

**CURRICULUM -1st YEAR
2024-2025**

UNIVERSITY	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş	PROGRAMME OF STUDY	INDUSTRIAL ECONOMIC ENGINEERING
FACULTY	Faculty of Engineering and Information Technologies	TITLE AWARDED	Graduate engineer
FIELD OF STUDY	Management of engineering	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities Courses	Code/Type of courses	1st semester														2nd semester														Total academic year								
			1st module (hours/week)							2nd module (hours/week)							3rd module (hours/week)							4th module (hours/week)															
			Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form									
			C	S,L,P,Stg	Indiv. Std	ECTS																																	
	Compulsory courses																																						
1	Mathematical analysis	IEI101	DF	4	4			5	E																														
2	Applied Informatics	IEI102	DF	4		4		3	C																														
3	Materials science and engineering	IEI103	DD	4		2		5	E																														
4	English Language 1	IEI104	DC		4			2	C																														
5	Chemistry	IEI105	DF							4		2			5	E																							
6	Descriptive Geometry	IEI106	DF							4	2				3	C																							
7	Numerical Methods	IEI107	DF							2	4				4	E																							
8	Economics Basics	IEI108	DF							4	2				3	E																							
9	Physical Education I	IEI109	DC									2			1	A/R																							
10	Linear algebra, analytical and differential geome	IEI110	DF														4	4				4	E																
11	Technical drawing and infographics I	IEI111	DF														4	6				5	C																
12	Physics	IEI112	DF														4	2	2			5	E																
13	Physical Education II	IEI113	DC																2			1	A/R																
14	Technology of Materials (1)	IEI114	DD																					4		4				5	E	28	28	69	5				
15	Computer programming and programming langu	IEI115	DF																					4	2					4	C	28	14	58	4				
16	Mechanics (1)	IEI116	DD																					4	2	2				5	C	28	28	69	5				
17	English Language 2	IEI117	DC																						4					2	C	0	28	22	2				
TOTAL		10DF, 4DC, 3DD		12	8	6	0	0		15	2E/ 2C	14	8	4	0	0		16	3E/ 2C	12	12	4	0	60		15	2E/ 2C	12	8	6	0	0		16	1E/ 3C	350	392	808	62
TOTAL HOURS/ECTS				26						26						88						26						742											

Formative categories **Activities**
DF Foundamental Course **c** Courses
DD Technical Course **s** Seminars
DS Specialized Course **lp** Practical exercises
DC Complementary Cours **p** Project

CURRICULUM - 2nd YEAR
2024-2025

UNIVERSITY	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș	PROGRAMME OF STUDY	INDUSTRIAL ECONOMIC ENGINEERING
FACULTY	Faculty of Engineering and Information Technologies	TITLE AWARDED	Graduate engineer
FIELD OF STUDY	Management of engineering	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities Courses	Code/Type of courses		1st semester														2nd semester														Total academic year								
				1st module (hours/week)							2nd module (hours/week)							3rd module (hours/week)							4th module (hours/week)															
				Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form									
				C	S,L,P,Stg	Indiv. Std	ECTS																																	
	Compulsory courses																																							
1	Technical drawing and infographics II	IEI201	DF	2	4				4	C																								14	28	58	4			
2	Processing technology	IEI202	DS	4		2			4	E																								28	14	58	4			
3	Machine mechanisms and elements I	IEI203	DD	4		4			4	E																								28	28	44	4			
4	Strength of Materials (1)	IEI204	DD								4	4	2			5	E																	28	42	55	5			
5	English Language 3	IEI205	DC									4				2	C																	0	28	22	2			
6	Physical Education III	IEI206	DC										2			1	A/R																	0	14	11	1			
7	Management Basics	IEI207	DD								4	2				4	E																	28	14	58	4			
8	Computer Aided Design	IEI208	DS															2		4			4	C										14	28	58	4			
9	Logistic management	IEI209	DD															4	4				4	E										28	28	44	4			
10	Technical Communcation (English Language)	IEI210	DC																2				1	C										0	14	11	1			
11	Tolerances and Dimensional Control	IEI211	DD															4		4			4	E										28	28	44	4			
12	Physical Education IV	IEI212	DC																	2			1	A/R										0	14	11	1			
13	Ethics and academic integrity	IEI213	DC																						2						1	C	14	0	11	1				
14	Machine mechanisms and elements II	IEI214	DD																						6		2	2		5	E	42	28	55	5					
15	Practical training	IEI215	DD	90																														4	C	0	90	10	4	
	Optional courses																																	0	0	0	0			
16	Thermotechnics and thermal equipment	IEI216/ IEI217	DD	4		2			4	E																								28	14	58	4			
17	Electronics and Automation	IEI218/ IEI219	DD								2		2			3	E																	14	14	47	3			
18	Marketing	IEI220/ IEI221	DD																						4	2		2		4	E	28	28	44	4					
19	Fluid Mechanics and Hydraulic Machines	IEI222/ IEI223	DD																						4		2			3	E	28	14	33	3					
TOTAL		1DF, 5DC, 11DD,		14	4	8	0	0			16	3E/ 1C	10	10	6	0	0		15	3E/ 2C	10	6	10	0	60		14	2E/ 3C	16	2	4	4	0		17	2E/ 3C	350	468		
TOTAL HOURS/ECTS		2DS		26									26								86								26								818		732	62

Formative categories
DF Foundamental Course
DD Technical Course
DS Specialized Course
DC Complementary Course

