

COURSE CODE AND TITLE		Year: I										Method of Assessment				Nr. Of Hours/Discipline				ECTS/Sem		Discipline	
		SEM 1 14 weeks					SEM 2 14 weeks																
		C	S	L	P	PR	C	S	L	P	PR	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type	
1.00	Mathematical Analysis	2	1	0	0	0							Gr		100	28	14	58	4.0		DF	DOB	
2.00	Physics I	2	1	1	0	0							Gr		100	28	28	44	4.0		DF	DOB	
3.00	Chemistry I	2	0	2	0	0							Gr		100	28	28	44	4.0		DF	DOB	
4.00	Descriptive Geometry	1	0	2	0	0							Gr		100	14	28	58	4.0		DF	DOB	
5.00	Computer Programming and Programming Languages	1	0	2	0	0							Gr		100	14	28	58	4.0		DF	DOB	
6.00	Materials Science and Engineering I	2	0	2	0	0							Gr		100	28	28	44	4.0		DF	DOB	
7.00	Communication	1	1	0	0	0							Gr		50	14	14	22	2.0		DC	DOB	
8.00	Physical Education and Sport 1	0	1	0	0	0							A/R		50	0	14	36	2.0		DC	DOB	
9.10	Modern Languages I English	0	2	0	0	0							Gr		50	0	28	22	2.0		DC	DOP	
9.20	Modern Languages I French	0	2	0	0	0							Gr		50	0	28	22	2.0		DC	DOP	
9.30	Modern Languages I German	0	2	0	0	0							Gr		50	0	28	22	2.0		DC	DOP	
10.00	Linear Algebra, Analytical and Differential Geometry						2	1	0	0	0		Gr		100	28	14	58	4.0		DF	DOB	
11.00	Physics II						2	1	1	0	0		Gr		100	28	28	44	4.0		DF	DOB	
12.00	Materials Science and Engineering II						2	1	2	0	0		Gr		125	28	42	55	5.0		DF	DOB	
13.00	Technical Drawing and Infographics						1	0	3	0	0		Gr		100	14	42	44	4.0		DF	DOB	
14.00	Crystallography and Mineralogy						2	0	1	0	0		Gr		125	28	14	83	5.0		DF	DOB	
15.00	Chemistry II						2	0	1	0	0		Gr		100	28	14	58	4.0		DF	DOB	
16.00	Physical Education and Sport 2						0	2	0	0	0		A/R		50	0	28	22	2.0		DC	DOB	
17.10	Modern Languages II English						0	2	0	0	0		Gr		50	0	28	22	2.0		DC	DOP	
17.20	Modern Languages II French						0	2	0	0	0		Gr		50	0	28	22	2.0		DC	DOP	
17.30	Modern Languages II German						0	2	0	0	0		Gr		50	0	28	22	2.0		DC	DOP	
TOTAL PER YEAR		11	6	9	0	0	11	7	8	0	0	sem1	5	3	1	1500	308	420	772	30.0	30.0		
					26.0					26.0		sem2	6	1	1								

100.00	Modern Languages 1	0	2	0	0	0						Gr				50	0	28	22	2.0		DC	DFA
200.00	Educational Psychology	2	2	0	0	0						Gr				125	28	28	69	5.0		DC	DFA
300.00	Volunteering 1	0	1	0	0	0						A/R				50	0	14	36	2.0		DC	DFA
102.00	Modern Languages 2						0	2	0	0	0	Gr				50	0	28	22	2.0		DC	DFA
201.00	Pedagogy I (Fundamentals of Pedagogy)						2	2	0	0	0	Gr				125	28	28	69	5.0		DC	DFA
301.00	Volunteering 2						0	1	0	0	0	A/R				50	0	14	36	2.0		DC	DFA
TOTAL PER YEAR		2	5	0	0	0	2	5	0	0	0	sem1	1	1	1	450	56	140	254	9.0	9.0		
					7.0					7.0		sem2	1	1	1								

