

Subdivided Module Catalogue for the Module studies (Bachelor)

Physics

Examination regulations version: 2019 Responsible: Faculty of Physics and Astronomy

JMU Würzburg • generated 30-Mär-2024 • exam. reg. data record MB|128|-|-|H|2019

Abbreviations used

UNIVERSITÄT

WÜRZBURG

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

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

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

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

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

Conventions

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

Notes

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

Should the 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:

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

15-May-2019 (2019-36) 27-Jun-2019 (2019-41) 14-Nov-2019 (2019-52) 22-Jan-2020 (2020-13) 06-May-2020 (2020-39) 22-Jul-2020 (2020-57) 17-Dec-2020 (2020-110) 10-Mar-2021 (2021-17) 09-Jun-2021 (2021-58) 22-Dec-2021 (2021-85) 05-Jul-2022 (2022-52) 31-Jan-2023 (2022-86) 15-Jun-2023 (2023-58) 13-Dec-2023 (2023-107)

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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.

Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Abbreviation	Module title		Method of grading	page
Summer Term 2019				<u>,</u>
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
Winter Term 2019			1	1
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
Summer Term 2020		I		
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
Winter Term 2020			_	
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	10
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14

11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
Summer Term 2021				
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-mo1	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-mo1	Selected Topics in Theoretical Physics	6	NUM	16
Winter Term 2021			Nom	10
11-BXE5-152-m01	Current Topics in Experimental Physics	Г	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	
11-BXT5-152-m01	Current Topics in Theoretical Physics		NUM	9 10
11-BXT6-152-m01	Current Topics in Theoretical Physics	5	NUM	
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	11
-		6	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics Selected Topics in Solid State Physics		NUM	13
11-CSF6-152-m01		6	-	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-mo1	Selected Topics in Theoretical Physics	6	NUM	16
Summer Term 2022				
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
Winter Term 2022			1	,
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
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11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
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11-CSF6-152-m01	Selected Topics in Solid State Physics	6	NUM	14
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-CSTh6-152-m01	Selected Topics in Theoretical Physics	6	NUM	16
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Summer Term 2023				
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
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11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
11-EXP6A-161-m01	Current Topics in Physik	6	NUM	17
11-EXP7-161-m01	Current Topics in Physik	7	NUM	18
Winter Term 2023		·		
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-EXP6A-161-m01	Current Topics in Physik	6	NUM	17
11-EXP7-161-m01	Current Topics in Physik	7	NUM	18
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15
Summer Term 2024		·	•	
11-BXE5-152-m01	Current Topics in Experimental Physics	5	NUM	7
11-BXE6-152-m01	Current Topics in Experimental Physics	6	NUM	8
11-BXE8-152-m01	Current Topics in Experimental Physics	8	NUM	9
11-EXP6A-161-m01	Current Topics in Physik	6	NUM	17
11-EXP7-161-m01	Current Topics in Physik	7	NUM	18
11-BXT5-152-m01	Current Topics in Theoretical Physics	5	NUM	10
11-BXT6-152-m01	Current Topics in Theoretical Physics	6	NUM	11
11-BXT8-152-m01	Current Topics in Theoretical Physics	8	NUM	12
11-CSA6-152-m01	Selected Topics in Astrophysics	6	NUM	13
11-CST6-152-m01	Selected Topics in Particle Physics	6	NUM	15

Module	e title				Abbreviation
Current	t Topics	s in Experimental Physics	5		11-BXE5-152-m01
Module coordinator Module offered by			I		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Current or stud			. Accredited academi	c achievements, e.g	, in case of change of university
Intend	ed lear	ning outcomes			
sics of unders classify	the Bac tand th / the su	chelor's programme. They e measuring and/or eval bject-specific contexts a	y have knowledge of uation methods nece nd know the applicat	a current subdiscipl essary to acquire this tion areas.	of a module of Experimental Phy- ine of Experimental Physics and s knowledge. They are able to
Courses (type, number of weekly contact hours, language — if other than German)					
V (2) +	R (2)				
		sessment (type, scope, la on on whether module ca			ation offered — if not every seme-
or oral pages) If a writ stead t of asse nation	examin or pres tten exa ake the ssmen date at	ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessm tion of one candidate must inform student	ites per candidate) c ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the methoc weeks prior to the original exami-
Allocat	ion of p	olaces			
Additio	onal inf	ormation			
Worklo	ad				
150 h					
Teachi	ng cycl	e			
	- /				
Referre	ed to in	LPOI (examination regu	lations for teaching-	degree programmes	