Activities
c Courses
s Seminars
lp Practical exercises
p Project

CURRICULUM- 3rd YEAR

2024-2025

UNIVERSITY	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş	PROGRAMME OF STUDY	INDUSTRIAL ECONOMIC ENGINEERING
FACULTY	Faculty of Engineering and Information Technologies	TITLE AWARDED	Graduate engineer
FIELD OF STUDY	Management of engineering	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities Courses	Code/Type of courses		1st semester														2nd semester														Total academic year						
				1st module (hours/week)						2nd module (hours/week)								3rd module (hours/week)							4th module (hours/week)													
				Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	C	S,L,P,Stg	Indiv. Std	ECTS			
	Compulsory courses																																					
1	Manufacturing equipment I	IEI301	DS	4		4		4	E																					28	28	44	4					
2	Accounting	IEI302	DD	4	2		2	4	E																					28	28	44	4					
3	Production systems modelling and simulation	IEI303	DD	4	4			4	E																					28	28	44	4					
4	Project.Production systems modelling and	IEI304	DD				2		1	C																				0	14	11	1					
5	Fundamentals of Systems engineering	IEI305	DS							4	2				5	E														28	14	83	5					
6	Human Resources Management	IEI306	DD							4	2				4	C														28	14	58	4					
7	Manufacturing technologies I	IEI307	DS							4		4			4	C														28	28	44	4					
8	European legislation and management	IEI308	DS														2	4				3	C							14	28	33	3					
9	Electronics and Automation	IEI309	DD														4		2			3	E							28	14	33	3					
10	Technological devices I	IEI310	DD														4		2			3	E							28	14	33	3					
11	Engineering of Production Systems	IEI311	DS																					4	4			4	E	28	28	44	4					
12	Manufacturing equipment II	IEI312	DS																				4		4			4	E	28	28	44	4					
13	Investment projects analysis	IEI313	DS																				4	4		2		5	C	28	42	55	5					
14	On-site training	IEI314	DS	90																								4	C	0	90	10	4					
	Optional courses																													0	0	0	0					
15	Economic Statistics	IEI315/ IEI316	DD							4	2				4	C														28	14	58	4					
16	Manufacturing technologies II	IEI317/ IEI318	DD														4		2	2		4	E							28	28	44	4					
TOTAL		8 DD, 8DS		12	6	4	4	0	13	3E/ 1C	16	6	4	0	0	17	1E/ 3C	14	4	6	2	0	13	3E/ 1C	12	8	4	2	0	17	2E/ 2C	378	440					
TOTAL HOURS/ECTS				26					13		26					17		26					13		26					17		818					682	60

Formative categories
 DF Foundamental Course
 DD Technical Course
 DS Specialized Course
 DC Complementary Course

Activities
 c Courses
 s Seminars
 lp Practical exercises
 p Project

CURRICULUM -4th YEAR
2024-2025

UNIVERSITY	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş	PROGRAMME OF STUDY	INDUSTRIAL ECONOMIC ENGINEERING
FACULTY	Faculty of Engineering and Information Technologies	TITLE AWARDED	Graduate engineer
FIELD OF STUDY	Management of engineering	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities Courses	Code/Type of courses		1st semester														2nd semester														Total academic year					
				1st module (hours/week)							2nd module (hours/week)							3rd module (hours/week)							4th module (hours/week)												
				Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form	Cours	Sem	Lp	Pr	Stg	ECTS	Verif form						
				C	S,L,P,Stg	Indiv.Std	ECTS																														
	Compulsory courses																																				
1	Sustainable development management	IEI401	DS	4	4			4	E																						28	28	44	4			
2	Managerial Communication	IEI402	DD	2	2			2	C																						14	14	22	2			
3	Diagnosis and evaluation of production	IEI403	DS	4	4			5	E																						28	28	69	5			
4	Bases of Mechatronic Systems	IEI404	DS	4		2		4	C																						28	14	58	4			
5	Proiect. Managementul dezvoltarii durabile	IEI405	DS										2		1	C															0	14	11	1			
6	Project.Diagnosis and evaluation of production	IEI406	DS										4		2	C															0	28	22	2			
7	Quality Management	IEI407	DD							4	4				4	E															28	28	44	4			
8	Industrial Design	IEI408	DD							4	2				4	E															28	14	58	4			
9	Information systems in management	IEI409	DD							2	4				4	E															14	28	58	4			
10	Enterprise Economy	IEI410	DS														4	4				3	E								28	28	19	3			
11	SME management	IEI411	DS														4	2				3	C								28	14	33	3			
13	Supply management	IEI413	DS														4	2		2		4	C								28	28	44	4			
12	Production management	IEI412	DD																					4			2		4	C	28	14	58	4			
14	Diploma project practical training	IEI414	DS																								70	4	C	0	70	30	4				
15	Diploma project drafting	IEI415	DS																4							4		4	C	0	56	44	4				
	Optional courses																														0	0	0	0			
16	Labour Law	IEI416/ IEI417	DD																					4	4				4	E	28	28	44	4			
17	Optimization of manufacturing processes	IEI418/ IEI419	DS																				4	2	2			4	E	28	28	44	4				
TOTAL		6 DD, 11DS		14	10	2	0	0	15	2E /2C	10	10	0	6	0	15	3E/ 2C	12	8	0	6	0	10	1E/ 2C	12	6	2	6	0	20	2E/ 3C	336	462	702	60		
TOTAL HOURS/ECTS				26					15	26					15	26					10	26					20	26					20	798		702	60

Formative categories **Activities**
DF Fundamental Course **c** Courses
DD Technical Course **s** Seminars
DS Specialized Course **lp** Practical exercises
DC Complementary Course **p** Project