

Student ID Number

Degree Programm Number

EXAMINATION RASTER MASTER'S PROGRAM BIOINFORMATICS

(1.10.2016)

Data of the Student

First name and Family name	
Phone number	
E-Mail	

Complementary Subjects for Bioinformatics [1]

Courses in the amount of 30 ECTS must be completed

Course	Code	Type	ECTS	Date	Grade
Basics in Chemistry for Bioinformatics	875GBICBCHK12	KV	1,5		
Introduction into Instrumental Analytics for Life-Sciences	875GBICIALK12	KV	3		
Numerical and Symbolic Methods for Bioinformatics	875GMATNSMK12	KV	3		
Molekulare Biologie der Zelle I	TPMWBUEMBZ1	UE	1,5		
	TPMPBVOMBZ1	VL	3		
Algorithmen und Datenstrukturen 2	INBIPVOALG2	VL	3		
Computer Graphics	INBIPUECOGR	UE	1,5		
	INBIPVOCOGR	VL	3		
Logic	521THEOLOGU13	UE	1,5		
	521THEOLOGV13	VL	3		
Rechnerarchitektur	521HARDRARCU16	UE	1,5		
	521HARDRARC16	VL	4,5		
Software Engineering	INBIPUESENG	UE	1,5		
	INBIPVOSENG	VL	3		
Systemnahe Programmierung	INBIPPRSPRO	PR	3		
Computer Forensics an IT Law	921NESECILV13	VL	3		
Parallel Computing	921COENPACK13	KV	4,5		
Software Architectures	921SOENSARK13	KV	4,5		
Statistik 2	INMAWKVSTA2	KV	3		
Visual Analytics	921DASIVIAV17	VL	3		

30

Complementary Subjects for Biologists [2]

Course	Code	Type	ECTS	Date	Grade
Basics of Bioinformatics			12		
Genome Analysis & Transcriptomics	675GTSBGATK13	KV	3		
Sequence Analysis and Phylogenetics	675GTSBSAPU16	UE	3		
	675GTSBSAPV16	VL	3		
Structural Bioinformatics	675GTSBSTBK13	KV	3		
Basics of Algorithms and Data Structures			6		
Algorithmen und Datenstrukturen 2	INBIPVOALG2	VL	3		
OR					
Algorithmen und Datenstrukturen	TM1PEKVADAT	KV	3		
Artificial Intelligence	INBIPVOAINT	VL	3		
Basics of Information Systems			6		
Informationssysteme	TM1PEKVINFO	KV	3		
OR					
Informationssysteme 1	INBIPVOIFS1	VL	3		
Visual Analytics	921DASIVIAV17	VL	3		
ODER					
Informationssysteme 1	INBIPUEIFS1	UE	3		
Basics of Mathematics			6		
Numerical and Symbolic Methods for Bioinformatics	875GMATNSMK12	KV	3		
Statistik 2	INMAWKVSTA2	KV	3		
			30		

Complementary Subjects for Chemists [3]

Course	Code	Type	ECTS	Date	Grade
Basics of Bioinformatics			12		
Genome Analysis & Transcriptomics	675GTSBGATK13	KV	3		
Sequence Analysis and Phylogenetics	675GTSBSAPU16	UE	3		
	675GTSBSAPV16	VL	3		
Structural Bioinformatics	675GTSBSTBK13	KV	3		
Basics of Algorithms and Data Structures			6		
Algorithmen und Datenstrukturen 2	INBIPVOALG2	VL	3		
OR					
Algorithmen und Datenstrukturen	TM1PEKVADAT	KV	3		
Artificial Intelligence	INBIPVOAINT	VL	3		
Basics of Information Systems			6		

Informationssysteme	TM1PEKVINFO	KV	3		
OR					
Informationssysteme 1	INBIPVOIFS1	VL	3		
Visual Analytics	921DASIVIAV17	VL	3		
OR					
Informationssysteme 1	INBIPUEIFS1	UE	3		
Basics of Mathematics			6		
Numerical and Symbolic Methods for Bioinformatics	875GMATNSMK12	KV	3		
Statistik 2	INMAWKVSTA2	KV	3		
				30	

Complementary Subjects for Computer Scientists and Business Informaticians [4]

