

University of Life Sciences "King Mihai I" from Timișoara

Faculty of Bioengineering of Animal Resources

Postgraduate study: **MASTER'S DEGREE**

Field of study: **Biotechnology**

Study programme: **SUSTAINABLE BIOTECHNOLOGY (full English)**

Type of education and attendance: **in person, Full-Time**

Duration of the study programme: **2 years/4 semesters / 3+1**

Approved by the **RECTOR**,

Prof. Dipl.Eng. Cosmin Alin POPESCU, PhD.

Date: ..... 20\_\_

**CURRICULUM**  
**for the 1st year of study, academic year 2025/2026**

No.	SUBJECT	Subject Code	Semester 1 (14 weeks)									Semester 2 (14 weeks)									Total /year		
			L	S	Lab	P	Total Teaching Hours (T.T.H.)	Cv. Hours	I.S. Hours	ECTS credits	E.F.	C	S	L	P	Total Teaching Hours (T.T.H.)	Hours Cv.	I.S. Hours	ECTS credits	E.F.	Cv. Hours	ECTS credits	I.S. Hours
<b>COMPULSORY subjects:</b>																							
1	Advanced molecular methods in biotechnology I	BS.1.A.DOB.1	2	-	2	-	56	112	169	9	E	-	-	-	-	-	-	-	-	-	112	9	169
2	Cell culture-based study methods	BS.2.A.DOB.1	3	-	3	-	84	168	216	12	E	-	-	-	-	-	-	-	-	-	168	12	216
3	Molecular nutrition	BS.3.S.DOB.1	2	2	-	-	56	112	169	9	E	-	-	-	-	-	-	-	-	-	112	9	169
4	Advanced molecular methods in biotechnology II	BS.4.A.DOB.2	-	-	-	-	-	-	-	-	-	1	-	1	-	28	56	122	6	E	56	6	122
5	Sustainable processing of bioresources	BS.5.S.DOB.2	-	-	-	-	-	-	-	-	-	2	-	2	-	56	112	144	8	E	112	8	144
6	Modern microbial biotechnologies	BS.6.S.DOB.2	-	-	-	-	-	-	-	-	-	2	-	2	-	56	112	144	8	E	112	8	144
7	Biotechnologies with applications in immunology	BS.7.S.DOB.2	-	-	-	-	-	-	-	-	-	2	-	2	-	56	112	144	8	E	112	8	144
<b>TOTAL</b>			7	2	5	0	196	392	554	30	3E	7	0	7	0	196	392	554	30	4E	784 28	60	1108
<b>FACULTATIVE (OPTIONAL) subjects</b>																							
1	Biostatistics	BS.1.C.DFA.1	1	-	2	-	42	77	-	3	C	-	-	-	-	-	-	-	-	-	77	3	0
2	Nanotechnology	BS.2.C.DFA.2	-	-	-	-	-	-	-	-	-	1	-	2	-	42	77	-	3	C	77	3	0
3	Invertebrate biology and systematics	BS.3.C.DFA.2	-	-	-	-	-	-	-	-	-	2	-	2	-	56	84	-	4	C	84	4	0
Legend: L - no. of lecture hours per week; S - no. of seminar hours per week; Lab - no. of practical work/laboratory hours per week; P - no. of project hours per week; Cv. hours - Conventional hours; CR - ECTS credits; I.S. Hours - Individual Study hours; E.F. - evaluation form: E - exam; C - colloquium; P - Project; Specialization Code: SB / Subject order/Formative category of the Subject: A - Advanced (in deep); S - specialty; C - Complementary/semester: 1-4.			Total activity hours / semester:	Total activity hours / semester:	No. of weeks / semester	Teaching hours / week	Teaching hours / semester	I.S. Hours / semester			Total activity hours / semester:	Total activity hours / semester:	No. of weeks / semester	Teaching hours / week	Teaching hours / semester	I.S. Hours / semester							
			750	1.413	14	14	196		554		750	1.413	14	14	196		554						

