

University of Life Sciences "King Michael I" from Timișoara  
 Faculty of Food Engineering

Domain: Food Engineering  
 Study program: JOINT DEGREE - SUSTAINABILITY IN AGRICULTURE, FOOD PRODUCTION AND FOOD TECHNOLOGY IN THE DANUBE REGION

Studies: Master

Full time study

Period of courses: 2 years / 4 semesters

Approved RECTOR,

Prof. dr. ing. Cosmin Alin Popescu  
 on the date of:

28. IUN. 2024



**Curriculum II. Year, 2024/2025**

No	COURSES	Code	I. Semester								II. Semester								Total /year			
			C	S	L	P	Hours CV	ECTS	Hours IS	EF	C	S	L	P	Hours CV	ECTS	Hours IS	EF	Hours CV	ECTS	Hours IS	
<b>Focus Area "Food Safety and Consumer Science"</b>																						
1	New food design and development		2	-	2	-	84	4	-	E	-	-	-	-	-	-	-	-	-	84	4	
2	Advanced techniques in food microbiology		1	-	1	-	42	2	-	E	-	-	-	-	-	-	-	-	-	42	2	
3	Modern techniques in food packaging and labelling		1	-	1	-	42	2	-	E	-	-	-	-	-	-	-	-	-	42	2	
4	Advanced food processing techniques		2	-	2	-	84	4	-	E	-	-	-	-	-	-	-	-	-	84	4	
5	Traditionnal food products		1	-	1	-	42	2	-	E	-	-	-	-	-	-	-	-	-	42	2	
<b>Focus Area "Sustainable rural and regional development and policy"</b>																						
1	Modern farm management		3	2	-	-	112	5	-	E	-	-	-	-	-	-	-	-	-	112	5	
2	Weather derivatives and risk management in agriculture: Theory and applications		3	2	-	-	112	5	-	E	-	-	-	-	-	-	-	-	-	112	5	
1	Regional marketing		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	-	70	3	
2	Environmental risk analysis and management		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	-	70	3	
3	Financial management in agribusiness		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	-	70	3	
4	Project management and projects at agribusiness		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	-	140	6	

5	Strategic management in agribusiness		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
6	Agri-environmental law and policy		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
7	e-marketing for sustainable development		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
8	Food marketing and consumer behaviour		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
9	Investments and investment projects in agribusiness		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
<b>Focus Area "Biodiversity and sustainable use of natural resources"</b>																					
1	Agroecological concepts in sustainable food production		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
2	Constructed wetlands in protection of water resources		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
1	Aquatic ecosystems and biodiversity		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
2	Microbial ecology		4	-	2	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
3	Wildlife Forages		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
4	Natural enemies and principles of biological control		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
5	Molecular methods in microbial agroecology		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
6	Ichthyology		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
7	Limnology and oceanology		4	2	-	-	140	6	-	E	-	-	-	-	-	-	-	-	140	6	
8	Beneficial associations of plants and microorganisms		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
<b>Focus Area "Sustainable Agriculture"</b>																					
1	Agroecological concepts in sustainable food production		3	-	3	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
2	Farm crops drying and storing		3	-	4	-	140	7	-	E	-	-	-	-	-	-	-	-	140	7	
3	Fruit and vegetable postharvest technology		3	-	3	-	126	6	-	E	-	-	-	-	-	-	-	-	-	-	
1	Field crops management		3	-	3	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
2	Livestock production and the environment		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
3	Plant pest management		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
4	Plant ecophysiology		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
5	Rhizosphere ecology		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	

6	Applied entomology		3	-	3	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
7	Yield formation in arable crops		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
<b>Focus Area "Soil, water and climate"</b>																					
1	GIS applications in land consolidation		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
2	Water resources management for sustainable agriculture		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
3	Water resources systems analysis techniques		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
4	Hydroecology		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
5	Soil, water and climate change		1	1	-	-	84	2	-	E	-	-	-	-	-	-	-	-	84	2	
6	Sustainable use of soils		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
1	Agroclimatology and climate change		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
2	Water management in agriculture		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
3	Environmental soil science		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
4	Regulation of Water		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
5	Biogeochemistry of soil metals		2	-	1	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
6	Hydrology and water resources		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
7	Global ecology		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
8	Mineralogy and petrology		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
<b>Focus Area "Sustainable energy systems"</b>																					
1	Energetic utilization of biomass and biofuel in agriculture		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
2	Field crops and bioenergy cropping systems		2	1	-	-	70	3	-	E	-	-	-	-	-	-	-	-	70	3	
3	Waste management in agriculture		3	3	-	-	126	6	-	E	-	-	-	-	-	-	-	-	126	6	
1	Practice		-	-	-	-	-	-	-	-	-	-	7	-	98	15	227	E	98	15	227
2	Research / Internship practice		-	-	-	-	168	5	-	C	-	-	-	-	-	-	-	-	168	5	C
3	Experimental techniques and research		-	-	1	-	21	4	300	C	-	-	-	-	-	-	-	-	21	4	300
4	Dissertation: elaboration (individual shedule)		-	-	-	-	-	-	-	-	-	-	7	-	98	15	227	E	98	15	227

5	Multilinguism and interculturality	1	1	-	-	42	2	-	C	-	-	-	-	-	-	-	-	-	42	2	
6	Intercultural interferences in different learning processes	1	1	-	-	42	2	-	C	-	-	-	-	-	-	-	-	-	42	2	
7	Ethics and academic integrity	1	-	-	-	42	2	36	C	-	-	-	-	-	-	-	-	-	42	2	36
<b>TOTAL</b>		6	2	6	-	406	30	400	3E+3	-	-	14	-	196	30	554	2E+1	602	60	954	
		14							C	14							C				
<b>Note:</b> C - No lesson hours/week; S - No seminar hours / L - No practical seminar hours / week; P - No project hours / week.; Hours CV - conventional hours; Hours IS - hours individual study; EF -		Total no of activities	No hours / week	No weeks / week	Didactical hours / week	Didactical hours / semester	Hours IS / week	Hours IS / semester		Total no of activities	No hours / week	No weeks / week	Didactical hours / week	Didactical hours / semester	Hours IS / week	Hours IS / semester					
		560	40	14	14	196	26	196		560	40	14	14	196	26	196					

Data: 04.06.2024

Advised DEAN,  
 Prof. dr. ing. Călin JIANU