COURSE CODE AND TITLE		Year: II										Method of Assessment				Nr. Of Hours/Discipline				ECTS/Sem		Discipline	
		SEM 1 14 weeks					SEM 2 14 weeks																
		C	S	L	P	PR	C	S	L	P	PR	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type	
18.00	Analysis techniques and characterization of materials	2	0	2	0	0						Gr		125	28	28	69	5.0		DF	DOB		
19.00	Mechanics	2	0	1	0	0						Gr		100	28	14	58	4.0		DF	DOB		
20.00	Materials Technology I	2	1	2	0	0						Gr		125	28	42	55	5.0		DF	DOB		
21.00	Physical Chemistry	2	0	1	0	0						Gr		100	28	14	58	4.0		DF	DOB		
22.00	Material Strength	2	1	1	0	0						Gr		100	28	28	44	4.0		DF	DOB		
23.00	Electrotechnics	2	0	1	0	0						Gr		75	28	14	33	3.0		DF	DOB		
24.10	Measurement Techniques and Data Acquisition	2	0	2	0	0						Gr		75	28	28	19	3.0		DF	DOP		
24.20	Basics of Experimental Research	2	0	2	0	0						Gr		75	28	28	19	3.0		DF	DOP		
25.10	Modern Languages III English	0	2	0	0	0						Gr		50	0	28	22	2.0		DC	DOP		
25.20	Modern Languages III French	0	2	0	0	0						Gr		50	0	28	22	2.0		DC	DOP		
25.30	Modern Languages III German	0	2	0	0	0						Gr		50	0	28	22	2.0		DC	DOP		
26.00	Thermotechnics						2	0	1	0	0	Gr		75	28	14	33	3.0		DF	DOB		
27.00	Materials Technology II						2	0	2	0	0	Gr		100	28	28	44	4.0		DF	DOB		
28.00	Materials Properties						2	0	2	0	0	Gr		100	28	28	44	4.0		DF	DOB		
29.00	Applied Informatics I						1	0	2	0	0	Gr		75	14	28	33	3.0		DF	DOB		
30.00	Fluid Mechanics						2	0	1	0	0	Gr		75	28	14	33	3.0		DF	DOB		
31.00	Physical Metallurgy						2	1	2	0	0	Gr		125	28	42	55	5.0		DF	DOB		
32.00	Practical Work in the Domain of Study						0	0	0	0	30	Gr		100	0	90	10	4.0		DF	DOB		
33.10	Special Mathematics						1	0	1	0	0	Gr		50	14	14	22	2.0		DF	DOP		
33.20	Numerical Methods						1	0	1	0	0	Gr		50	14	14	22	2.0		DF	DOP		
34.10	Modern Languages IV English						0	2	0	0	0	Gr		50	0	28	22	2.0		DC	DOP		
34.20	Modern Languages IV French						0	2	0	0	0	Gr		50	0	28	22	2.0		DC	DOP		
34.30	Modern Languages IV German						0	2	0	0	0	Gr		50	0	28	22	2.0		DC	DOP		
TOTAL PER YEAR		14	4	10	0	0	12	3	11	0	30	sem1	6	2	0	1500	364	482	654	30.0	30.0		
					28.0					26.0		sem2	5	3	1								

103.00	Modern Languages 3	0	2	0	0	0				Gr	50	0	28	22	2.0		DC	DFA					
202.00	Pedagogy 2 (Instruction Theory and Methodology, Assessment Theory and Methodology)	2	2	0	0	0				Gr	125	28	28	69	5.0		DC	DFA					
302.00	Volunteering 3	0	1	0	0	0				A/R	50	0	14	36	2.0		DC	DFA					
104.00	Modern Languages 4						0	2	0	0	0			Gr	50	0	28	22	2.0		DC	DFA	
203.00	Didactics of the Specialization						2	2	0	0	0			Gr	125	28	28	69	5.0		DC	DFA	
303.00	Volunteering 4						0	1	0	0	0			A/R	50	0	14	36	2.0		DC	DFA	
TOTAL PER YEAR		2	5	0	0	0	2	5	0	0	0	sem1	1	1	1	450	56	140	254	9.0	9.0		
					7.0					7.0		sem2	1	1	1								

