

Biosystems Engineering MSc

The aim of the course is to train qualified professionals with interdisciplinary knowledge in the fields of engineering and agricultural sciences. Students graduating in the field of biosystems engineering will be able to manage agricultural farms, develop and operate technical and/or economic systems processes and manage business projects, and carry out professional management, planning, synthesis research and innovation activities. They will be able to apply their knowledge of data science and information technology to the management of agricultural-mechanical systems. They are prepared to pursue their studies at PhD level.

The Master's degree (MSc) study period in Biosystems Engineering is 3 semesters.

Hungarian University of Agriculture and Life Sciences

Name of the institute: Institute of Technology

Name of the programme: Biosystems Engineering MSc

Leader of the programme: Prof. Dr. László Kátai

Semester	Subject name (Eng)	Instructor	Title	Weekly hours			Semester hours						Credit	Requirement	Subject type	Prerequisite
				Theoretical	Practical	Lab	Theoretical	Practical	Lab	Field practice	Field practice	Cons				
Autumn 1/Spring 1	Agricultural logistics	Magó László	Associate Professor	2	1	0	26	13	0	0	0	0	4	exam	A	
Autumn 1/Spring 1	Applied physics	Seres István	Associate Professor	2	1	0	26	13	0	0	0	0	3	exam	A	
Autumn 1/Spring 1	Energetics and Environmental industry	Schrempf Norbert	Associate Professor	2	1	0	26	13	0	0	0	0	6	exam	A	
Autumn 1/Spring 1	Farm machinery 1.	Bense László	Associate Professor	2	0	1	26	0	13	0	0	0	4	Term mark	A	
Autumn 1/Spring 1	Applied Artificial intelligence	Szabó István	Professor	3	0	0	39	0	0	0	0	0	5	Term mark	A	
Autumn 1/Spring 1	Intelligent facilities	Szabó Márta	Associate Professor	2	1	0	26	13	0	0	0	0	4	Term mark	A	
Autumn 1/Spring 1	Data science and data engineering	Szabó István	Professor	2	1	0	26	13	0	0	0	0	5	Term mark	A	
Autumn 1/Spring 1	Technical language			0	2	0	0	26	0	0	0	0	0	signature	A	
Altogether:				15	7	1	195	91	13	0	0	0	31			
Spring 1/ Autumn 2	Engineering-economic mathematics	Kicsiny Richárd	Associate Professor	3	2	0	39	26	0	0	0	0	6	exam	A	
Spring 1/ Autumn 2	Advanced Engineering Economics	Daróczy Miklós	Associate Professor	2	1	0	26	13	0	0	0	0	4	exam	A	
Spring 1/ Autumn 2	Farm machinery 2.	Bense László	Associate Professor	2	0	1	26	0	13	0	0	0	4	exam	A	
Spring 1/ Autumn 2	Digitalization in agriculture	Szabó István	Professor	1	2	1	13	26	13	0	0	0	4	Term mark	A	
Spring 1/ Autumn 2	Post-harvest processing	Korzenszky Péter Emőd	Associate Professor	2	1	0	26	13	0	0	0	0	5	Term mark	A	
Spring 1/ Autumn 2	Engineering management	Medina Viktor	Associate Professor	2	2	0	26	26	0	0	0	0	4	exam	A	
Spring 1/ Autumn 2	Project Work	Kátai László	Professor	0	2	0	0	26	0	0	0	0	5	Term mark	A	
Altogether:				12	10	2	156	130	26	0	0	0	32			
Aurumn 2/ Spring 2	System technology	Bárfai Zoltán	Associate Professor	2	2	0	26	26	0	0	0	0	4	exam	A	
Aurumn 2/ Spring 2	Optional ("C") Subject			4	0	0	52	0	0	0	0	0	6	Term mark	C	
Aurumn 2/ Spring 2	Diploma thesis preparation practice	Kátai László	Professor	0	0	0	0	0	0	80	20	0	0	signature	A	
Aurumn 2/ Spring 2	Diploma thesis preparation	Kátai László	Professor	0	0	0	0	0	0	0	0	15	15	signature	A	
Aurumn 2/ Spring 2	Technical language			0	2	0	0	26	0	0	0	0	2	Term mark	A	
Altogether:				6	4	0	78	52	0	80	20	15	27			
				33	21	3	429	273	39	80	20	15	90			