le Langu	l examination of of a lexamination in going in grant in g	approx. 90 to 120 minutes) or ne candidate each (approx. 30 minutoups (groups of 2, approx. 30 minutous (8 to 10 pages) or prox. 30 minutes). was chosen as method of assessmetion of one candidate each or an oral students about this by four weeks pt: German and/or English ce a year, summer semester	es per candidate ent, this may be c I examination in :	hanged and ass groups. If the m	ethod of assessment is changed,				

11-CTA-212-m01	Advanced Co	mputer To	mogra	ohy			· · · · · · · · · · · · · · · · · · ·				
	ECTS 6	Duratio	n	1 semester	Method of gradin	g numerical grade	Modul level	graduate			
	Courses	·		+ R (1) ile taught in: Germa	an or English						
	Method of as	ssessment	b) ora c) ora d) pro e) pro If a w form the lo Lango	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: In the semester in which the course is offered and in the subsequent semester							
11-EIM-211-m01	Electron and	Ion Micros	· ·								
	ECTS 6	Duratio	n	1 semester	Method of gradin	g numerical grade	Modul level	graduate			
	Courses			+ R (1) ile taught in: Germa	an or English						
	Method of as	ssessment	b) ora c) ora d) pro e) pro If a w form the lo Lango	Il examination in groject report (approxesentation/talk (apritten examination of an oral examinatecturer must informuage of assessmen	one candidate each (approx. 30 minutes) or groups (groups of 2, approx. 30 minutes per candidate) or ox. 8 to 10 pages) or approx. 30 minutes). In was chosen as method of assessment, this may be changed and assessment may instead attion of one candidate each or an oral examination in groups. If the method of assessment may instead attions about this by four weeks prior to the original examination date at the latest. Bent: German and/or English on the semester in which the course is offered and in the subsequent semester						
o8-PCM1a-161-	Laser Spectr	oscopy									
mo1	ECTS 5	Duratio		1 semester	Method of gradin	g numerical grade	Modul level	graduate			
	Courses		S (2) + Ü (1) Module taught in: German or English								
	Method of as	ssessment	nt a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English								
Subfield General ( The 20 ECTS point											

Alternatively, within these 20 ECTS credits, modules of the "Subfield Focus Topic (I to V)" can also be completed, whereby the modules already taken in the selected "Subfield Focus Topic" and introduced there cannot be used again in the "Subfield General Compulsory Electives". **Module Group Material Sciences** 08-FU-SGC-222-Sol-Gel Chemistry mo1 **ECTS** Duration 1 semester Method of grading | numerical grade Modul level undergraduate 13 V (3) Courses Module taught in: German or English Method of assessment | 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 **Analytical Methods - Examples from Practical Failure Analysis** 08-FU-ANA-161mo1 ECTS 5 Duration Method of grading | numerical grade Modul level 1 semester graduate Courses V(2) + P(2)Method of assessment 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 Assessment offered: Once a year, summer semester P: creditable for bonus **Module Group Physics** 11-SPD-152-mo1 **Physics of Semiconductor Devices** ECTS Method of grading | numerical grade 6 Modul level Duration 1 semester undergraduate V(3) + R(1)Courses Module taught in: German or English Method of assessment | 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-HLF-152-m01	Semiconductor Lasers and Photonics												
	ECTS 6	Duration	ı semester	Method of grading numerical grade	Modul level	graduate							
	Courses		V (3) + R (1)										
			Module taught in: German or English										
	Method of as	ssessment	a) written examination	n (approx. 90 to 120 minutes) or									
			o) 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 (appr	ox. 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 examir	nation of one candidate each or an oral examinatio	on in groups. If the m	nethod of assessment is changed,							
			the lecturer must inform students about this by four weeks prior to the original examination date at the latest.										
				anguage of assessment: German and/or English ssessment offered: Once a year, summer semester									
11-QTH-161-m01	Quantum Tra	nsport	7.55c55incht onerea. c	once a year, summer semester	1								
	ECTS 6	Duration	1 semester	Method of grading   numerical grade	Modul level	graduate							
	Courses		V (3) + R (1)		·								
			Module taught in: German or English										
	Method of as	ssessment	a) written examination	n (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: In the semester in which the course is offered and in the subsequent semester										
11-ZMB-152-m01	Methods of N	Von-Destruc	tive Material Testing	in the semester in which the course is offered and	The subsequent s	emester							
11 211101	ECTS 4	Duration		Method of grading   numerical grade	Modul level	undergraduate							
	Courses		V (2) + R (1)										
			Module taught in: German or English										
	Method of as	ssessment		n (approx. 90 to 120 minutes) or									
				one candidate each (approx. 30 minutes) or	lidate) 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).										
				on was chosen as method of assessment, this may nation of one candidate each or an oral examination									
				rm students about this by four weeks prior to the c									
			Language of assessme	ent: German and/or English	3								
			Assessment offered: (	Once a year, winter semester									

