Wydział Agrobioinżynierii

Kierunek GLOBAL MANAGEMENT IN SMART AGRICULTURE

studia stacjonarne I stopnia

Plan studiów zgodny z UCHWAŁĄ NR 39/2022-2023 Senatu UP w Lublinie

z dnia 28 kwietnia 2023 r. Obowiązuje dla naboru 2025-2026

Lp.	Classes Module	ECTS	Form of credit	Hours in total	Lectures	Auditory Classes	Laboratory Classes	Field Classes	Lecture hours in total	Classes hours in total
	SEMESTR I									
1	Agricultural Botany	5	E	50	15	10	20	5	1	2
2	Zoology	4	Z	45	15	10	20		1	2
3	Chemistry	4	Z	45	15	10	20		1	2
4	Economics	4	E	45	15	30			1	2
5	Information Technology	2	Z	30			30			2
6	Mathematical Decision Support	4	Z	45	15	10	20		1	2
7	Work Safety and Ergonomics	1	Z	10	10				1	
8	Physical Education 1	-	Z	30		30				2
9	Optional Module – block A1	4	Z	45	30	5	10		2	1
10	Optional Module – block A2	2	Z	30	30				2	
	Σ	**30**	**2E**	**375**	**145**	**105**	**120**	**5**	**10**	**15**
	SEMESTR II									
11	Biochemistry	4	E	45	15	10	20		1	2
12	Microbiology	6	E	60	30	10	20		2	2
13	Soil Science	6	E	60	30	10	15	5	2	2
14	Drainage and irrigation of plants	2	Z	30	15	5	5	5	1	1
15	Database Design and Maintenance	2	Z	30	15		15		1	1
16	Foreign Language 1	2	Z	30			30			2
17	Physical Education 2	-	Z	30		30				2
18	Optional Module – block B1	4	Z	45	15		30		1	2
19	Optional Module – block B2	2	Z	30	15	15			1	1
20	Optional Module – block B3	2	Z	30	30				2	

	Σ	**30**	**3E**	**390**	**165**	**80**	**135**	**10**	**11**	**15**
	SEMESTR III									
21	Agricultural Chemistry	6	E	60	30	10	15	5	2	2
22	Basics of Marketing	2	Z	30	30				2	
23	Basics of Mechanical Engineering	6	E	60	30	15	15		2	2
24	Livestock Production Technologies	2	Z	30	15	5	10		1	1
25	Plant Pests	2	Z	30	15	5	10		1	1
26	Phytopathology	2	Z	30	15	5	10		1	1
27	Foreign Language 2	2	Z	30			30			2
28	Optional Module – block C1	4	Z	45	15	10	20		1	2
29	Optional Module – block C2	2	Z	30	15		15		1	1
30	Optional Module – block C3	2	Z	30	15		15		1	1
	Σ	**30**	**2E**	**375**	**180**	**50**	**140**	**5**	**12**	**13**
	SEMESTR IV									
31	Soil and Plant Cultivation	6	E	60	30	10	15	5	2	2
32	Agricultural Automation	6	E	60	30	10	20		2	2
33	Spatial Information Systems in Agriculture	4	Z	45	15	10	20		1	2
34	Foreign Language 3	4	E	45			45			3
35	Optional Module - block D1	2	Z	30	15	15			1	1
36	Optional Module – block D2	4	Z	45	15	10	20		1	2
37	Optional Module – block D3	4	Z	45	15	10	20		1	2
	Σ	**30**	**3E**	**330**	**120**	**65**	**140**	**5**	**8**	**14**
	SEMESTR V									
38	Stationary and Mobile Agrotronic Systems	4	E	45	15	10	20		1	2
39	Intellectual Property Protection	1	Z	15	15				1	
40	Detailed Plant Cultivation 1	6	Z	60	30	10	20		2	2
41	Optional Module – block E1	6	E	60	30	10	20		2	2
42	Optional Module – block E2	2	Z	30	15	15			1	1
43	Optional Module – block E3	2	Z	30	15	15			1	1
44	Optional Module – block E4	2	Z	30	15	15			1	1
45	Optional Module – block E5	4	Z	45	15		30		1	2
46	Optional Module – block E6	1	Z	15	15				1	
47	Optional Module – block E7	2	Z	30	15	15			1	1
	Σ	**30**	**2E**	**360**	**180**	**90**	**90**	**0**	**12**	**12**
	SEMESTR VI									
48	Integrated Construction of Agricultural Vehicles and Machines	4	Z	50	15	10	20	5	1	2
49	Detailed Plant Cultivation 2	6	E	65	30	10	20	5	2	2
50	Grassland Science	6	E	65	30	10	20	5	2	2