~	e title				Abbreviation
Curren	t Topic	s in Experimental Physic	S		11-BXE6-152-m01
Module coordinator Module offered by					
chairpe	erson o	f examination committee	9	Faculty of Physics	and Astronomy
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites	5	
1 seme	ester	undergraduate	Approval from exam	nination committee	required.
Conten	nts				
Current or stud			. Accredited academ	ic achievements, e.g	g. in case of change of university
Intend	ed lear	ning outcomes			
sics of unders classify	the Bao tand th y the su	chelor's programme. The le measuring and/or eva lbject-specific contexts a	y have knowledge of luation methods neco and know the applica	a current subdiscip essary to acquire thi tion areas.	of a module of Experimental Phy- line of Experimental Physics and s knowledge. They are able to
Courses (type, number of weekly contact hours, language — if other than German)					
V (3) +	R (1)				
		s essment (type, scope, la ion on whether module c			ation offered — if not every seme-
	ovami				
or oral pages) If a writ stead t of asse nation	examir or pres tten exa ake the essmen date at	nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation	examir or pres tten exa cake the essmen date at age of a	nation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina t is changed, the lecture the latest. ssessment: German and	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua	examir or pres tten exa cake the essmen date at age of a	nation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina t is changed, the lecture the latest. ssessment: German and	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat	examir or pres tten exa cake the essmen date at age of a tion of p	nation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina t is changed, the lecture the latest. ssessment: German and	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat	examir or pres tten exa cake the essmen date at age of a tion of p	nation in groups (groups sentation/talk (approx. 3 amination was chosen as a form of an oral examina t is changed, the lecture the latest. Issessment: German and places	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat	examir or pres tten exa cake the essmen date at age of a tion of p	nation in groups (groups sentation/talk (approx. 3 amination was chosen as a form of an oral examina t is changed, the lecture the latest. Issessment: German and places	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat Additic	examir or pres tten exa cake the essmen date at age of a tion of p	nation in groups (groups sentation/talk (approx. 3 amination was chosen as a form of an oral examina t is changed, the lecture the latest. Issessment: German and places	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat Additio Worklo 180 h	examir or pres tten exa cake the essmen date at age of a tion of p onal inf	nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina t is changed, the lecture the latest. ssessment: German and places ormation	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat Additic	examir or pres tten exa cake the essmen date at age of a tion of p onal inf	nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina t is changed, the lecture the latest. ssessment: German and places ormation	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidate r must inform studen	utes per candidate) of ent, this may be cha e each or an oral exa	or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method
or oral pages) If a writ stead t of asse nation Langua Allocat Additio 180 h Teachin 	examir or pres tten exa cake the essmen date at age of a tion of p onal inf oad	nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina t is changed, the lecture the latest. ssessment: German and places ormation	of 2, approx. 30 minu o minutes). s method of assessm ation of one candidator r must inform studen /or English	utes per candidate) of ent, this may be cha e each or an oral exa ts about this by four	anged and assessment may in- amination in groups. If the method weeks prior to the original exami-

	e title				Abbreviation
Curren	t Topic	s in Experimental Physic	S		11-BXE8-152-m01
Module coordinator				Module offered by	
chairpo	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
8	nume	rical grade			
Duratio		Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	nination committee r	equired.
Conten	nts				
	t topics ly abroa		. Accredited academi	ic achievements, e.g	. in case of change of university
Intend	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Experimental Phy- sics of the Bachelor's programme. They have knowledge of a current subdiscipline of Experimental Physics and understand the measuring and/or evaluation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.					
Courses (type, number of weekly contact hours, language — if other than German)					
V (4) +	R (2)				
		sessment (type, scope, la ion on whether module c			tion offered — if not every seme-
or oral pages) If a wri stead t	examir or pres tten exa ake the essmen	aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina	of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate	ites per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) ir project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method
nation		the latest. ssessment: German and		ts about this by four	
nation Langua	age of a	ssessment: German and		ts about this by four	weeks prior to the original exami
nation Langua		ssessment: German and		ts about this by four	
nation Langua Allocat	age of a t ion of j	ssessment: German and blaces		ts about this by four	
nation Langua Allocat	age of a t ion of j	ssessment: German and		ts about this by four	
nation Langua Allocat	age of a tion of p onal inf	ssessment: German and blaces		ts about this by four	
nation Langua Allocat Additic	age of a tion of p onal inf	ssessment: German and blaces		ts about this by four	
nation Langua Allocat Additic Worklo 240 h	age of a tion of p onal inf	ssessment: German and places ormation		ts about this by four	
nation Langua Allocat Additic Worklo 240 h	age of a tion of p onal inf	ssessment: German and places ormation		ts about this by four	
nation Langua Allocat Additic 240 h Teachi 	age of a tion of p onal inf pad	ssessment: German and places ormation	/or English		weeks prior to the original exami

