Study plan - Biophysics FSPO 2024 - Start: winter semester

03.03.2026

Semester						Credit points
1	Biophysics Lecture Series **6 CP**	Advanced Biophysics Seminar **3 CP** Biophysics Lab - A **9 CP**	**Adaptation** *Take* Biophysics Basics (6 CP) *(WiSe) or* Introductory biophysics (German) (6 CP)* *(WiSe) or* Soft Matter Physics and Biophysics (6 CP)* *(SoSe)* *and select further adaptation modules:* mathematical methods (5 CP, *WiSe*), practical skills in physics (4 CP, *WiSe/SoSe*), introductory chemistry (3 CP, *WiSe*)	Subject-specific specialization **18 CP**	**Complementary modules** *Language classes, classes from Humboldt Centre for Philosophy and Humanities* **3 CP**	30
2	Biophysics Elective Lectures **6 CP**	Biophysics Lab - B **6 CP**	**9 CP**			30
3	Biophysics Research Project **15 CP**		Research Internship **15 CP**			30
4	Master's Thesis **30 CP**					30

*usually not for students with a BA issued by Ulm University, please contact your study coordinator

https://www.uni-ulm.de/en/einrichtungen/humboldt-centre/teaching/asq/

Adaptation
Subject-specific specialization and research internship
Biophysics Modules
Master's Thesis
Complementary modules

Study plan - Biophysics FSPO 2024 - Start: summer semester

03.03.2026

<table>
<tr><th>Semester</th><th></th><th></th><th></th><th></th><th></th><th>Credit points</th></tr>
<tr><td>1</td><td colspan="2">Biophysics Elective Lectures
6 CP

Advanced Biophysics Seminar
3 CP</td><td>Biophysics Lab - A

9 CP</td><td>Adaptation Take
Biophysics Basics (6 CP) (WiSe) or
Introductory biophysics (German) (6 CP)* (WiSe) or
Soft Matter Physics and Biophysics (6 CP)* (SoSe)

and select further adaptation modules:
mathematical methods (5 CP, WiSe), practical skills in physics (4 CP, WiSe/SoSe), introductory chemistry (3 CP, WiSe)

9 CP</td><td>Subject-specific specialization

18 CP</td><td>Complementary modules
Language classes, classes from Humboldt Centre for Philosophy and Humanities

3 CP</td><td>30</td></tr>
<tr><td>2</td><td>Biophysics Lecture Series
6 CP</td><td>Biophysics Lab - B
6 CP</td><td></td><td></td><td></td><td>30</td></tr>
<tr><td>3</td><td colspan="3">Biophysics Research Project
15 CP</td><td colspan="2">Research Internship
15 CP</td><td></td><td>30</td></tr>
<tr><td>4</td><td colspan="5">Master's Thesis
30 CP</td><td>30</td></tr>
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Adaptation

Subject-specific specialization and research internship

Biophysics Modules

Master's Thesis

https://www.uni-ulm.de/en/einrichtungen/humboldt-centre/teaching/asq/

Complementary modules

Study Plan Biophysics M.Sc.