ECTS   6   Duration   1 semester   Method of grading   numerical grade   Modul level   undergraduate							
Method of assessment  Method of assessment							
Method of assessment  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) 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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment 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  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V(3) + R(1) Module taught in: German or English  Method of assessment 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) 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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
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 form of an oral examination in groups. If the method of assessment 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-BMT-161-mo1  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V(3) + R(1) Module taught in: German or English  Method of assessment 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessmen 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-BMT-161-mo1  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration   1 semester   Method of grading   numerical grade   Modul level   graduate    Courses   V (3) + R (1)   Module taught in: German or English  Method of assessment   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) 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 insteat form of an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment 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-BMT-161-m01  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V(3) + R(1) Module taught in: German or English  Method of assessment 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) or e) presentation/talk (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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
e) presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment 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  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration							
form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment 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-BMT-161-m01  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration   1 semester   Method of grading   numerical grade   Modul level   graduate    Courses   V (3) + R (1)   Module taught in: German or English    Method of assessment   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) 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
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-BMT-161-m01  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V (3) + R (1) Module taught in: German or English  Method of assessment 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) 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	it is thanged,						
Language of assessment: German and/or English Assessment offered: Once a year, winter semester  11-BMT-161-mo1  Biophysical Measurement Technology in Medical Science  ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V (3) + R (1) Module taught in: German or English  Method of assessment 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
Biophysical Measurement Technology in Medical Science							
ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate  Courses V (3) + R (1) Module taught in: German or English  Method of assessment 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
Courses  V (3) + R (1)  Module taught in: German 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
Method of assessment  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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Module taught in: German or English						
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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	a) written examination (approx. 90 to 120 minutes) 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 insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
e) presentation/talk (approx. 30 minutes)  If a written examination was chosen as method of assessment, this may be changed and assessment may insteat form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
form of an oral examination of one candidate each or an oral examination in groups. If the method of assessmen the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	e) presentation/talk (approx. 30 minutes)						
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: In the semester in which the course is offered and in the subsequent semester	Assessment offered: In the semester in which the course is offered and in the subsequent semester						
11-HPH-201-m01 Semiconductor Physics							
ECTS 6 Duration 1 semester Method of grading numerical grade Modul level graduate							
Courses V (3) + R (1)							
	Module taught in: German or English						
Method of assessment   a) written examination (approx. 90 to 120 minutes) or							
c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or	b) oral examination of one candidate each (approx. 30 minutes) 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 form of an oral examination of one candidate each or an oral examination in groups. If the method of assessmen							
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: In the semester in which the course is offered and in the subsequent semester							

