

UNIVERSITY OF PETROSANI

Faculty MECHANICAL AND ELECTRICAL ENGINEERING

Field MECHANICAL ENGINEERING

 Study Program **Equipment for Industrial Processes**

Engineers - IF, 4 years x 2 sem./year x 14 weeks./sem. x 28 hours/week., 4 weeks. main exam's sessions/sem.

MINISTRY of NATIONAL EDUCATION
STUDY PLAN

valid beginning with academic year 2009 - 2010

No.	FIRST YEAR		Semester 1				Semester 2				Prepare hours		Credit points		Ex., C., V.		No. of hours		
	Courses	Courses code	C	S	L	P	C	S	L	P	Sem.1	Sem.2	Sem. 1	Sem. 2	Sem. 1	Sem. 2	Class	Apl.	Total
1.	Chemistry	2MU1OF01	2	-	2	-	-	-	-	-	2	-	4	-	E ₁	-	28	28	56
2.	Materials Science and Engineering	2MU1OD02	3	-	2	-	-	-	-	-	2.5	-	5	-	E ₁	-	42	28	70
3.	Mathematical Analysis	2MU1OF03	2	2	-	-	-	-	-	2	-	5	-	E ₁	-	28	28	56	
4.	Descriptive Geometry	2MU1OF04	2	-	2	-	-	-	-	1.5	-	4	-	C ₁	-	28	28	56	
5.	General Economy	2MU10X05	2	1	-	-	-	-	-	1	-	3	-	C ₁	-	28	14	42	
6/7.	Computer Programming and Use I, II	2MU1OF06/2MU2OF07	1	-	2	-	1	-	2	-	1	1	3	4	C ₁	E ₂	28	56	84
8/9.	Mechanics I, II	2MU1OD08/2MU2OD09	2	-	1	-	2	1	1	-	1	1	4	4	E ₁	E ₂	56	42	98
10/11.	Optional course OP11 I, II	2MU1AX10/2MU2AX11	-	2	-	-	-	2	-	-	1	1	2	2	C ₁	C ₂	-	56	56
12.	Materials Technology	2MU2OD12	-	-	-	-	3	-	2	-	-	2.5	-	5	-	E ₂	42	28	70
13.	Linear Algebra, Analytical and Differential Geometry	2MU2OF13	-	-	-	-	2	2	-	-	2	-	5	-	E ₂	28	28	56	
14.	Physics	2MU2OF14	-	-	-	-	2	-	2	-	-	2	-	4	-	E ₂	28	28	56
15.	Technical Drawing	2MU2OF15	-	-	-	-	1	-	2	-	-	1.5	-	4	-	C ₂	14	28	42
16.	Optional course OP 12	2MU2AX16	-	-	-	-	2	1	-	-	1	-	2	-	C ₂	28	14	42	
	TOTAL hours C, S, L,P/week.		14	5	9	-	13	6	9	-	12	12	30	30	4E+4C	5E+3C	378	406	784
17/18.	Sport I,II	2MU1OX17/2MU2OX18	-	2	-	-	-	2	-	-	-	-	-	-	-	A/R	-	56	56