updated 26.02.2026

Areas and Modules	module no.	exam 1 no.	exam 2 no.	exam 3 no.	modules	min CP	type	SWS	grade	sem.	exams
						120					
A - Compulsory Area						**69**	**P**				
	80000	88888			Master's Thesis	30	P		G	WiSe SoSe	1
	74016	14016			Biophysics Research Project	15	P	Pj	G	WiSe SoSe	1
	75597	15597			Advanced Biophysics Seminar	3	P	2Ü	G	WiSe	1
	77119	17119	17319		Biophysics Lecture Series	6	P	4VL+1Ü	G	WiSe	1
	75607	15607			Biophysics Lab - A	9	P	9Ü	G	WiSe	1
	76658	15589			Biophysics Lab - B	6	P	6Ü	U	SoSe	1
B - Compulsory Elective Area						**48**					
B1 Adaptation						**9**					
	76656	18024	18524	18324	Introductory Biophysics	6	W	+1Lab	G	WiSe	1
	71944	13018			Introductory Chemistry	3	W	2VL	G	WiSe	1
	72383	13011			Mathematical Methods in Material Science	5	W	3VL+1Ü	G	WiSe	1
	72383	13513			Practical skills in Physics	4	W	4Ü	G	WiSe	1
	71164	12187	12277		Soft Matter Physics and Biophysics	6	W	3VL+2Ü	G	SoSe	1
B2 Biophysics Electives						**6**					
	74004	14004			Gene Expression	3	W	2VL	G	SoSe	1
	75694	15694			Mechanobiology	3	W	2VL	G	SoSe	1
	74003	14003			Molecular Motors	3	W	2VL	G	WiSe	1
B3 Internship						**15**					
	75595	15595			Research Internship	15	W	Pj	G	WiSe SoSe	1
B4 Specialization						**18**					
Biology											
	78007	18507	18007	18907	Advanced Microbiology	15	W		G	SoSe	1
	78022	18015	18022	18505	Advanced Skills in Life Sciences	9	W		G	SoSe	1
	75427	15416	15427		Endocrinology	15	W		G	WiSe	1
	78011	18011	18911	18511	Neurobiology and Behaviour	15	W		G	SoSe	1
	78008	15431	18908	18508	Protein Biochemistry	15	W		G	WiSe	1
	75413	15413			Protein Biochemistry and Structural Biology (Lecture)	3	W		G	WiSe	1
	72399	13531			Summer School - From Strucural Biology to Drug Discovery	3	W		G	SoSe	6
Physics											
	71502	12102	12112		Biophotonics	6	W		G	SoSe	1
	74005	14005			Cellular Biophysics	3	W		G	SoSe	1
	75802				Seminar Computational Methods in Quantum Information Theory						
	71657	12365	12366		Econophysics: Numerical Simulations	6			G	WiSe	1
	74004	14004			Gene Expression	3	W		G	SoSe	1
	77108	17108	17308		Introduction to NMR	6	W		G	WiSe	1
	74003	14003			Molecular Motors	3	W		G	WiSe	1
	71766	12580	12581		Open Quantum Systems	6	W		G	WiSe	1
	77107	17107	17307		Physics of medical imaging	6	W		G	WiSe	1
Data Science											
	74212	14212			Learning Systems I: Introduction to Machine Learning	6	W		G	SoSe	1
	72138	13705			Bioinformatics and Systems Biology	6	W		G	WiSe	1
	72818	10818	11818		Mathematical Statistics	9	W		G	WiSe	1
	74379	14379			Causal inference	4	W		G	WiSe	1
	77083	17083	17583		3D Deep Learning	6	W		G	SoSe	1
	75483	15483			Einführung in die Bioinformatik	6	W		G	WiSe	1
Chemistry											
	70999	11238			Biomaterials	3	W		G	WiSe	1
	71204	12026			Laser Spectroscopy	4	W		G	SoSe	1
	70337	10295	12958		Theoretische Modellierung und Simulation	4	W		G	SoSe	1
	71300	12014			Inorganic materials Synthesis/Inorganic Nanomaterials	3	W		G	SoSe	1
	71308	12034			Biopolymers	3	W		G	SoSe	1
	70337	10295	12958		Theoretische Modellierung und Simulation	4	W		G	SoSe	1
Engineering											
	75312	15312			Appropropriate Medical Device Design	4	W		G	WiSe	1
	75683	15683			Neuromorphic Engineering: Bio-inspired Sensing	6	W		G	WiSe	1
	75335	15335			Medical wearables I	5	W		G	WiSe	1
C - Complementary Area						**3**					
					Modules from the range offered by the Humboldt Study Centre for Philosophy and Humanities and the						

type: P = Pflicht, Compulsory; W = Wahlpflicht, Elective; E = Ergänzung, Complementary
grade: G = graded
U = ungraded
SWS: Semesterwochenstunde = classroom hours
CP: Credit Points
WiSe (winter semester), SoSe (summer semester)
V = Vorlesung (lecture), Ü = Übung (exercise), P = Praktikum (laboratory), Pj = Projekt, S = Seminar, T = Tutorium