

STUDY CURRICULUM

Field of study: Biotechnology

Course	Number of ECTS credits	Number of hours						asses- ment ³	Department/Institute
		Total (4+5+6+7 +8)	Teaching hours			Contact hours	ESW ²		
			lectures	pract. classes	Others ₁				
1	2	3	4	5	6	7	8	9	10
Semester 1									
Use of microorganisms in biotechnology	4	120	15	30		5	70		Department of General and Environmental Microbiology
Industrial applications of cell and tissue cultures	5	140	15	30	-	5	90		Department of Biotechnology and Food Microbiology Department of Biochemistry and Biotechnology
Application of Biotechnology in Plant Breeding	5	140	15	30	-	5	90		Department of Genetics and Plant Breeding
Bioinformatics	3	90	15	15		5	55		Department of Biochemistry and Biotechnology
Data processing and Experimental Design	4	125	15	30	-	15	65		Department of Mathematical and Statistical methods
Genetic engineering	7	180	15	60		15	90		Department of Biochemistry and Biotechnology
total number of hours – semester 1	28	795	90	195		50	460		
Semester 2									

Biotechnology in chemical industry and energetics	5	180	30	45	-	10	95		Department of Biotechnology and Food Microbiology
Recent advances in biotechnology - Industrial biotechnology	3	79	15	15	-	5	44		Department of Biotechnology and Food Microbiology
Plant Biotechnology	6	190	30	45	-	15	100		Department of Biochemistry and Biotechnology
Recent advances in biotechnology - Animal Biotechnology	3	79	15	15	-	5	44		Department of Genetics and Animal Breeding
Cytogenetics and Chromosome engineering	5	160	30	60		15	55		Department of Genetics and Plant Breeding Department of Genetics and Animal Breeding
Economic and legal aspects of the company's activities	5	75	30	-		2	43		Katedra Prawa i Organizacji Przedsiębiorstw w Agrobiznesie
M. Sc. Seminar I	2	50	-	30	-	4	16		
M.Sc. Laboratory I	5	150	-	-	-	150	-		
total number of hours – semester 2	34	963	150	210		206	397		
Semester 3									
Recent advances in biotechnology - Molecular diagnostics	3	79	15	15	-	5	44		Department of Biochemistry and Biotechnology
M. Sc. Seminar II	4	120	-	30	-	5	85		Department of Biotechnology and Food Microbiology Department of Genetics and Animal Breeding
Gene expression and regulation	4	120	15	15	-	5	85		Department of Biochemistry and Biotechnology
Recent advances in biotechnology - Plant biotechnology	3	79	15	15	-	5	44		Department of Genetics and Plant Breeding

M.Sc. Laboratory II	15	400	-	-	-	250	150		
total number of hours – semester 3	29	798	45	75		270	408		
Semester 4									
M. Sc. Seminar III	4	120	-	30	-	5	85		Department of Biochemistry and Biotechnology
Molecular Diagnostics	6	205	30	30		15	130		Department of Biochemistry and Biotechnology
Genetic Diseases of Domestic Animals	4	100	15	15		10	60		Department of Genetics and Animal Breeding
M.Sc. Laboratory III	15	400	-	-	-	250	150		
total number of hours – semester 4	29	825	45	75		280	425		
total for studies (four semesters)	120	3381	330	555		806	1690		