EDUCATIONAL INSTITUTION	*Riga Technical University "RTU Olaine Technology College"*
TYPE OF PROGRAM	*1st level professional higher education*
NAME OF THE PROGRAM	***Biotechnology***
QUALIFICATION TO BE OBTAINED	*Biotechnology process specialist, 4th professional qualification level*
PREVIOUS EDUCATION	*Secondary vocational or general secondary education*
SCOPE OF THE PROGRAM	*2,5 years*
ACQUISITION FORM	*Face to face*

ANNEX 9

PLAN OF STUDY PROGRAMME "BIOTECHNOLOGY"

Course title	*Name, surname of responsible teaching staff*	*Credit points*	*Eksams / semester*	*Hours*						*Planning*				
					Contact hours				*Independent works*	*1st course*		*2nd course*		*3rd course*
										1.sem.	2.sem.	3.sem.	4.sem.	5.sem.
				Total	*In total*	*Theory*	*Practical work*	*Laboratory works*		20 *week*	14 \ 6 *week*	20 *week*	20 *week*	20 *week*
1.	2	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
Part A: General educational study courses														
Humanities and social sciences														
Foreign language	Abdelmajid El Hadri	4		160	80	80	0	0	80	2	2			
Basics of psychology	Dace Vilkena	1		40	20	20	0	0	20			1		
Natural sciences, technical sciences and information technologies														
Higher mathematics	Elita Kazakēviča	5	2.	200	100	71	29	0	100	3	2			
Physics	Elita Kazakēviča	3	2.	120	60	40	8	12	60	2	1			
General and inorganic chemistry	Anete Ķeķe	2.5		100	50	36	4	10	50	2.5				
Computer science	Arturs Rasnacis	2		80	40	0	40	0	40	2				
Environmental protection	Ivars Pēkainis	1		40	20	16	4	0	20			1		
Civil protection	Andrejs Kotovs	1		40	20	14	6	0	20				1	
Labor protection	Tatjana Rezņika	1		40	20	20	0	0	20		1			
Part B IN TOTAL:		**20.5**		**820**	**410**	**297**	**91**	**22**	**410**					
Part B: Mandatory and optional study courses of the sector														
An introduction to the biotechnology sector	Jeļena Pisarjonoka	1		40	20	20	0	0	20	1				
Organic chemistry	Māris Utināns	2.5	1.	100	50	21	12	17	50	2.5				
Physical chemistry	Anastasija Jēgermane	2		80	40	32	0	8	40			2		
Instrumental testing methods	Anastasija Jēgermane	4		160	80	44	0	36	80			2	2	
Biochemistry	Jeļena Pisarjonoka	3		120	60	29	0	31	60		3			
Microbiology	Laura Žorža	3	2.	120	60	26	2	32	60	2	1			
Cell biology	Laura Žorža	2	3.	80	40	28	4	8	40			2		
Genetics and DNA technology	Laura Žorža	2	4.	80	40	30	10	0	40				2	
Industrial biotechnology	Jeļena Pisarjonoka	5	3.	200	100	37	10	53	100		2	3		
Food biotechnology	Jeļena Pisarjonoka	2	3.	80	40	19	0	21	40			2		
Environmental biotechnology	Viktors Vibornijs	2	4.	80	40	18	22	0	40				2	
Plant biotechnology	Jeļena Pisarjonoka	1		40	20	10	0	10	20			1		
Bioenergetics	Tatjana Rezņika	1		40	20	20	0	0	20				1	
Quality systems	Tatjana Rezņika	2		80	40	30	10	0	40				2	
Processes and equipment	Tatjana Rezņika	3		120	60	40	16	4	60	1	2			
Engineering graphics	Svetlana Pomozova	2		80	40	4	36	0	40	2				
Technological processes automation	Aleksejs Gedzurs	3		120	60	60	0	0	60			1	2	
Planning of biotechnological experiments	Tatjana Rezņika	1		40	20	9	11	0	20				1	
Medication extraction technology	Iraīda Arvanova	4	4.	160	80	32	32	16	80			2	2	
Business professional competences module	Lāsma Balceraite	6	4.	240	120	60	60	0	120			3	3	
Use of ICT in the biotechnology industry	Anastasija Jēgermane	1		40	20	2	18	0	20				1	
Toxicology	Laura Žorža			40	20	18	2	0	20					
Part B IN TOTAL:		**52.5**		2100	1050	571	243	236	1050					
Part C: Free choices courses														
Business communication	Dace Vilkena	1		40	20	20	0	0	20				1	
Sports	Inese Gibeiko			40	20	0	20	0	20					
Part C IN TOTAL:		**1**												
Practice	Jeļena Pisarjonoka	6		240	0	0	240	0	0		6			
Qualification practice	Jeļena Pisarjonoka	10		400	0	0	400	0	0					10
Qualification work		10		400	0	0	0	0	400					10
IN TOTAL:		**26**		1040	0	0	640	0	400					
IN TOTAL:		**100**		4000	1480	888	974	258	1880	20	20	20	20	20