

CURRICULUM – 1th YEAR 2024-2025

UNIVERSITY	<i>George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş</i>	PROGRAMME OF STUDY	Industrial processes automation control systems
FACULTY	<i>Faculty of Engineering and Information Technologies</i>	TITLE AWARDED	Master degree
FIELD OF STUDY	<i>Systems Engineering</i>	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	2 years
LEVEL OF QUALIFICATION	7	NUMBER OF ECTS/SECT CREDITS	120 + 10 Preparation of the Disertation Paper

No.	Educational activities Courses	Code/ Type Of courses	1st semester								2nd semester								Total academic year			
			1st module (7 weeks)				2nd module(7 weeks)				3rd module (7 weeks)				4th module (7 weeks)							
			Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	Indiv. stud.	ECTS
1.	Designing systems for monitoring processes	SAC101/DS	2	4 _L	4	E												14	28	58	4	
2.	FPGA Structures	SAC102/DS	4	4 _L	6	E												28	28	94	6	
3.	Industrial Advanced Processes Control	SAC103/DA					4	4 _L	6	E								28	28	94	6	
4.	Image Processing in industrial systems	SAC104/DS					2	4 _L	4	E								14	28	58	4	
5.	Professional practice I	SAC105/DS	-	12	-	-	0	12	10	C								0	168	82	10	
6.	Robust control systems	SAC106/DA									4	4 _{LP}	5	E				28	28	69	5	
7.	Instrumentation for control systems	SAC107/DA									4	2 _L	4	E				28	14	58	4	
8.	Ethics and academic integrity	SAC108/DS									2	-	3	E				14	0	61	3	
9.	Intelligent and adaptive process control	SAC109/DA													4	4 _L	5	E	28	28	69	5
10.	Critical Infrastructures in Automation Systems	SAC110/DS													4	2 _L	3	C	28	14	33	3
11.	Professional practice II	SAC111/DS									-	10	-	-	-	12	10	C	0	154	96	10
GENERAL TOTAL		11 Compulsory;	6	8+12	10	2E	6	8+12	20	2E;1C	10	6+10	12	3E	8	6+12	18	1E; 2C	210	518	772	60
TOTAL HOURS/ECTS			AI 14 + AP 12 hours/week; 30 ECTS								AI 15 + AP 11 hours/week; 30 ECTS								728			

CURRICULUM – 2th YEAR 2024-2025

UNIVERSITY	<i>George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș</i>	PROGRAMME OF STUDY	Industrial processes automation control systems
FACULTY	<i>Faculty of Engineering and Information Technologies</i>	TITLE AWARDED	Master degree
FIELD OF STUDY	<i>Systems Engineering</i>	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	2 years
LEVEL OF QUALIFICATION	7	NUMBER OF ECTS/SECT CREDITS	120 + 10 Preparation of the Disertation Paper

No.	Educational activities Courses	Code/ Type Of courses	1st semester								2nd semester								Total academic year			
			1st module(7 weeks)				2nd module (7 weeks)				3rd module(7 weeks)				4th module (7 weeks)							
			Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	ECTS	Verif. form	Curs	SLP	Indiv. stud.	ECTS
1.	Processes Control information systems	SAC201/DA	4	2 _L	4	E												28	14	58	4	
2.	Embedded systems	SAC202/DS	4	4 _L	6	E												28	28	94	6	
3.	Automation of cogeneration systems	SAC203/DS					4	4 _L	5	E								28	28	69	5	
4.	Professional training III	SAC204/DS	-	12			-	12	10	C								0	168	82	10	
5.	Advanced Scientific Research leading to the Dissertation	SAC205/DS									4	2 _S	5	C				28	14	83	5	
6.	Practice for the Dissertation Paper	SAC206/DS									-	10	-	-	-	13	12	C	0	161	139	12
7.	Preparation of the Disertation Paper	SAC207/DS									-	10	-	-	-	13	13	C	0	161	164	13
8.	Systems and platforms in the Internet of Things	SAC208/DA					2	4 _L	5	E								14	28	83	5	
GENERAL TOTAL		6 Compulsory; 2 optional	8	6+12	10	2E	6	8+12	20	2E;1C	4	2+20	5	1C	0	26	25	2C	126	602	772	60
TOTAL HOURS/ECTS			AI 14+AP 12 hours/week; 30 ECTS								AI 3+AP 23 hours/week; 30 ECTS								728			