Principles of Two- and Three-Dimensional Röntgen Imaging												
ECTS	6	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
Courses	5											
Method	of asse		a) Written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or									
					didate) or							
			d) project report (appr	rox. 8 to 10 pages) or								
			e) presentation/talk (a	approx. 30 minutes). On was chosen as method of assessment, this may	v he changed and ass	sessment 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,									
			he lecturer must inform students about this by four weeks prior to the original examination date at the latest.									
Physics	of Adv			once a year, summer semester								
				Method of grading   numerical grade	Modul level	graduate						
Courses	5		V (3) + R (1)									
Method	of asse											
			c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or									
			d) project report (approx. 8 to 10 pages) or									
			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.									
			anguage of assessment: German and/or English									
Labauat												
					Modul lovel	graduate						
		J		Method of grading   numerical grade	Modul level	graduate						
Courses	•		Module taught in: German or English									
Method	of asse		a) written examination (approx. 90 to 120 minutes) or									
					1: -  - + - \ - "							
			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									
					onginal examination	uate at the latest.						
	Physics ECTS Courses Method  Method  Laborat ECTS Courses Courses	ECTS 6 Courses  Method of assortion  Physics of Adv ECTS 6 Courses  Method of assortion  ECTS 6 Courses  Laboratory and ECTS 6 Courses	ECTS 6 Duration  Courses  Method of assessment  Physics of Advanced Ma ECTS 6 Duration  Courses  Method of assessment  Laboratory and Measure ECTS 6 Duration  Courses  Method of assessment	Courses	Courses	ECTS   6   Duration   1 semester   Method of grading   numerical grade   Modul level						

11-CMS-161-m01	Computa	tional Materia	ls Scie	Science (DFT)							
	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	,		+ R (2) ıle taught in: Germa	n or English						
	Method o	of assessment	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: In the semester in which the course is offered and in the subsequent semester								
11-FK2-201-m01	Solid Sta	te Physics 2									
	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	·		+ R (2) ule taught in: Germa	n or English		•				
	Method o	of assessment	b) ora c) ora d) pro e) pro If a w form the lo Langu	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: In the semester in which the course is offered and in the subsequent semester							
	other pre	requisites	Appro	oval from examination	on committee require	d.					

11-BMS-152-m01	Imagin	o Meth	ods at the	Synch	roton		1				
11 BMS 132 MO1	ECTS	6	Duration		1 semester	Method of grading   numerical grade	Modul level	undergraduate			
	Course			V (3) - Modu	+ R (1) lle taught in: Germa						
	Method	d of ass	essment	b) ora c) ora d) pro e) pre If a wi form o the le Langu	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-BSV-161-m01	61-mo1 Image and Signal		nal Proce	ssing i	n Physics						
	ECTS 6 Duration			1	1 semester	Method of grading   numerical grade	Modul level	graduate			
	Course	S			V (2) + Ü (2) Module taught in: German or English						
	Method of assessment			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: In the semester in which the course is offered and in the subsequent semester							
Module Group Cher	mistry										
08-SCM3-152-m01	Bioorga	anic Ch	emistry								
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		S (3)							
	Method	d of ass	essment	b) ora c) ora	ll examination of or l examination in gr	approx. 45 to 90 minutes) or ne candidate each (20 to 30 minutes) or oups of up to 3 candidates (15 to 30 minutes per c :: German and/or English	candidate)				

o8-BC-	Mole	cular Biol	ogy for Ad	dvance	d Students									
MOLMC-161-mo1	ECTS	5 5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cour	ses		V (2) -	/ (2) + Ü (1)									
	Meth	nod of asse	essment	a) wri	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									
							lates (approx. 15 minu	utes per candidate) or						
					d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English									
08-OCM-SYNT-161-	Mod	ern Synthe	etic Metho	ods										
mo1	ECTS				1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cour	ses		S (2) -		e								
					Module taught in: German or English									
	Metr	nod of asse	essment	ent 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	d) log (approx. 20 pages) or									
					e) presentation (approx. 30 minutes) Language of assessment: German and/or English									
						German and/or Engl	ish							
o8-PCM4-161-mo1		Ultrafast spectroscopy and quantum-control												
	ECTS		Duration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cour	ses		S (2) + Ü (1) Module taught in: German or English										
	Meth	nod of asse	essment	a) written examination (approx. 90 minutes) or										
				b) oral examination of one candidate each (approx. 20 minutes) or										
					(approx. 30 minute		ich							
	otho	r prerequis	itos	Language of assessment: German and/or English  Prior completion of modules o8-PCM1a and o8-PCM1b recommended.										
08-PCM2-161-m01				nd Reaction Dynamics										
00 1 CM2 101 m01	ECTS		Duration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cour				$S(2) + \ddot{U}(1)$									
					Module taught in: German or English									
	Meth	nod of asse	essment			prox. 90 minutes) o								
							prox. 20 minutes) or							
					(approx. 30 minute	s) German and/or Engl	ich							
				Langu	age of assessifiell:	German anu/or Engl	1311							