Rector,
Prof. dr. ing. Vasile Topa

Dean,
Conf. dr. ing. Bogdan Viorel Neamtu

Department Director,
Conf. dr.ing.fiz Traian Florin Marinca

COURSE CODE AND TITLE		Year: III										Method of Assessment				Nr. Of Hours/Discipline				ECTS/Sem		Discipline	
		SEM 1 14 weeks					SEM 2 14 weeks																
		C	S	L	P	PR	C	S	L	P	PR	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type	
35.00	Machine Elements and Mechanisms	2	0	1	0	0							Gr		75	28	14	33	3.0		DF	DOB	
36.00	Machine Elements and Mechanisms (Project)	0	0	0	2	0							Gr		50	0	28	22	2.0		DF	DOB	
37.00	Surfaces Corrosion	2	0	1	0	0							Gr		100	28	14	58	4.0		DS	DOB	
38.00	Technological Processes in Material Engineering I (Heat Treatments)	2	0	2	0	0							Gr		100	28	28	44	4.0		DF	DOB	
39.00	Powder Metallurgy	2	0	1	0	0							Gr		75	28	14	33	3.0		DS	DOB	
40.00	Management	2	1	0	0	0							Gr		75	28	14	33	3.0		DF	DOB	
41.00	Applied Informatics II	1	0	2	0	0							Gr		100	14	28	58	4.0		DF	DOB	
42.00	Theory of Plastic Deformation and Fracture of Materials	2	0	1	0	0							Gr		100	28	14	58	4.0		DF	DOB	
43.00	Environmental Protection in Industry	2	0	1	0	0							Gr		75	28	14	33	3.0		DF	DOB	
44.00	Surfaces Engineering						2	0	1	1	0		Gr		75	28	28	19	3.0		DS	DOB	
45.00	Manufacturing Engineering						2	0	1	1	0		Gr		75	28	28	19	3.0		DF	DOB	
46.00	Quality Engineering						2	1	0	0	0		Gr		75	28	14	33	3.0		DF	DOB	
47.00	Basics of Computer Aided Design						0	0	2	0	0		Gr		75	0	28	47	3.0		DF	DOB	
48.00	Technological Processes in Material Engineering II (Plastic Deformation)						2	0	1	0	0		Gr		75	28	14	33	3.0		DF	DOB	
49.00	Technological Processes in Material Engineering III (Casting)						2	0	1	0	0		Gr		75	28	14	33	3.0		DF	DOB	
50.00	Equipments and Heating Installations						2	0	1	0	0		Gr		75	28	14	33	3.0		DS	DOB	
51.00	Welding and Related Processes						2	0	1	0	0		Gr		75	28	14	33	3.0		DS	DOB	
52.10	Marketing						1	1	0	0	0		Gr		50	14	14	22	2.0		DC	DOP	
52.20	Business Strategy						1	1	0	0	0		Gr		50	14	14	22	2.0		DC	DOP	
52.30	Ethics and Academic Integrity						1	1	0	0	0		Gr		50	14	14	22	2.0		DC	DOP	
53.00	Practical Work in the Specialization						0	0	0	0	30		Gr		100	0	90	10	4.0		DS	DOB	
TOTAL PER YEAR		15	1	9	2	0	15	2	8	2	30	sem1	5	4	0	1500	420	426	654	30.0	30.0		
					27.0					27.0		sem2	5	4	1								

105.00	Modern Languages V	0	2	0	0	0						Gr			50	0	28	22	2.0		DC	DFA
204.00	Teaching Practice in Compulsory Pre-university Education ~(1)	0	0	0	0	3						Gr			75	0	42	33	3.0		DC	DFA
205.00	Computer Assisted Training	1	0	1	0	0						Gr			50	14	14	22	2.0		DC	DFA
304.00	Volunteering 5	0	1	0	0	0						A/R			50	0	14	36	2.0		DC	DFA
106.00	Modern Languages VI						0	2	0	0	0	Gr			50	0	28	22	2.0		DC	DFA
206.00	Teaching Practice in Compulsory Pre-university Education ~(2)						0	0	0	0	3	Gr			50	0	36	14	2.0		DC	DFA
207.00	Graduation Exam Level I. Teaching Portfolio						0	0	0	0	0	Gr			125	0	0	125	5.0		DC	DFA

208.00	Classroom Management			1	1	0	0	0	Gr		75	14	14	47	3.0		DC	DFA				
305.00	Volunteering 6			0	1	0	0	0	A/R		50	0	14	36	2.0		DC	DFA				
TOTAL PER YEAR		1	3	1	0	3	1	4	0	0	3	sem1	0	3	1	575	28	190	357	9.0	9.0	
					5.0					5.0		sem2	0	3	1						+ 5	