Modul	e title				Abbreviation
Curren	t Topic	s in Theoretical Physics			11-BXT5-152-m01
Module coordinator				Module offered by	<u> </u>
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.
Conter	nts				
	t topics abroad.		ccredited academic	achievements, e.g. i	n case of change of university or
Intend	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Phy- sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current pro- blems of Theoretical Physics.					
		, number of weekly conta	ct hours, language –	- if other than Germa	an)
V (2) +					
		sessment (type, scope, la ion on whether module ca			ation offered — if not every seme-
or oral pages) If a wri stead t of asse nation	examir or pres tten exa take the essmen date at	ation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	ites per candidate) c ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami-
	tion of p		0,0		
Additio	onal inf	ormation	·		
Worklo	ad				
150 h					
	ng cycl	e			
		-			
Referre	ed to in	LPO I (examination regu	lations for teaching.	legree programmes	
Referre					,

Module	e title				Abbreviation
Curren	t Topics	s in Theoretical Physics			11-BXT6-152-m01
Module coordinator				Module offered by	/
chairpe	erson o	f examination committee		Faculty of Physics	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee	required.
Conten	nts				
	t topics abroad.	of Theoretical Physics. A	ccredited academic a	achievements, e.g.	in case of change of university or
Intend	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Phy- sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current pro- blems of Theoretical Physics.					
Course	es (type	, number of weekly conta	ict hours, language –	- if other than Germ	nan)
V (3) +	R (1)				
		essment (type, scope, la on on whether module ca			nation offered — if not every seme-
or oral pages) If a writ stead t of asse nation	examin or pres tten exa take the essmen date at	ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student	tes per candidate) ent, this may be ch e each or an oral ex	ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami-
-	tion of p				
Additic	onal inf	ormation			
Worklo	bad				
180 h					
	ng cycl	e			
 Referre	ed to in	LPOI (examination regu	lations for teaching-o	legree programme	s)

Modul	e title				Abbreviation
Current Topics in Theoretical Physics 11-BXT8-152-mo1				11-BXT8-152-m01	
Module coordinator				Module offered by	/
chairp	erson o	f examination committee		Faculty of Physics	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
8	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee	required.
Conter	nts				
	t topics abroad.	of Theoretical Physics. A	ccredited academic a	achievements, e.g.	in case of change of university or
Intend	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Phy- sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current pro- blems of Theoretical Physics.					
Course	es (type	, number of weekly conta	ct hours, language –	- if other than Germ	ian)
V (4) +	R (2)				
		sessment (type, scope, la ion on whether module ca			ation offered — if not every seme-
or oral pages) If a wri stead t of asse nation	examir) or pres tten exa take the essmen date at	aation in groups (groups of sentation/talk (approx. 30 amination was chosen as e form of an oral examina	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	tes per candidate) ent, this may be ch e each or an oral ex	ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami-
-	tion of p				
Additi	onal inf	ormation	·		
Worklo	bad				
240 h	-				
	ing cycl	e			
reduill					
	ed to in	LPO I (examination regu	lations for teaching-o	degree programme	6)