Module Group The	ory of Cl	hemistr	y / Numeri	ics (M	athematics / Comp	outer Science)					
08-TCM2-161-m01	Basics	and Ap	plications	of Qu	antum Chemistry						
	ECTS	5	Duration	n 1 semester Method of grading numerical grade Mod				Modul level	graduate		
	Course	es		S (2)	+ Ü (2)						
	Metho	d of ass	essment		written examination (approx. 90 to 180 minutes) or ) oral examination of one candidate each (20 to 30 minutes) or oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or ) log (approx. 20 pages) or ) presentation (approx. 30 minutes) anguage of assessment: German and/or English						
				c) ora							
08-TCM3-161-m01	Numer	ical Met	thods and			it. German and/or Eng	50311				
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	es		S (2)	+ Ü (2)						
	Metho	d of ass	essment	a) wri	) written examination (approx. 90 to 180 minutes) or ) oral examination of one candidate each (20 to 30 minutes) or						
				c) ora	l examination in g	roups of up to 3 cand	idates (approx. 15 mini	utes per candidate) or			
					l) log (approx. 20 pages) or e) presentation (approx. 30 minutes)						
						. 30 minutes) it: German and/or Eng					
08-TCM4-161-m01	Quanti	um Dyna	amics	<u> </u>							
oo rema lor mor	ECTS	5	Duration	1	1 semester	graduate					
	Course			S (2)	+ Ü (2)						
	Metho	d of ass	essment	a) wri	tten examination (	approx. 90 to 180 mi	nutes) or				
						ne candidate each (2					
					l examination in g g (approx. 20 pages		idates (approx. 15 minu	utes per candidate) or			
					sentation (approx						
				Langu	uage of assessmer	nt: German and/or Eng	glish				
08-TCM1-161-m01		ed Topic			Chemistry						
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course				+ Ü (2)						
	Metho	d of ass	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						
					(approx. 20 page:		idates (approx. 15 illilit	ates per candidate) of			
				e) pre	sentation (approx	. 30 minutes)					
				Langu	uage of assessmer	nt: German and/or Eng	glish				

10-I-PP-152-m01	Practic	al Cour	se in Prog	rammi	ng						
	ECTS	10	Duratio	n		Method of grading	(not) successfully completed	Modul level	undergraduate		
	Courses			P (6)							
	Method	Method of assessment			written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).						
	Referred to in LPO I				§ 49   Nr. 1 c) § 69   Nr. 1 d)						
10-M-MWR-222-	Modelling and Computational Science										
mo1	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			V (4) + Ü (2) Module taught in: German and/or English							
	Method of assessment			b) ora c) ora Langu Asses	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 Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus						