COURSE CODE AND TITLE		Year: IV										Method of Assessment			Nr. Of Hours/Discipline				ECTS/Sem		Discipline	
		SEM 1 14 weeks					SEM 2 14 weeks															
		C	S	L	P	PR	C	S	L	P	PR	E	C	V	Total	C	Apl	Indiv. St.	1	2	cat	type
54.00	Technological Equipments	2	0	1	0	0						Gr		100	28	14	58	4.0		DS	DOB	
55.00	Metallic Materials	2	0	1	1	0						Gr		100	28	28	44	4.0		DS	DOB	
56.00	Sintered Materials and Products (modules)	2	0	1	1	0						Gr		100	28	28	44	4.0		DS	DOB	
57.00	Ceramic Materials	2	0	1	0	0						Gr		100	28	14	58	4.0		DS	DOB	
58.00	Selection and Design of Materials	2	1	0	0	0						Gr		100	28	14	58	4.0		DS	DOB	
59.00	Polymeric Materials	2	0	1	0	0						Gr		75	28	14	33	3.0		DS	DOB	
60.00	Computer-Aided Design and Manufacturing	1	0	2	0	0						Gr		75	14	28	33	3.0		DS	DOB	
61.10	Materials Processing Technologies	2	0	2	0	0						Gr		100	28	28	44	4.0		DS	DOP	
61.20	Ecological Materials	2	0	2	0	0						Gr		100	28	28	44	4.0		DS	DOP	
62.00	Composite Materials						2	0	1	0	0	Gr		100	28	14	58	4.0		DS	DOB	
63.00	Materials with Special Applications (modules)						2	0	1	0	0	Gr		100	28	14	58	4.0		DS	DOB	
64.00	Advanced Materials and Technologies						2	0	1	0	0	Gr		100	28	14	58	4.0		DS	DOB	
65.00	Numerical Control Systems in Materials Processing						1	0	2	0	0	Gr		100	14	28	58	4.0		DS	DOB	
66.10	Modeling and Simulation in Materials Science						1	0	2	0	0	Gr		75	14	28	33	3.0		DS	DOP	
66.20	Semiconductor Materials						1	0	2	0	0	Gr		75	14	28	33	3.0		DS	DOP	
67.10	Civil Engineering Materials						1	0	1	0	0	Gr		75	14	14	47	3.0		DS	DOP	
67.20	Nanomaterials and Nanotechnologies						1	0	1	0	0	Gr		75	14	14	47	3.0		DS	DOP	
68.00	Graduation Project						0	0	0	9	0	A/R		200	0	126	74	8.0		DS	DOB	
70.00	Diploma Project Defense						0	0	0	0	0	Gr		0	0	0	0	10.0		DS	DOB	
TOTAL PER YEAR		15	1	9	2	0	9	0	8	9	0	sem1 sem2	6 4	2 2	0 1	1500	336	406	758	30.0 + 10		

107.00	Commercial and Community Legislation	2	1	0	0	0					Gr		75	28	14	33	3.0		DC	DFA	
306.00	Volunteering 7	0	1	0	0	0					A/R		50	0	14	36	2.0		DC	DFA	
307.00	Volunteering 8						0	1	0	0	0	A/R		50	0	14	36	2.0		DC	DFA
TOTAL PER YEAR		2	2	0	0	0	0	1	0	0	0	sem1	0	1	1	175	28	42	105	5.0	2.0
		4.0					1.0					sem2	0	0	1						

	C	S	L	P	PR	ECTS	Exams	Curriculum and verif.	Total evaluations	No.exams/tot.evaluations
Year I	308	182	238	0	0	60	11	6	17	65 %
Year II	364	98	294	0	90	60	11	6	17	65 %
Year III	420	42	238	56	90	60	10	9	19	53 %
Year IV	336	14	238	154	0	60	10	5	15	67 %
TOTAL	1428	336	1008	210	180	240	42	26	68	62 %

NUMAR ORE TOTAL	3162	DIN CARE	180.00	ORE PRACTICA
TOTAL ORE CURS, SEMINAR, LAB., PROIECT	2982			
TOTAL ORE DISCIPLINE FUNDAMENTALE - TIP DF	1896	59.96 %	din tot.activ.didactice	
TOTAL ORE DISCIPLINE DE SPECIALIZARE - TIP DS	1056	33.40 %	din tot.activ.didactice	
TOTAL ORE DISCIPLINE COMPLEMENTARE - TIP DC	210	6.64 %	din tot.activ.didactice	
TOTAL ORE DISCIPLINE OBLIGATORII - CAT DOB	2812	88.93 %	din tot.activ.didactice	
TOTAL ORE DISCIPLINE OPTIONALE - CAT DOP	350	11.07 %	din tot.activ.didactice	
TOTAL ORE DISCIPLINE FACULTATIVE - CAT DFA	680	21.51 %	din tot.activ.didactice	
TOTAL ORE CURS	1428			
TOTAL ORE APLICARE PRACTICA	1734			
RAPORT CURS / APLICARE PRACTICA	0.82			
TOTAL ORE DE PREGATIRE INDIVIDUALA	2838			
total ore didactice pe saptamana	213			

OBS. Disciplina Practica pedagogica in invatamantul preuniversitar anul 3 sem.2 se studiaza pe parcursul a 12 saptamani

Examenul de absolvire: nivelul I se desfasoara pe parcursul a 2 saptamani