Course	Code	Type	ECTS	Date	Grade
Basics of Bioinformatics			12		
Genome Analysis & Transcriptomics	675GTSBGATK13	KV	3		
Sequence Analysis and Phylogenetics	675GTSBSAPU16	UE	3		
	675GTSBSAPV16	VL	3		
Structural Bioinformatics	675GTSBSTBK13	KV	3		
Basics of Molecular Biology			4,5		
Molekulare Biologie der Zelle I	TPMWBUEMBZ1	UE	1,5		
Molekulare Biologie der Zelle I	TPMPBVOMBZ1	VL	3		
Basics of Biochemistry			7,5		
Basics in Chemistry for Bioinformatics	875GBICBCHK12	KV	1,5		
Introduction into Instrumental Analytics for Life-Sciences	875GBICIALK12	KV	3		
Chemie für Physiker II	LP2PCVOCHP2	VL	3		
Basics of Mathematics			6		
Numerical and Symbolic Methods for Bioinformatics	875GMATNSMK12	KV	3		
Statistik 2	INMAWKVSTA2	KV	3		
				30	

Complementary Subjects for Mathematicians [5]

Course	Code	Type	ECTS	Date	Grade
Basics of Bioinformatics			12		
Genome Analysis & Transcriptomics	675GTSBGATK13	KV	3		
Sequence Analysis and Phylogenetics	675GTSBSAPU16	UE	3		
Sequence Analysis and Phylogenetics	675GTSBSAPV16	VL	3		
Structural Bioinformatics	675GTSBSTBK13	KV	3		

Basics of Molecular Biology			4,5		
Molekulare Biologie der Zelle I	TPMWBUEMBZ1	UE	1,5		
Molekulare Biologie der Zelle I	TPMPBVOMBZ1	VL	3		
Basics of Biochemistry			7,5		
Basics in Chemistry for Bioinformatics	875GBICBCHK12	KV	1,5		
Introduction into Instrumental Analytics for Life-Sciences	875GBICIALK12	KV	3		
Chemie für Physiker II	LP2PCVOCHP2	VL	3		
Basics of Algorithms and Data Structures			3		
Artificial Intelligence	INBIPVOAINT	VL	3		
Basics of Information Systems			3		
Visual Analytics	921DASIVIAV17	VL	3		
OR					
Informationssysteme 1	INBIPUEIFS1	UE	3		
			30		

Complementary Subjects for Physicists [6]

Course	Code	Type	ECTS	Date	Grade
Basics of Bioinformatics			12		
Genome Analysis & Transcriptomics	675GTSTBGATK13	KV	3		
Sequence Analysis and Phylogenetics	675GTSBSAPU16	UE	3		
Sequence Analysis and Phylogenetics	675GTSBSAPV16	VL	3		
Structural Bioinformatics	675GTSBSTBK13	KV	3		
Basics of Molecular Biology			4,5		
Molekulare Biologie der Zelle I	TPMWBUEMBZ1	UE	1,5		
Molekulare Biologie der Zelle I	TPMPBVOMBZ1	VL	3		
Basics of Biochemistry			4,5		
Basics in Chemistry for Bioinformatics	875GBICBCHK12	KV	1,5		
Introduction into Instrumental Analytics for Life-Sciences	875GBICIALK12	KV	3		
Basics of Information Systems			6		
Informationssysteme	TM1PEKVINFO	KV	3		
OR					
Informationssysteme 1	INBIPVOIFS1	VL	3		
Visual Analytics	921DASIVIAV17	VL	3		
OR					
Informationssysteme 1	INBIPUEIFS1	UE	3		

Basics of Mathematics			3		
Statistik 2	INMAWKVSTA2	KV	3		
			30		

Bioinformatics and Machine Learning [8]

Course	Code	Type	ECTS	Date	Grade
Basic Methods of Data Analysis	875BIMLMDAK16	KV	3		
Deep Learning and Neural Networks	875BIMLDLNK16	KV	3		
Genome Assembly	875BIMLGAFK16	KV	3		
Machine Learning: Supervised Techniques	875BIMLMSTU16	UE	1,5		
	875BIMLMSTV16	VL	3		
Machine Learning: Unsupervised Techniques	875BIMLMUTU16	UE	1,5		
	875BIMLMUTV16	VL	3		
Theoretical Concepts of Machine Learning	INMAWVOTCML	VL	3		
			21		

Seminar Bioinformatics [10]

Course	Code	Type	ECTS	Date	Grade
Seminar Bioinformatics	875SBINSBIS12	SE	3		
			3		

Project Bioinformatics [12]

Course	Code	Type	ECTS	Date	Grade
Project Bioinformatics	875SBINPBIP12	PR	9		
			9		

Soft Skills and Ethics [14]

Course	Code	Type	ECTS	Date	Grade
		KV	3		
			3		

Area of Specialisation [16]

Course	Code	Type	ECTS	Date	Grade