Module Group Biol	ogy												
07-4S1MOLB-152-	Aspect	s of Mo	ecular Bi	otechn	technology								
mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course			V (2) -									
	Method	d of ass	essment	writte credit	n examination (apprable for bonus	rox. 30 to 60 minutes	)						
		oants ar of place		Stude Shoul chelo located degree cation availa quota form reconce least. A wait Select ments rage geludir lows: dits (dapplied ding the sasters lot. Question of the sasters lot.	Id the number of appents of the Bachelor' Id the module be user's degree subject Bed to students of the esubjects Computant-oriented subject Bed to none quota execution for the coerned will be allocated one other module coerned will be maintion process group a series for this purpose, a grade of all assessming Chemie (Chemistriest, applicants will qualitative ranking) accepted this third ranking. First, applicants will qualitate to the respective appends of ECTS credits all ame number of ECTS of the respective appunts 3 (25 % of placed the module be used to the module to the mo	s degree subject Bioled in other subjects, iologie (Biology) with a Bachelor's degree setional Mathematics a iology (as well as pot ceed the number of a vithin one module courses of one module ed in the same proceed and places realined and places realined and places realined and places realined to place will be ranked, firstly, acand, secondly, according ranking will be component of the respectation of	and 5% of play ubject Biologie (Biology) with 6 and Mathematik (Mathematics), entially to students of other 'impplications, the remaining place imponent, several courses with a component. In this case, placed dure. In this procedure, applica ective module will be given presallocated as they become availating be allocated according ked according to the number of eir studies or of all module com Mathematik (Mathematics)) at according to their average gradeding to their total number of EC alculated as the sum of these trith the same ranking, places with the same ranking to the followed according to the followed with the same number of acces will be allocated by lot. Quants with the same number of or's degree subject Biologie (Biologie (Biologie)	edits will be give of places will be aces (a minimum or ECTS credits as porting' subjectes will be allocated number of ECTS credits the applicant of ECTS credits the time of application of ECTS credits the time of application of ECTS credits achies we rankings, and the Faculty of Boota 2 (25 % of possible ct semestes the subject semestes and the subject semister and th	ren preferential consideration. E allocated to students of the Bam of one place in total) will be almost of the Bachelor's ECTS credits, as part of the applits). Should the number of places ated to applicants from the other of places, there will be a unit of a module component that are y have successfully completed at deration.  Its' previous academic achievency have achieved and their avesubject of Biologie (Biology) (explication. This will be done as folding to the number of ECTS creaved (quantitative ranking). The and places will be allocated accordance to the qualitative ranking to the qualitative rankin				

Module Group Biol	ogy							
08-FU-AP-222-m01	Foreign Studies							
	ECTS 5 Duration	n 1 semester Method of grading (not) successfully completed Modul level undergraduate						
	Courses	P (o) Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) report (10 to 20 pages) or b) talk (10 to 20 minutes) Language of assessment: German and/or English and potentially language of the respective country						
	other prerequisites	lease consult with course advisory service in advance.						
	Additional Information	Block internship abroad with at least 20 working days						
08-FU-ALS-222-	Foreign Studies with a f	ocus on Materials Science						
mo1	ECTS 5 Duration	n 1 semester Method of grading (not) successfully completed Modul level						
	Courses	Course(s) as specified by respective institution Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or color or candidate each (20 to 30 minutes) or color or candidate each (20 to 30 minutes) or color or candidate) or candidates (approx. 15 minutes per candidate) or color (approx. 20 pages) or color or candidate) or candi						
	other prerequisites	Please consult with course advisory service in advance.						
08-FU-ST-222-m01	Special Topics of Mater	uls Science						
	ECTS 5 Duration	1 semester Method of grading (not) successfully completed Modul level						
	Courses	V (3)						
	Method of assessment	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						
Module Group Focu	ıs Topic I: Functional Mat	erials in Biology and Medicine						
03-BIO-	Biopolymers							
POL-222-m01	ECTS 5 Duration	1 semester Method of grading numerical grade Modul level						
	Courses	V (2) + Ü (1) + P (1) Module taught in: V, Ü: English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) talk (approx. 30 minutes) Language of assessment: English						

03-BIO-	Biofabri	ication		1									
FAB-222-m01	ECTS	5 Dur	tion	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	5		$V(2) + \ddot{U}(1) + P(1)$ Module taught in: V, $\ddot{U}$ : English									
	NA - 411	- <b>C</b>	_										
	Method	of assessm		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) talk (approx. 30 minutes) Language of assessment: English									
o3-FU-IM-	Function	Functional Materials in Implantology											
PL-222-m01	ECTS 5 Duratio				Method of grading   numerical grade	Modul level							
	Courses			V (3) + P (1)		•							
	Method of assessment			<ul><li>b) presentation (appro c) written examination</li></ul>	report on work placement (approx. 10 pages) or presentation (approx. 30 minutes) or written examination (approx. 60 minutes) anguage of assessment: German and/or English								
03-FU-DDEL-222-	Nano4Med												
mo1	ECTS	5 Dur	tion	1 semester	Method of grading numerical grade	Modul level							
	Courses	5		V (1) + Ü (1) + P (1)	·	·							
	Method of assessment			a) placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes) Language of assessment: German and/or English									
o3-GEW-	Tissue cells meet materials												
MAT-222-m01	ECTS	5 Dur	tion	1 semester	Method of grading numerical grade	Modul level							
	Courses	5		V (2) + P (2)	·	<u> </u>							
	Method	of assessm		a) placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes) Language of assessment: German and/or English									
<b>Module Group Foc</b>	us Topic II: Polymer Functional Materials												
03-BIO-	Biofabri	ication											
FAB-222-m01	ECTS	5 Dur	tion	1 semester	Method of grading   numerical grade	Modul level	graduate						
	Courses			V (2) + Ü (1) + P (1)  Module taught in: V, Ü: English									
	Method	of assessm											