51	Optional Module – block F1	4	Z	45	30	15			2	1
52	Optional Module – block F2	2	Z	30	15	15			1	1
53	Optional Module – block F3	2	Z	30	15	15			1	1
54	Diploma Seminar 1 (including methodology of information research 2 hours)	2	Z	30			30			2
55	Professional Training (4 weeks)	4	E	0						
	Σ	**30**	**3E**	**315**	**135**	**75**	**90**	**15**	**9**	**11**
	SEMESTR VII									
56	Precision Agriculture	6	E	60	30	10	15	5	2	2
57	Techniques and Technologies in Plant Protection	4	Z	45	15	10	20		1	2
58	Smart Environment: SmartHome, SmartVillage, SmartCity	6	E	60	30	10	20		2	2
59	Optional Module – block G1	2	Z	30	15	15			1	1
60	Optional Module – block G2	2	Z	30	15	15			1	1
61	Diploma Seminar 2	2	Z	30			30			2
62	Engineering Project and Diploma Exam	8	E	0						
	Σ	**30**	**3E**	**255**	**105**	**60**	**85**	**5**	**7**	**10**
	Total in semesters I - VII	**210**	**18**	**2400**	**1030**	**525**	**800**	**45**		
	Percentage Share				42,9	21,9	33,3	1,9		
	Share of auditorium practicals in total [%]					38,3				

Optinal modules

Lp.	Classes module	ECTS	Forms of credit	Hours in total	Lectures	Auditory classes	Laboratory classes	Field classes	Lecture hours a week	Class hours a week
	term I - UNIT A1									
9_1	Agrometeorology	**4**	Z	45	30	5	10		2	1
9_2	Climatology and Meteorology	**4**	Z	45	30	5	10		2	1
	term I - UNIT A2									
10_1	Sociology	**2**	Z	30	30				2	
10_2	Social Communication	**2**	Z	30	30				2	
	term II -UNIT B1									
18_1	Engineering Design	**4**	Z	45	15		30		1	2

18_2	Computer Aided Design	**4**	Z	45	15		30		1	2
	term II - UNIT B2									
19_1	International Economic Relations	**2**	Z	30	15	15			1	1
19_2	Economy of European Integration	**2**	Z	30	15	15			1	1
	term II - UNIT B3									
20_1	Global Trends and Demographic Processes	**2**	Z	30	30				2	
20_2	Social Responsibility for the Nature	**2**	Z	30	30				2	

	term III - UNIT C1									
28_1	Microbiological Hazards in Agriculture	**4**	Z	45	15	10	20		1	2
28_2	Bioengineering of Microorganisms	**4**	Z	45	15	10	20		1	2
	term III- UNIT C2									
29_1	Programming of Mobile Devices	**2**	Z	30	15		15		1	1
29_2	Programming in Python	**2**	Z	30	15		15		1	1
	term III- UNIT C3									
30_1	Web Application Development	**2**	Z	30	15		15		1	1
30_2	Objective-C Programming	**2**	Z	30	15		15		1	1
	term IV- UNIT D1									
35_1	Agricultural Accounting	**2**	Z	30	15	15			1	1
35_2	Agricultural Economics	**2**	Z	30	15	15			1	1
	term IV- UNIT D2									
36_1	Environmental Protection	**4**	Z	45	15	10	20		1	2
36_2	Biodiversity Conservation	**4**	Z	45	15	10	20		1	2
	term IV - UNIT D3									
37_1	Reclamation of Degraded Areas	**4**	Z	45	15	10	20		1	2
37_2	Circular Economy	**4**	Z	45	15	10	20		1	2
	term V - UNIT E1									
41_1	Genetics, Plant Breeding and Seed Production Science	**6**	E	60	30	10	20		2	2
41_2	Plant Biotechnology	**6**	E	60	30	10	20		2	2
	term V -UNIT E2									
42_1	Agriculture and Environment	**2**	Z	30	15	15			1	1
42_2	Good Agricultural Practices	**2**	Z	30	15	15			1	1
	term V - UNIT E3									
43_1	Taxes in Agriculture	**2**	Z	30	15	15			1	1
43_2	Economy of Sustainable Development	**2**	Z	30	15	15			1	1
	semestr V - BLOK E4									
44_1	International Marketing	**2**	Z	30	15	15			1	1
44_2	Management in International Business	**2**	Z	30	15	15			1	1
	term V - UNIT E5									

45_1	Remote Sensing in Smart Agriculture	**4**	Z	45	15		30		1	2
45_2	Data Acquisition Systems for Agriculture	**4**	Z	45	15		30		1	2
	term V - UNIT E6									
46_1	Home Gardens	**1**	Z	15	15				1	
46_2	Management and Development of Forests and Open Areas	**1**	Z	15	15				1	
	term V - UNIT E7									
47_1	Recycling of Engineering Materials	**2**	Z	30	15	15			1	1
47_2	Natural Use of Waste	**2**	Z	30	15	15			1	1
	term VI - UNIT F1									
51_1	Food Quality Management	**4**	Z	45	30	15			2	1
51_2	Quality Assurance Systems in Agriculture	**4**	Z	45	30	15			2	1
	term VI - UNIT F2									
52_1	International Trade	**2**	Z	30	15	15			1	1
52_2	Globalisation in Agriculture	**2**	Z	30	15	15			1	1
	term VI - UNIT F3									
53_1	Climate Changes and Global Warming	**2**	Z	30	15	15			1	1
53_2	Hydrology and Water Management	**2**	Z	30	15	15			1	1
	term VII - UNIT G1									
59_1	Innovations in Agriculture	**2**	Z	30	15	15			1	1
59_2	Digitization of Agriculture	**2**	Z	30	15	15			1	1
	term VII - UNIT G2									
60_1	Financial Analysis in Agro-enterprise	**2**	Z	30	15	15			1	1
60_2	Financial Management	**2**	Z	30	15	15			1	1