

Study program: **BIOTa-MgD18 - biotechnology - (Master's II. st., full-time form)**

Study field: **4. - biotechnology**

Study part

Compulsory subjects

Block - Compulsory subjects - 1. year										
The student must obtain 10 credits for the winter semester are required for advancement to the summer semester, 40 credits for advancement to the next year of the study.										
Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KBT/med300/21	Molecular Biology Techniques		3	2P	S	1	Z	P		
KBT/med301/21	Molecular Biotechnology		3	2P	S	1	Z	P		
KBT/med302/21	Laboratory Exercise in Advanced Molecular Biology Techniques		5	6L	S	1	Z	P		
KCH/med303/21	Instrumental Methods for the Analysis of Substances		3	2P	S	1	Z			
KB/med304/21	Fundamentals of Genomics		3	2P + 1S	S	1	Z			
KBT/med305/21	Theory and Methodology of Diploma Thesis		7	8S	S	1	Z			
KBT/med306/21	Industrial Biotechnology		3	2P	S	1	L	P		
KBT/med307/21	Laboratory Exercise in Industrial Biotechnology		5	6L	S	1	L	P		
KBT/med308/21	Pharmaceutical and Medical Biotechnology		3	2P	S	1	L			

KBT/med309/21	Biofuels and Renewable Products		3	2P	S	1	L	P		
KBT/med310/21	Laboratory Exercise for Diploma Thesis I		10	10L	S	1	L	P	KBT/med305/21	

Blok - Compulsory subjects - 2. year										
Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KBT/med325/21	Fundamentals of Bioengineering		3	2P	S	2	Z	P		
KBT/med326/21	Nanobiotechnology		3	2P	S	2	Z			
KBT/med327/21	in vitro Plant Systems		3	2P	S	2	Z	P		
KBT/med328/21	Laboratory Exercise on in vitro Plant Systems		5	5L	S	2	Z	P		
KBT/med329/21	Novel and Functional Foods		3	2P	S	2	Z	P		
KBT/med330/21	Laboratory Exercise for Diploma Thesis II		10	15L	S	2	Z	P	KBT/med310/21	
KBT/med331/21	Diploma Thesis Seminar		3	2S	S	2	L			
KBT/med332/21	Laboratory Exercise for Diploma Thesis III		12	23L	S	2	L	P	KBT/med330/21	
The student must obtain 104 credits with no state exam subjects as a condition of admission from the state exam.										

Compulsory optional subjects

Block - Compulsory optional subjects - 1. year

From the compulsory optional subjects, the student must choose at least two subjects in the winter semester and at least two subjects in the summer semester.

Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KB/med311/21	Clinical Microbiology		3	2P + 1S	S	1	Z			
KB/med312/21	Selected Chapters in Virology		3	2P + 1S	S	1	Z			
KBT/med313/21	Exploitation and Conservation of Biological Resources		3	2P	S	1	Z			
KER/med314/21	Wastewater Treatment Technology		3	2P + 1S	S	1	Z			
KER/med315/21	Radioecology		3	2P + 1S	S	1	Z			
KBT/med316/21	Advanced Biochemistry		3	2P	S	1	Z			
KBF/med317/21	Introduction to Biophysics		3	2P	S	1	L			
KB/med318/21	Proteomics		3	2P	S	1	L			
KB/med319/21	Molecular Biology and Human Genetics		3	2P + 1S	S	1	L			
KB/med320/21	Pharmaceutical Botany		3	2P	S	1	L			
KER/med321/21	Environmental Quality Assessment Methods		3	2P	S	1	L			
KER/med322/21	Environmental Chemistry		3	2P	S	1	L			

Credits earned in both the optional subjects and the compulsory optional subjects are counted towards progression to the summer semester; credits earned in both the optional subjects and the compulsory optional subjects are counted towards progression to the next part of the program of study.

Block - Compulsory optional subjects - 2. year

From the compulsory optional subjects, the student must choose at least two subjects in the winter semester. 2. year

Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KB/med333/21	Mycology		3	2P	S	2	Z			
KER/med334/21	Remediation Technology		3	2P + 1S	S	2	Z			
KER/med335/21	Influences of Stress Factors on Biota		3	3P	S	2	Z			
KER/med336/21	Metal Recycling Biotechnology		3	2P	S	2	Z			
KER/med337/21	Imaging Techniques		3	2P + 1S	S	2	Z			
KCH/med338/21	Forensic Chemistry		3	2P	S	2	Z			
KCH/med339/21	Bioanalytical Chemistry		3	2P + 1S	S	2	Z			

Credits earned in both the optional subjects and the compulsory optional subjects are counted towards progression to the summer semester; credits earned in both the optional subjects and the compulsory optional subjects are counted towards progression to the next part of the program of study.

Optional subjects

Block - Optional subjects - 1. year

The student may or may not choose from the optional subjects.

Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KB/md323/21	Sport Activities I		2	2C	S	1	Z			
KB/md324/21	Sport Activities II		2	2C	S	1	L			

Block - Optional subjects - 2. year

The student may or may not choose from the optional subjects.

Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KB/md340/21	Sport Activities III		2	2C	S	2	Z			
KB/md341/21	Sport Activities IV		2	2C	S	2	L			

State exams

Optional subjects

Block - State examination

The student must obtain 104 credits with no state exam subjects as a condition of admission from the state exam.

Abbreviation	Name	Act.	Credit	Range	Ends.	Year	Sem.	Sign	Prerequisite	Teacher
KBT/med342/21	Diploma Thesis		6		OB					
KBT/med343/21	Stat Exam in Biotechnology		6		SS					

A minimum of 120 credits is required for successful completion of the Master's degree.

There may be additional signs for subjects in study programs

! - the subject is not implemented in the given academic year

+ - the subject is not implemented, possibly from the next academic year

- the subject is being implemented for the last time

Sign of the subject in the study plan:

P - profile subject of the study program