08-FU-PW1-161-	Polymer Mater	rials 1: Tec	hnolo	gy of Polymer Modif	ication		<del>,</del>					
mo1	ECTS 5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (2) +	V (2) + P (2)								
	Method of ass		b) ora c) oral Langu Asses	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, winter semester P: creditable for bonus								
03-AD-	Additive Manu	facturing										
FER-222-m01	ECTS 5	Duration		1 semester	Method of grading	numerical grade	Modul level					
	Courses			- Ü (1) + P (1) le taught in: V, Ü: En	glish							
	Method of ass	essment	b) ora c) talk	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) talk (approx. 30 minutes) Language of assessment: English								
08-FU-PW2-161-	Polymer Mater	Polymer Materials 2: Technology of Filler Modification for Polymer Materials										
mo1	ECTS 5 Duratio		l	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (2) +	- P (2)								
	b) c) La As			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, summer semester P: creditable for bonus								
03-FU-PM2-222-	Polymers II											
mo1	ECTS 5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (2) + P (2)									
	Method of assessment a) v b) c c) t Lar Ass			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus								

<b>Module Group Foc</b>	us Topic I	II: Ener	gy Techno	ologie	S								
08-FU-EEW-222-	Electroc	hemica	al Energy	Storag	ge and Conversion								
mo1	ECTS	5	Duration	n 1 semester Method of grading numerical grade Modul				Nodul level undergraduate					
	Courses	5			+ S (2)								
					le taught in: German		,						
	Method	of asse	essment	a) written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 30 minutes) and b) talk (ap-									
					prox. 30 minutes); (weighted 65:35) Language of assessment: German and/or English								
				Assessment offered: Once a year, summer semester									
08-FU-MW-222-	Structu	Structure-Properties Correlations of Light Materials - Experiments and Numerical Simulations											
mo1	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	5			+ S (2)		,						
					le taught in: Germai								
	Method	of asse	essment			pprox. 90 minutes) or oral examination of one car	ndidate each (app	rox. 30 minutes) and b) talk (ap-					
					prox. 30 minutes); (weighted 60:40) Language of assessment: German and/or English								
				Assessment offered: Once a year, summer semester									
99-HIS-222-m01	Materials for High Voltage insulation and High Voltage Systems												
	ECTS	5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate					
	Courses			V (3) + Ü (1)									
	Method	of asse		a) written examination (approx. 90 minutes) or									
				b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)									
				Language of assessment: German and/or English									
11-NTE-152-m01	Nanotechnology in Energy Research												
	ECTS	6	Duration	1	1 semester	Method of grading   numerical grade	Modul level	graduate					
	Courses	5		V (3) + R (1)									
				Module taught in: German or English									
	Method	of asse	essment			pprox. 90 to 120 minutes) or							
						e candidate each (approx. 30 minutes) or	ate) 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,								
						on or one candidate each or an oral examination is students about this by four weeks prior to the orig							
						: German and/or English	,at examination	adic at the tatest.					
				Asses	sment offered: Once	e a year, summer semester							

