

International University of Sarajevo (IUS)													
Faculty of Engineering and Natural Sciences (FENS)													
Master of Science (M.Sc.) in Genetics and Bioengineering (60 ECTS)													
Academic Year 2025-2026													
Semester I						Semester II							
Code	Title	Prerequisites	T	P	ECTS	Code	Title	Prerequisites	T	P	ECTS		
xxx	Elective Course				6	xxx	Elective Course				6		
xxx	Elective Course				6	xxx	Elective Course				6		
xxx	Elective Course				6	BIO590	Master Thesis		0	12	24		
xxx	Elective Course				6								
					Semester Total =	24						Semester Total =	36
Notes:													
6 Program elective courses are taken from the list of available 500-level GBE program elective courses (up to 3 courses of 400-level can be taken).													
During the first week, new graduate students must take the Laboratory Safety Training (non-credit) before working in the laboratory.													
New graduate students need to complete the following safety trainings:													
1. General safety and Emergency													
2. Chemical Safety for Laboratories and													
3. Bio safety.													
Abbreviations: T (Theory), P (Practice)													
Total Credits Required for Graduation					60	Average Credit Load Per Semester					30		
Total Credits of Electives					36	Elective Ratio					60%		

Program Elective Courses										
Code	Title	Prerequisites	T	P	ECTS					
BIO501	Advanced Molecular Biology		3	0	6					
BIO502	Recent Advances in Biosciences		3	0	6					
BIO504	Personalized Medicine		3	0	6					
BIO507	Advanced Protein Engineering		3	0	6					
BIO508	Advanced Genetic Engineering		3	0	6					
BIO509	Scientific Research methods		3	0	6					
BIO510	Bioprocess engineering		3	0	6					
BIO511	Biomaterials		3	0	6					
BIO512	Biostatistics		3	0	6					
BIO513	Advanced Cell Biology		3	0	6					
BIO514	O-mics technology		3	0	6					
BIO515	Bio-Imaging systems		3	0	6					
BIO516	Advanced Bio-Chemical engineering		3	0	6					
BIO517	Biosensors instrumentation and technology		3	0	6					
BIO518	Special Topics in Life Sciences I		3	0	6					

Last update: 29 September, 2023; IUS-SENATE-11-2910/2023