

Faculty of Agronomy of Bioengineering

STUDY CURRICULUM

Field of study **Agronomy**

Subject	ECTS	Number of hours						Education unit
		Total (4+5+6+7+8)	Classes			Others with teacher	Students own work	
			Lectures	Exercises	Others			
1	2	3	4	5	6	7	8	9
Semester 1								
Plant Management	4	100	15	30		15	40	Department of Agronomy
Data Processing and Experimental Design	4	100	15	30		15	40	Department of Mathematical and Statistical Methods
Sustainable Crop Plants Fertilization	4	100	15	30		15	40	Department of Agricultural Chemistry and Environmental Biogeochemistry
Subject selected by students I	4	100	15	30		15	40	
Subject selected by students I	4	100	15	30		15	40	
Subject selected by students I	4	100	15	30		15	40	
M. Sc. Seminar I	4	95		30		10	55	
Practical training (4 weeks)	6	170				10	160	
Total	34	865	90	210		110	455	
Semester 2								
Biotechnology in Modern Agriculture	4	100	15	30		15	40	Department of Biochemistry and Biotechnology
Plant Breeding	4	100	15	30		5	50	Department of Genetics and Plant Breeding
Instrumental Analysis	4	100	15	30		15	40	Department of Agricultural Chemistry and Environmental Biogeochemistry
Soil Ecology and Chemistry	4	100	15	30			55	Department of Soil Science and Land Protection, Department of Agricultural Chemistry and Environmental Biogeochemistry, Department of Genral and Environmental Microbiology

Subject selected by students II	4	100	15	30		15	40	
Subject selected by students II	4	100	15	30		15	40	
Subject selected by students II	4	100	15	30		15	40	
M. Sc. Seminar II	4	95		30		10	55	
Total	32	795	105	240		90	360	
Semester 3								
Diagnostics of Plant Nutritional Disorders	4	100	15	30		15	40	Department of Agricultural Chemistry and Environmental Biogeochemistry
Integrated Pest Management	4	100	15	30		10	60	Department of Agronomy
Biomass Production and Management	4	100	15	15	15	15	40	Institute of Biosystems Engineering/Department of Agronomy
Subject selected by students III	4	100	15	30		15	40	
Subject selected by students III	4	100	15	30		15	40	
Subject selected by students III	4	100	15	30		15	40	
M. Sc. Seminar III	4	110		30		20	60	
Total	28	710	90	195	15	105	320	
Semester 4								
Crop Protection in Practice	4	100		30		15	55	Department of Agronomy
Subject selected by students IV	4	100	15	30		15	40	
Subject selected by students IV	4	100	15	30		15	40	
M. Sc. Seminar IV	4	95		30		10	55	
Preparing M.Sc. Thesis	10	250				50	200	
Total	26	645	30	120		105	390	
Overall total	120	3015	315	765	15	410	1525	

List of subjects selected by students

Student choose three of five optional subjects in I and II semesters, three of four in III semester and two of five optional subjects in IV semester.

Subject	Semester	Education unit
Environmental Biochemistry	I	Department of Biochemistry and Biotechnology
Protection and Enhance the Productivity of the Soils	I	Department of Soil Science and Land Protection
Technologies in Environmental Protection	I	Institute of Biosystems Engineering
Plant Tissue and Cell Culture	I	Department of Genetics and Plant Breeding
Cytogenetics and Chromosome Engineering	I	Department of Genetics and Plant Breeding
Microbiology of Natural Environments	II	Department of General and Environmental Microbiology
Grassland Management	II	Department of Grassland and Natural Landscape Sciences
Biodiversity of Agricultural Ecosystems	II	Department of Grassland and Natural Landscape Sciences
Molecular Plant Physiology	II	Department of Biochemistry and Biotechnology
Resistance Breeding of Plants	II	Department of Genetics and Plant Breeding
Biofuels	III	Institute of Biosystems Engineering
Nutrient Recycling and Biowastes	III	Department of Agricultural Chemistry and Environmental Biogeochemistry
Sustainable Agriculture on Peatland Ecosystems – Opportunities and Limitations	III	Department of Soil Science and Land Protection
Modern Aspects of Agricultural Microbiology	III	Department of General and Environmental Microbiology
Genetic Engineering	IV	Department of Biochemistry and Biotechnology
Plant Genomics	IV	Department of Biochemistry and Biotechnology
Molecular Plant Breeding	IV	Department of Genetics and Plant Breeding
Tillage Systems	IV	Department of Agronomy
Plant Biotechnology	IV	Department of Biochemistry and Biotechnology