11-ENT-152-m01	Princip	les of E	nergy Tec	hnolog	gies						
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	5		V (3) + R (1)							
				Module taught in: German or English							
	Method	l of asse		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 c	itten examination w of an oral examination	as chosen as method	d of assessment, this may be cr	ianged and ass	ethod of assessment is changed,		
							y four weeks prior to the origina				
				Language of assessment: German and/or English							
	D (	1	DO I	Assessment offered: Once a year, winter semester							
	Referre	d to in L		§ 22    Nr. 1 h)   § 22    Nr. 2 f)							
				§ 22 II Nr. 3 f)							
11-HNS-161-m01	Optical Properties of Semiconductor Nanostructures										
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V (3) +							
				Module taught in: German or English							
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or							
				c) oral examination of one candidate each (approx. 30 fillinates) of							
				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 le	cturer must inform s	tudents about this b	y four weeks prior to the origina				
						German and/or Engl					
				Asses	sment offered: In th	e semester in which	the course is offered and in the	subsequent se	emester		

Module Group Focu	ıs Topic I\	/: Sem	iconduct	or Nan	ostructures						
11-HPH-201-m01	Semicon	ducto	r Physics								
	ECTS 6 Duration			n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses				V (3) + R (1) Module taught in: German or English						
	Method	of asse	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: In the semester in which the course is offered and in the subsequent semester							
11-SPD-152-m01	Physics of Semiconductor Devices										
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			V (3) + R (1) Module taught in: German or English							
	Method of assessment			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							

11-0HL-161-m01	Organ	Organic Semiconductors												
	ECTS 6 Duration		1	1 semester	Method of grading	numerical grade	Modul level	graduate						
	Course	es			V (3) + R (1) Module taught in: German or English									
	Metho	d of ass	essment	b) ora c) ora d) pro e) pro If a w form the le Lange	) written examination (approx. 90 to 120 minutes) or ) oral examination of one candidate each (approx. 30 minutes) or ) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or ) project report (approx. 8 to 10 pages) or ) presentation/talk (approx. 30 minutes) fa written examination was chosen as method of assessment, this may be changed and assessment may instement of an oral examination of one candidate each or an oral examination in groups. If the method of assessment lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: German and/or English assessment offered: In the semester in which the course is offered and in the subsequent semester									
11-BVG-202-m01	Coatin	g Techn	ologies ba	ased o	n Vapour Deposit	ion								
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	es			+ R (1) ule taught in: Gern	nan or English		•	-					
				b) ora c) ora d) pro e) pre If a w form the le Langu Asses credi	al examination of all examination in a piect report (appropersentation/talk (a ritten examination of an oral examination of an oral examination and examination of an oral examination of an oral examination of an oral examination of an oral examination of a sessent of assessment offered: O table for bonus	ox. 8 to 10 pages) or pprox. 30 minutes). In was chosen as metho ation of one candidate on students about this bent: German and/or Englance a year, summer sen	prox. 30 minutes) or prox. 30 minutes per cared of assessment, this material or an oral examinate y four weeks prior to the ish	ay be changed and as tion in groups. If the n	nethod of assessmen					
11-HNS-161-m01					ductor Nanostruc				1					
	ECTS Course	6 es	Duration	V (3)	+ R (1)	Method of grading	numerical grade	Modul level	graduate					
	Metho	d of ass	essment	Module taught in: German 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: In the semester in which the course is offered and in the subsequent semester										