No.	SECOND YEAR		Semester 3				Semester 4				Prepare hours		Credit points		Ex., C., V.		No. of hours		
	Courses	Courses code	C	S	L	P	C	S	L	P	Sem.1	Sem.2	Sem. 1	Sem. 2	Sem. 1	Sem. 2	Class	Apl.	Total
19.	Optional course OP 21	2MU3AX19	2	-	1	-	-	-	-	-	1	-	3	-	C ₃	-	28	14	42
20.	Special Mathematics	2MU3OF20	2	2	-	-	-	-	-	-	2	-	4	-	E ₃	-	28	28	56
21.	Numerical Methods	2MU3OF21	2	2	-	-	-	-	-	2	-	4	-	E ₃	-	28	28	56	
22.	Mechanisms	2MU3OD22	3	-	2	1	-	-	-	2.5	-	7	-	E ₃	-	42	42	84	
23/24.	Infographics (CAD) I, II	2MU3OF23/2MU4OF24	1	-	2	-	1	-	2	-	1	-	3	3	C ₃	C ₄	28	56	84
25/26.	Materials Strength and Elements of Elasticity Theory I,II	2MU3OD25/2MU4OD26	3	1	2	-	2	1	1	-	2.5	2	6	5	E ₃	E ₄	70	70	140
27/28.	Optional course OP11 III,IV	2MU3/4AX27/28	-	2	-	-	-	2	-	-	1	1	2	2	C ₃	C ₄	-	56	56
29.	Vibrations	2MU4OD29	-	-	-	-	2	-	2	-	-	2	-	4	-	E ₄	28	28	56
30.	Dimensional Tolerance and Control	2MU4OD30	-	-	-	-	2	-	2	-	-	2	-	4	-	E ₄	28	28	56
31.	Machine -Tools and Cutting Processes	2MU4OD31	-	-	-	-	3	-	2	-	-	2.5	-	5	-	E ₄	42	28	70
32.	Machine Parts I	2MU4OD32	-	-	-	-	2	-	1	-	-	1.5	-	3	-	C ₄	28	14	42
33.	Optional course OP 22	2MU4OS33	-	-	-	-	2	1	-	-	-	1	-	3	-	C ₄	28	14	42
34.	Practical Training I, 3weeks. x 40 h/week.	2MU4OD34	-	-	-	-	-	-	-	-	-	-	-	2	-	C ₄	-	120	120
	TOTAL hours C, S, L,P/week.		13	7	7	1	14	4	10	-	12	12	29	31	4E+3C	4E+5C	378	526	904

No.	THIRD YEAR		Semester 5				Semester 6				Prepare hours		Credit points		Ex., C., V.		No. of hours		
	Courses	Courses code	C	S	L	P	C	S	L	P	Sem.1	Sem.2	Sem. 1	Sem. 2	Sem. 1	Sem. 2	Class	Apl.	Total
35.	Mechanics of Fluids and Hydraulic Machines	2MU5OD35	3	-	2	-	-	-	-	-	2	-	5	-	E ₅	-	42	28	70
36.	Heat Engineering and Thermal Machines	2MU5OD36	3	-	2	-	-	-	-	2	-	5	-	E ₅	-	42	28	70	
37.	Electrotechnical and Electrical Drives	2MU5OD37	3	-	2	-	-	-	-	2	-	5	-	E ₅	-	42	28	70	
38.	Finite Elements Analysis	2MU5OD38	2	-	2	-	-	-	-	2	-	4	-	C ₅	-	28	28	56	
39.	Optional course OP 31	2MU5AD39	2	-	1	-	-	-	-	1	-	3	-	C ₅	-	28	14	42	
40.	Machine Parts II	2MU5OD40	2	-	2	2	-	-	-	3	-	7	-	E ₅	-	28	56	84	
41.	Industrial Electronics	2MU6OD41	-	-	-	-	2	-	1	-	1	-	3	-	C ₆	28	14	42	
42.	Systems Theory and Automation	2MU6OD42	-	-	-	-	2	-	1	-	1.5	-	3	-	E ₆	28	14	42	
43.	Tribology	2MU6OD43	-	-	-	-	2	-	1	-	1.5	-	3	-	E ₆	28	14	42	
44.	Hydraulic and Pneumatic Drives	2MU6OD44	-	-	-	-	2	-	2	2	-	3	-	E ₆	28	56	84		
45.	Environment Protection Technologies	2MU6OS45	-	-	-	-	2	-	1	-	1	-	3	-	C ₆	28	14	42	
46.	Thermal Treatments	2MU6OS46	-	-	-	-	2	-	1	-	1	-	3	-	C ₆	28	14	42	
47.	Process Equipment	2MU6OS47	-	-	-	-	2	-	2	-	2	-	4	-	E ₆	28	28	56	
48.	Optional course OP 32	2MU6OS48	-	-	-	-	2	-	1	-	1	-	3	-	C ₆	28	14	42	
49.	Practical Training II, 3weeks. x 40 h/week.	2MU6OD49	-	-	-	-	-	-	-	-	-	-	2	-	C ₆	-	120	120	
TOTAL hours C, S, L,P/week.			15	-	11	2	16	-	10	2	12	12	29	31	4E+2C	4E+5C	434	470	904

