

Subjects	Semesters (courses/week) / (courses/semester)						Credit	evaluation
	1.	2.	3.	4.	5.	6.		

Soft skills for biotechnology							
-------------------------------	--	--	--	--	--	--	--

General and biotechnological economy and management (lec.)		1/14					1	exam
General and biotechnological economy and management (sem.)		1/14					1	
European Union epistemology in biotechnology (sem.)	1/14						1	practice grade
Bioethics (sem.)		1/14					1	practice grade
Communication (sem.)				1/14			1	practice grade

Basic Module							
--------------	--	--	--	--	--	--	--

Physical and biophysical foundation of biotechnology I. (lec.)	1/14						2	exam
Physical and biophysical foundation of biotechnology I. (sem.)	1/14						1	
Physical and biophysical foundation of biotechnology I. (pract.)	2/28						2	
Physical and biophysical foundation of biotechnology II. (lec.)		1/14					2	exam
Physical and biophysical foundation of biotechnology II. (sem.)		1/14					1	
Physical and biophysical foundation of biotechnology II. (pract.)		2/28					2	
Physical chemistry (lec.)	1/14						1	exam
Physical chemistry (pract.)	2/28						4	
Biotechnology on the border of physics and chemistry (lec.)		1/14					1	exam
Biotechnology on the border of physics and chemistry (pract.)		1/14					2	
General chemistry (lec.)	2/28						2	exam
General chemistry (sem.)	1/14						1	
General chemistry (pract.)	1/14						1	
Inorganic chemistry (lec.)	2/28						2	exam
Inorganic chemistry (pract.)	2/28						2	
Analitical chemisty (lec.)			1/14				1	exam
Analitical chemisty (sem.)			1/14				1	
Analitical chemisty (pract.)			2/28				2	
Organic chemistry (lec.)		2/28					2	exam
Organic chemistry (sem.)		1/14					1	

Subjects	Semesters (courses/week) / (courses/semester)						Credit	evaluation
	1.	2.	3.	4.	5.	6.		
Organic chemistry (pract.)		1/14					2	
Mathematical foundation of biostatistics (sem.)	1/14						2	practice grade
Mathematical foundation of biostatistics (pract.)	2/28						2	
Mathematical and biostatistical foundation of biotechnology (lec.)		2/28					2	exam
Mathematical and biostatistical foundation of biotechnology (sem.)		1/14					1	
Mathematical and biostatistical foundation of biotechnology (pract.)		2/28					2	

Specialised Core Module								
Cell biology (lec.)	1/14						1	exam
Cell biology (sem.)	1/14						2	
Cell biology (pract.)	2/28						2	
Genetic background of gene manipulation I. (lec.)			2/28				2	exam
Genetic background of gene manipulation I. (pract.)			2/28				4	
Genetic background of gene manipulation II. (lec.)				1/14			1	exam
Genetic background of gene manipulation II. (sem.)				1/14			2	
Genetic background of gene manipulation II. (pract.)				2/28			4	
Biochemistry I. (lec.)		1/14					1	exam
Biochemistry I. (sem.)		2/28					2	
Biochemistry II. (lec.)			1/14				1	exam
Biochemistry II. (sem.)			1/14				1	
Biochemistry II. (pract.)			2/28				2	
Omics methods (lec.)						1/14	1	exam
Omics methods (sem.)						1/14	1	
Omics methods (pract.)						2/28	2	
General microbiology (lec.)		1/14					1	exam
General microbiology (sem.)		2/28					2	
Biomedical microbiology (lec.)			1/14				1	exam
Biomedical microbiology (pract.)			2/28				2	

Subjects	Semesters (courses/week) / (courses/semester)						Credit	evaluation
	1.	2.	3.	4.	5.	6.		
Immunology (lec.)				2/28			2	exam
Immunology (sem.)				1/14			1	
Immunology (pract.)				2/28			2	
Physiology of plants and herbs (lec.)			1/14				1	exam
Physiology of plants and herbs (sem.)			1/14				1	
Physiology of plants and herbs (pract.)			2/28				2	
Experimental animals in biotechnology (lec.)			1/14				1	exam
Experimental animals in biotechnology (sem.)			1/14				2	
Experimental animals in biotechnology (pract.)			1/14				1	
Human physiology (lec.)			2/28				2	exam
Human physiology (pract.)			2/28				4	
Informatics and bioinformatics I. (sem.)				2/28			2	practice grade
Informatics and bioinformatics I. (pract.)				2/28			2	
Informatics and bioinformatics II. (sem.)					2/28		2	practice grade
Informatics and bioinformatics II. (pract.)					2/28		2	

Specialty module in Biotechnology								
Molecular biology and gene technology I. (lec.)				2/28			2	exam
Molecular biology and gene technology I. (sem.)				1/14			2	
Molecular biology and gene technology I. (pract.)				2/28			4	
Molecular biology and gene technology II. (lec.)					2/28		2	exam
Molecular biology and gene technology II. (sem.)					1/14		2	
Molecular biology and gene technology II. (pract.)					2/28		4	
Modern analytical devices (lec.)				1/14			1	exam
Modern analytical devices (pract.)				2/28			4	
Pharmaceutical and medical biotechnology (lec.)					2/28		2	exam
Pharmaceutical and medical biotechnology (sem.)					1/14		1	
Pharmaceutical and medical biotechnology (pract.)					2/28		4	

Subjects	Semesters (courses/week) / (courses/semester)						Credit	evaluation
	1.	2.	3.	4.	5.	6.		
Environmental biotechnology (lec.)						1/14	1	exam
Environmental biotechnology (sem.)						1/14	1	
Environmental biotechnology (pract.)						1/14	1	
Agricultural biotechnology (lec.)					1/14		1	exam
Agricultural biotechnology (sem.)					1/14		2	
Industrial biotechnology (lec.)					1/14		1	exam
Industrial biotechnology (sem.)					1/14		2	
Industrial biotechnology (pract.)					1/14		2	
Quality assurance, biosafety (sem.)						2/28	2	practice grade
Experimental data science (sem.)						1/14	1	practice grade
Experimental data science (pract.)						1/14	2	

Thesis preparation and practice module								
Thesis I		1/14					1	practice grade
Thesis II			1/14				1	practice grade
Thesis III				2/28			2	practice grade
Thesis VI					4/56		4	practice grade
Thesis VI						4/56	4	practice grade
Professional practice in biotechnology						4/56	4	practice grade
Optional subjects	1/14			1/14		7/98	9	exam
Total credit points / semester	29 credit points	27 credit points	31 credit points	31 credit points	37 credit points	25 credit points	Total credit points:	180 credit points