Module Group Focu	ıs Topic \	V: Orga	nic Functi	ional N	laterials and Appli	cations					
08-FU-NT-AA-152-	Chemic	al Nanc	technolo	gy: An	alytics and Applica	tions					
mo1	ECTS	5	Duratio	on 1 semester Method of grading numerical grade				Modul level	graduate		
	Courses	S		V (4)	(4)						
	Method	l of asso	essment		a) written examination (approx. 90 to 180 minutes) or						
					) oral examination of one candidate each (20 to 30 minutes) or ) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or						
					(approx. 20 pages		iox. 15 illillutes per c	andidate) of			
				e) pre	sentation (approx.	30 minutes)					
. 511 5111					Language of assessment: German and/or English						
08-FU-PW1-161- mo1					gy of Polymer Mod			1	1		
IIIOI		5	Duratio		1 semester	Method of grading   numerica	l grade	Modul level	graduate		
	Courses		-	V (2)					_		
	Method	l of asso	essment	a) wri	tten examination (a	approx. 90 minutes) or	ninutas) or				
					b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate)						
				Langu	Language of assessment: German and/or English						
					Assessment offered: Once a year, winter semester P: creditable for bonus						
08-PCM3-161-m01	Nanosc	ala Mai	torials	P: Cre	ditable for bonus						
08-PCM3-101-11101		5	Duration	1 semester Method of grading numerical grade Modul level graduate							
	Courses			$S(2) + \ddot{U}(1)$					Siduate		
		-		Module taught in: German or English							
	Method	l of asso	essment		a) written examination (approx. 90 minutes) or						
					b) oral examination of one candidate each (approx. 20 minutes) or						
					c) talk (approx. 30 minutes) Language of assessment: German and/or English						
				creditable for bonus							
08-FU-PW2-161-	Polyme	r Mater	ials 2: Te	chnolo	gy of Filler Modific	ation for Polymer Materials					
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerica	l grade	Modul level	graduate		
	Courses			V (2) + P (2)							
	Method	l of asso	essment	a) written examination (approx. 90 minutes) or							
				b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate)							
				c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English							
				Assessment offered: Once a year, summer semester							
			1	P: creditable for bonus							

08-SCM1-161-m01	Supran	nolecul	ar Chemis	try (Ba	sics)			<u> </u>				
	ECTS 5 Duration		1	1 semester	Method of grading   numerical grade		Modul level	graduate				
	Course	S		S (3) Module taught in: German or English								
	Method	d of ass	sessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English								
08-PCM5-161-m01	Physic	Physical Chemistry of Supramolecular Assemblies										
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	е	Modul level	graduate			
	Course	S		S (2) - Modu	+ Ü (1) le taught in: Germ	an or English						
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English								
Module Group Focu	ıs Topic	VI: Ima	ging und S	Spectro	oscopy							
11-ZDR-152-m01	Principles of Two- and Three-Dimensional Röntgen Imaging											
	ECTS	6	Duration	1	1 semester	Method of grading   numerical grade	e	Modul level	graduate			
	Course	S		V (3) + R (1) Module taught in: German or English								
	Method of assessment			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-CTA-212-m01	Advanc	ed Con	nputer Tor	nograp	ohy			-				
	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								
	Method	d of ass	essment	b) ora c) ora d) pro e) pre If a w form the le Langu	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: In the semester in which the course is offered and in the subsequent semester							
11-EIM-211-m01	Electron and Ion Microscopy											
	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								
				b) ora c) ora d) pro e) pre If a w form the le Langu	al examination of o al examination in g oject report (approx esentation/talk (ap ritten examination of an oral examina ecturer must inform uage of assessmen	approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or roups (groups of 2, approx. 30 minutes per cax. 8 to 10 pages) or oprox. 30 minutes).  was chosen as method of assessment, this notion of one candidate each or an oral examinates about this by four weeks prior to the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the course is offered and the semester in which the semester in the semest	may be changed and ass ation in groups. If the m ne original examination	ethod of assessment is changed, date at the latest.				
o8-PCM1a-161-	Laser S	pectro	scopy			<del>_</del>						
mo1	ECTS	5	Duratio		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course			S (2) + Ü (1) Module taught in: German or English								
	Method	d of ass	sessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English								

Thesis (30 ECTS credits)											
08-FU-MT-161-m01	Master	Thesis	Function	al Mate	rials						
	ECTS	ECTS 25 Duration			1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		No co	No courses assigned to module						
	Method	d of asse	essment	Master's thesis (approx. 70 pages) Language of assessment: German and/or English							
	Additio	nal Info	rmation	Time to complete: 6 months.							
08-FU-Koll-161-	Master Thesis Defense										
mo1	ECTS	5	Duratio	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		K (o)							
	Method	d of asse	essment	final colloquium (approx. 60 minutes): talk (approx. 30 minutes) with subsequent discussion (approx. 30 minutes) Language of assessment: German and/or English							
	Modules successfully completed 08-FU-MT										