Avizat DECAN,  
 Prof. dr. ing. Ioan PEȚ  
 Data: 08/07/2025

University of Life Sciences "King Mihai I" from Timișoara  
 Faculty of Bioengineering of Animal Resources

Postgraduate study: **MASTER'S DEGREE**

Field of study: **Biotechnology**

Study programme: **SUSTAINABLE BIOTECHNOLOGY (full Romanian)**

Type of education and attendance: **in person, Full-Time**

Duration of the study programme: **2 years/4 semesters / 3+1**

Approved by the **RECTOR,**

Prof. Dipl. Eng. Cosmin Alin POPESCU, PhD.

Date: ..... 20\_\_

**CURRICULUM**  
**for the 2nd year of study, academic year 2025/2026**

No.	SUBJECT	Subject Code	Semester 3 (14 weeks)										Semester 4 (14 weeks)										Total /year		
			L	S	Lab	P	Total Teaching Hours (T.T.H.)	Cv. Hours	I.S. Hours	ECTS credits	E.F.	C	S	L	P	Total Teaching Hours (T.T.H.)	Hours Cv.	I.S. Hours	ECTS credits	E.F.	Cv. Hours	ECTS credits	I.S. Hours		
<b>COMPULSORY subjects:</b>																									
1	Biotechnological entrepreneurship	BS.1.S.DOB.3	1	1	-	-	28	56	122	6	E	-	-	-	-	-	-	-	-	-	-	56	6	122	
2	Animal biotechnologies with applications in industry and agriculture	BS.2.S.DOB.3	4	-	4	-	112	224	288	16	E	-	-	-	-	-	-	-	-	-	-	224	16	288	
3	Ethics and academic integrity	BS.3.C.DOB.3	1	-	-	-	14	35	36	2	E	-	-	-	-	-	-	-	-	-	-	35	2	36	
4	Practical training	BS.4.S.DOB.4	-	-	-	-	-	-	-	-	-	-	-	-	15	210	315	415	25	C	-	315	25	415	
5	Dissertation writing	BS.5.S.DOB.4	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	65	5	C	-	0	5	65	
-	<b>ELECTIVE subjects:</b>	-	2	1	-	-	42	91	108	6	E	-	-	-	-	-	-	-	-	-	-	91	6	108	
<b>TOTAL</b>			8	2	4	0	196	406	554	30	4E	0	0	0	15	210	315	480	30	2C	721	60	1034		
			<b>14</b>									<b>15</b>										25.8			
<b>ELECTIVE subjects (choose 1 out of 2):</b>																									
6	Quality management in biotechnology	BS.6.S.DOP.3	2	1	-	-	42	91	108	6	E	-	-	-	-	-	-	-	-	-	-	91	6	108	
7	Microbiome science	BS.7.S.DOP.3	2	1	-	-	42	91	108	6	E	-	-	-	-	-	-	-	-	-	-	91	6	108	
-	<b>DISSERTATION DEFENSE</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	
Legend: L - no. of lecture hours per week; S - no. of seminar hours per week; Lab - no. of practical work/laboratory hours per week; P - no. of project hours per week; Cv. hours - Conventional hours; CR - ECTS credits; I.S. Hours - Individual Study hours; E.F. - evaluation form: E - exam; C - colloquium; P - Project; Specialization Code: SB / Subject order/Formative category of the Subject: A - Advanced (in deep); S - specialty; C - Complementary/semester: 1-4.			Total activity hours / semester:	Total activity hours / semester:	No. of weeks / semester	Teaching hours / week	Teaching hours / semester	I.S. Hours / semester			Total activity hours / semester:	Total activity hours / semester:	No. of weeks / semester	Teaching hours / week	Teaching hours / semester	I.S. Hours / semester									
			750	1.365	14	14	196	554			750	1.524	14	15	210	480									

Approved by the **DEAN,**

Prof. Dipl.Eng. Ioan PEȚ, PhD.

Data: 08/07/2025