No.	FOURTH YEAR		Semester 7				Semester 8				Prepare hours		Credit points		Ex., C., V.		No. of hours		
	Courses	Courses code	C	S	L	P	C	S	L	P	Sem.1	Sem.2	Sem. 1	Sem. 2	Sem. 1	Sem. 2	Class	Apl.	Total
50.	Optional course OP41	2MU7AS50	2	-	2	2	-	-	-	-	2	-	6	-	E ₇	-	28	56	84
51/52	Equipment and Installations Manufacturing Technology I,II	2MU7OS51/2MU8OS52	2	-	1	-	2	-	1	1	1.5	2	3	4	C ₇	E ₈	56	42	98
53/54	Technological Machines and Equipment I,II	2MU7OS53/2MU8OS54	4	-	2	2	2	-	1	-	3.5	2.5	9	4	E ₇	E ₈	84	70	154
55/56	Industrial Mechanical Installations I,II	2MU7OS55/2MU8OS56	3	-	2	-	2	-	1	-	2	2	5	3	E ₇	E ₈	70	42	112
57/58	Building and Calculation of the Loading and Haulage Equipment I,II	2MU7OS57/2MU8OS59	4	-	2	-	2	-	1	-	3	2	6	3	E ₇	E ₈	84	42	126
59.	Products Reliability and Maintenance	2MU8OS59	-	-	-	-	2	-	1	-	-	2.5	-	4	-	C ₈	28	14	42
60.	Optional course OP42	2MU8AS60	-	-	-	-	2	-	2	-	-	1	-	3	-	C ₈	28	28	56
61.	Elaboration of graduation paper, 14 weeks x 8 h/week.	2MU8OS61	-	-	-	-	-	-	-	8	-	-	-	10	-	C ₈	-	112	112
TOTAL hours C, S, L,P/week.			15	-	9	4	12	-	7	9	12	12	29	31	4E+1C	4E+3C	378	406	784

ANNEX I		Optional courses			
An	Cod	Courses			
I, II		Enlish	French	German	Spanish
1	OP11	History of Culture and Civilization		Logics	
2	OP12	Labor Law and Economic Legislation		Economic management systems	
3	OP21	Basics of Experimental Research		Technologies and equipment control	
3	OP22	Industrial Management		Economic Analysis of Production Systems	
3	OP31	Quality Control and Insurance		Ecology and the Environment	
3	OP32	Design of the Machines and Instalations		Computer Aided Design Technology	
4	OP41	The Recovery and Reuse of materials		Unconventional Processing in Machine Building	
4	OP42				

ANEXA 2 DISCIPLINE FACULTATIVE		Tip disc	Sem.	C	S	L	Prepare hours	Credit points		Ex., Cv.		No. of hours		
												Class	Apl.	Total
62/63.	Sport III, IV	X	3 4	-	2/2	-	-	-	-	A/R	A/R	-	56	56
64...67	Foreign Language V, ..., VIII	X	5...8	-	-	2	1 ...1	2	2	C ₅	C ₈	-	112	112
68.	Energy Management	S	6	2	2	-	2	-	4	-	C ₆	28	28	56
69.	Calculation capacity transport systems	S	7	2	1	-	1.5	3	-	C ₇	-	28	14	42
70.	Manipulators and Robots I,II	S	8	2	2	-	2	-	4	-	C ₈	28	28	56

Legend: C – class; S – seminar; L – laboratory; P – project; Ex. (E1...8) – exam in semester 1...8; Cv. (C1...8) – colloquy in semester 1...8

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