6 numerical grade Duration Module level Oth 1 semester undergraduate App Contents Selected topics of Astrophysics. Intended learning outcomes The students have basic knowledge of a cuttion methods necessary to acquire this know know the application areas. Courses (type, number of weekly contact here of weekly contact here of weekly contact here of weekly contact here of a sessment (type, scope, languater, information on whether module can be written examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mil f a written examination was chosen as met stead take the form of an oral examination	Module offered by Faculty of Physics and Astronomy succ. compl. of module(s)					
chairperson of examination committeeECTSMethod of gradingOnd6numerical gradeDurationModule levelOth1 semesterundergraduateAppContentsundergraduateAppContentsselected topics of Astrophysics.Intende learning outcomesThe students have basic knowledge of a cultion methods necessary to acquire this know know the application areas.Courses (type, number of weekly contact here know the application areas.Courses (type, number of weekly contact here know the application areas.V (3) + R (1)Method of assessment (type, scope, langu ster, information on whether module can be written examination (approx. 90 to 120 mir or oral examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mi If a written examination was chosen as mer stead take the form of an oral examination of assessment is changed, the lecturer must nation date at the latest. Language of assessment: German and/or EAllocation of placesAdditional informationWorkload	Faculty of Physics and Astronomy succ. compl. of module(s)					
ECTSMethod of gradingOn6numerical gradeDurationModule levelOth1 semesterundergraduateAppContentsSelected topics of Astrophysics.Intended learning outcomesThe students have basic knowledge of a cution methods necessary to acquire this know know the application areas.Courses (type, number of weekly contact here information on whether module can be written examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mi If a written examination was chosen as met stead take the form of an oral examination of assessment is changed, the lecturer must nation date at the latest. Language of assessment: German and/or EAllocation of placesWorkload	succ. compl. of module(s)					
6 numerical grade Duration Module level Ott 1 semester undergraduate App Contents Selected topics of Astrophysics. Intended learning outcomes The students have basic knowledge of a cuttion methods necessary to acquire this know know the application areas. Courses (type, number of weekly contact here variable of a second to a second t						
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Intended learning outcomes The students have basic knowledge of a cu tion methods necessary to acquire this known know the application areas. Courses (type, number of weekly contact h V (3) + R (1) Method of assessment (type, scope, langung ster, information on whether module can b written examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mind If a written examination was chosen as mering stead take the form of an oral examination of assessment is changed, the lecturer mustion nation date at the latest. Language of assessment: German and/or E Allocation of places Workload						
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Method of assessment (type, scope, langu ster, information on whether module can b written examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mi If a written examination was chosen as mer stead take the form of an oral examination of assessment is changed, the lecturer mus nation date at the latest. Language of assessment: German and/or E Allocation of places Additional information Workload	nguage — if other than German)					
ster, information on whether module can b written examination (approx. 90 to 120 mir or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mi If a written examination was chosen as mer stead take the form of an oral examination of assessment is changed, the lecturer mus nation date at the latest. Language of assessment: German and/or E Allocation of places Additional information Workload						
or oral examination in groups (groups of 2, pages) or presentation/talk (approx. 30 mi If a written examination was chosen as me stead take the form of an oral examination of assessment is changed, the lecturer mus nation date at the latest. Language of assessment: German and/or E Allocation of places Additional information Workload	f other than German, examination offered — if not every seme- n to earn a bonus)					
 Additional information Workload	r oral examination of one candidate each (approx. 30 minutes) . 30 minutes per candidate) or project report (approx. 8 to 10 assessment, this may be changed and assessment may in- candidate each or an oral examination in groups. If the method n students about this by four weeks prior to the original exami-					
180 h						
Teaching cycle						
Referred to in LPO I (examination regulation						
	eaching-degree programmes)					

Module	e title				Abbreviation
Selecte	ed Topi	cs in Solid State Physics			11-CSF6-152-m01
Module coordinator				Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	ed topic	s of Solid-State Physics.			
Intende	ed lear	ning outcomes			
The students have basic knowledge of a specialist field of Solid-State Physics and understand the measuring and evaluation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.					
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	an)
V (3) +	R (1)				
		sessment (type, scope, la ion on whether module ca			ition offered — if not every seme-
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). 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					
Allocation of places					
Additio	onal inf	ormation			
Worklo	ad				
180 h					
Teachi	ng cycl	e			
	- •				
Referre	ed to in	LPOI (examination regu	lations for teaching-o	degree programmes)	
				0	

Module coordichairperson ofECTSMetho6numer1 semesterI1 semesterIContentsSelected topicsIntended learnThe students htheoretical merand know the aCourses (type,V (3) + R (1)Method of asset	examination committee d of grading ical grade Module level undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu	Only after succ. con Other prerequisites Approval from exam a special field of Eler	ination committee r						
chairperson of ECTS Metho 6 numer Duration 1 1 semester Image: Contents Selected topics Intended learn The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of asset	examination committee d of grading ical grade Module level undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	Only after succ. con Other prerequisites Approval from exam a special field of Eler	Faculty of Physics a npl. of module(s)						
ECTSMetho6numerDuration11 semesterContentsContentsSelected topicsIntended learnThe students htheoretical merand know the aCourses(type,V (3) + R (1)Method of asset	d of grading ical grade Module level undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	Only after succ. con Other prerequisites Approval from exam a special field of Eler	npl. of module(s)						
6 numer Duration 1 semester Contents Selected topics Intended learn The students h theoretical me and know the a Courses (type, V (3) + R (1) Method of asse	ical grade Module level undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	 Other prerequisites Approval from exam a special field of Eler	ination committee r	equired.					
Duration 1 semester Contents Selected topics Intended learn The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of asset	Module level undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	Approval from exam	ination committee r	equired.					
1 semester Contents Selected topics Intended learn The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of asse	undergraduate s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	Approval from exam	ination committee r	equired.					
Contents Selected topics Intended learn The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of asse	s of Particle Physics. ing outcomes ave basic knowledge of thods necessary to acqu application areas.	a special field of Eler		equired.					
Selected topic: Intended learn The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of asse	ing outcomes ave basic knowledge of thods necessary to acqu application areas.		montany Darticla Dhu						
Intended learn The students h theoretical me and know the a Courses (type, V (3) + R (1) Method of asse	ing outcomes ave basic knowledge of thods necessary to acqu application areas.		montany Darticla Dhu						
The students h theoretical mer and know the a Courses (type, V (3) + R (1) Method of ass	ave basic knowledge of the theory of theory of the theory of theory of the theory of t		montany Darticlo Dhy						
theoretical me and know the a Courses (type, V (3) + R (1) Method of ass	thods necessary to acqu application areas.		montany Particla Dhu						
V (3) + R (1) Method of ass	number of weekly conta			The students have basic knowledge of a special field of Elementary Particle Physics and of the experimental or theoretical methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.					
Method of ass		ct hours, language –	- if other than Germa	n)					
	on on whether module ca	an be chosen to earn	a bonus)	tion offered — if not every seme- didate each (approx. 30 minutes)					
or oral examina pages) or prese If a written exa stead take the of assessment nation date at	ation in groups (groups c entation/talk (approx. 30 mination was chosen as form of an oral examinat is changed, the lecturer	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	ites per candidate) o ent, this may be chai e each or an oral exa	r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami-					
Allocation of p	laces								
Additional info	ormation								
Workload									
180 h									
Teaching cycle	2								
Referred to in	LPOI (examination regu	lations for teaching-o	degree programmes)						
			,,						

