

CURRICULUM – 1st YEAR

2024-2025

UNIVERSITY	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș	PROGRAMME OF STUDY	INFORMATICS
FACULTY	Faculty of Engineering and Information Technologies	TITLE AWARDED	INFORMATICS/BACHELOR IN COMPUTER SCIENCES
FIELD OF STUDY	INFORMATICS	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	3 years
LEVEL OF QUALIFICATION	6	NUMBER OF ECTS/SECT CREDITS	180

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)							
			Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	Indiv. stud.	ECTS
1.	Programming fundamentals	INFLR101/ DF	6	6L	8	E													42	42	116	8
2.	Fundamental algorithms	INFLR102/ DF	4	4L	6	E													28	28	94	6
3.	Physical education 1	INFLR103/ DC	-	2L	1	A/R													-	14	11	1
4.	English Language 1	INFLR104/ DC					-	4S	3	C									-	28	47	3
5.	Mathematical analysis	INFLR105/ DC					6	4S	7	E									42	28	105	7
6.	Computer architecture	INFLR106/ DF					4	4L	6	E									28	28	94	6
7.	Databases	INFLR107/ DS									4	4L	6	E					28	28	94	6
8.	Advanced programming methods	INFLR108/ DS									6	6L	8	E					42	42	116	8
9.	English Language 2	INFLR108/ DS									-	4S	3	C					-	28	47	3
10.	Structuri de date	INFLR110/ DF													4	4L	6	E	28	28	94	6
11.	Linear algebra, analytical and differential geometry	INFLR111/ DC													6	4S	7	E	42	28	105	7
12.	Physical education 2	INFLR112/ DC													-	2L	1	A/R		14	11	1
GENERAL TOTAL		12 compulsory	10	12	15	2E,A/R	10	12	16	2E,C	10	14	17	2E,C	10	10	14	2E,A/R	280	336	934	62
TOTAL HOURS/ECTS			22hours/week; 31 ECTS								22hours/week; 31 ECTS								616			

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

CURRICULUM –2nd YEAR

2024-2025

UNIVERSITY	<i>George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mures</i>	PROGRAMME OF STUDY	INFORMATICS
FACULTY	<i>Faculty of Engineering and Information Technologies</i>	TITLE AWARDED	INFORMATICS/BACHELOR IN COMPUTER SCIENCES
FIELD OF STUDY	INFORMATICS	OFFICIAL LENGHT OF THE PROGRAMME OF STUDY	3 years
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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)							
			Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	Indiv. stud.	ECTS
1.	Object oriented programming	INFLR201/ DF	6	6L	7	E													42	42	91	7
2.	Graph algorithm	INFLR202/ DF	4	4L	5	E													28	28	69	5
3.	English Language 3	INFLR203/ DC	-	2S	1	C														14	11	1
4.	Operating systems	INFLR204/ DF					6	4L	6	E									42	28	80	6
5.	Advanced programming techniques	INFLR205/ DS					4	4L	6	E									28	28	94	6
6.	Programming environments and instruments *	INFLR206/DS					4	4L	5	E									28	28	69	5
7.	Numerical calculus	INFLR207/DS									4	4L	5	E					28	28	69	5
8.	Mathematical and computational logic	INFLR208/ DF									4	2S	4	E					28	14	58	4
9.	Development of mobile applications *	INFLR209/DS									4	6LP	5	E					28	42	55	5
10.	English Language 4	INFLR210/ DC														2S	1	C		14	11	1
11.	Differential equations and with partial derivatives	INFLR211/ DC													4	4S	5	E	28	28	69	5
12.	Computer networks	INFLR212/ DF													4	4L	5	E	28	28	69	5
13.	Physical education 3	INFLR213/DC													-	2L	1	A/R	-	14	11	1
14.	On-site Training	INFLR214/DS														4x30P	5	C		120	5	5
		12 compulsory+ 2 optional	10	12	13	2E,C	14	12	17	3E	12	12	14	3E	8	12	17	2E,2C, A/R	308	456	761	61
TOTAL HOURS/ECTS			23 hours/week; 30 ECTS								22hours/week; 31 ECTS								764			

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

CURRICULUM 3rd YEAR 2024-2025

UNIVERSITY	<i>George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș</i>	PROGRAMME OF STUDY	INFORMATICS
FACULTY	<i>Faculty of Engineering and Information Technologies</i>	TITLE AWARDED	INFORMATICS/BACHELOR IN COMPUTER SCIENCES
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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)							
			Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form	Cours	SLP	ECTS	Verif. form
1.	Artificial intelligence	INFLR301/DF	6	6LP	8	E									42	42	116	8
2.	Probability and Statistics	INFLR302/ DF	4	6LS	6	E									28	42	80	6
3.	Computer graphics	INFLR303/DS					4	4S/4L	5	E					28	28	69	5
4.	Criptography	INFLR304/DS					4	4L	5	E					28	28	69	5
5.	Development of WEB applications	INFLR305/DS					4	4L	6	E					28	28	94	6
6.	Databases management systems	INFLR306/DS									2	2L	5	E	20	20	85	5
7.	Formal Languages and Compilers	INFLR307/DF									3	2L	6	E	30	20	100	6
8.	Software Engineering	INFLR308/DF									2	2L/2S	5	E	20	20	85	5
9.	Information systems security	INFLR309/DF									3	3L	7	C	30	30	115	7
10.	Scientific and professional writing and communication	INFLR310/DF									2	1	3	C	20	10	45	3
11.	Preparation of the graduation paper	INFLR311/DS										4x25	4	C		100		4
		6compulsory+ 5 optional	10	12	14	2E	12	12	16	3E	12	10	30	3E,3C	274	368	858	60
TOTAL HOURS/ECTS			23 hours/week; 30 ECTS								22 hours/week;30 ECTS				642			

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

Opționale selectate:

AN II

Disciplină opțională - Pachet 1 INF INFLR206/ DS

Medii și instrumente de programare

Disciplină opțională - Pachet 2 INF INFLR209/ DS **Dezvoltarea aplicațiilor mobile**

AN III

Disciplină opțională - Pachet 3 INF INFLR301/DF **Inteligență artificială**

Disciplină opțională - Pachet 4 INF INFLR303/ DS **Grafică pe calculator**

Disciplină opțională - Pachet 5 INF INFLR308/ DS **Inginerie software**

Disciplină opțională - Pachet 6 INF INFLR309/DF **Securitatea sistemelor informatice**

Disciplină opțională - Pachet 7 INF INFLR310/DC **Redactare și comunicare științifică și profesională**