Module	e title			Abbreviation			
Selecte	ed Topi	cs in Theoretical Physics	5		11-CSTh6-152-m01		
Modul	e coord	inator		Module offered by			
chairpe	erson o	f examination committee	9	Faculty of Physics	and Astronomy		
ECTS	ï	od of grading		Only after succ. compl. of module(s)			
6	nume	rical grade					
Duration Module level		Module level	Other prerequisites				
1 semester undergraduate		undergraduate	Approval from exam	Approval from examination committee required.			
Conten	Its						
Selecte	ed topio	cs of Theoretical Physics.					
Intend	ed lear	ning outcomes					
The students have basic knowledge of a special field of Theoretical Physics and have mastered the necessary mathematical methods. They are able to apply the acquired methods to current problems of Theoretical Physics.							
Course	s (type	, number of weekly conta	act hours, language –	if other than Germ	an)		
V (3) +	R (1)						
		sessment (type, scope, la ion on whether module c			ation offered — if not every seme-		
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). 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							
Allocat	ion of _l	places					
			_				
Additio	onal inf	ormation					
Workload							
180 h							
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Referre	eu to m	LPOI (examination regu	ulations for teaching-o	legree programmes)		

Module	e title			Abbreviation				
Current Topics in Physik 11-EXP6A-161-m01								
Module	e coord	inator		Module offered by	I			
chairperson of examination committee				Faculty of Physics and Astronomy				
ECTS	Metho	od of grading						
6	nume	rical grade						
Duration Module level		Module level	Other prerequisites					
1 semester graduate			Approval from examination committee required.					
Conten	ts							
		in Experimental or Theor tudy abroad.	retical Physics. Credit	ted academic achiev	vements, e.g. in case of change of			
Intend	ed learı	ning outcomes						
The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.								
Course	s (type	, number of weekly conta	ict hours, language –	- if other than Germa	an)			
V (3) +	R (1)		-					
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)								
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								
Allocat	ion of p	olaces						
Additic	onal info	ormation						
Workload								
WORKIG	180 h							
		Teaching cycle						
180 h	ng cvcl	e						
180 h	ng cycl	e						
180 h Teachi i 		e LPOI (examination regu	lations for teaching-o	degree programmes)			

Module	e title		Abbreviation				
Current Topics in Physik					11-EXP7-161-m01		
Module coordinator				Module offered by	l		
chairperson of examination committee				Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. compl. of module(s)				
7	nume	rical grade					
Duration Module level		Other prerequisites					
1 seme	ster	graduate	Approval from exam	ination committee r	equired.		
Conten	ts						
		of Experimental and The /ersity or study abroad.	oretical Physics. Acc	redited academic ac	hievements, e.g. in case of		
Intende	ed learı	ning outcomes					
The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.							
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	an)		
V (3) +	R (1)						
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
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). 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							
Allocat	-						
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oitibhA	nal inf	ormation					
Additional information							
 Workload							
210 h							
Teaching cycle							
reacting cycle							
Peterred to in LDO L (avamination regulations for teaching degree programmes)							
Referred to in LPO I (examination regulations for teaching-degree programmes)							