

Academic Bachelor Degree: Energetic in mechanical engineering

2nd year

Fall Semester

Courses	Credits	Coefficient	weekly time load			Time load/semester (15 weeks)	Additional Work in Consultation (15 weeks)	Evaluation mode	
			Lectures	DW	PW			continuous assessment	Final Exam
Mathematics 3	6	3	3h00	1h30		67h30	82h30	40%	60%
Waves and Vibrations	4	2	1h30	1h30		45h00	55h00	40%	60%
Fluid Mechanics	4	2	1h30	1h30		45h00	55h00	40%	60%
Rational Mechanics	4	2	1h30	1h30		45h00	55h00	40%	60%
Probability and Statistics	4	2	1h30	1h30		45h00	55h00	40%	60%
Computer Science 3	2	1			1h30	22h30	27h30	100%	
Technical Drawing	2	1			1h30	22h30	27h30	100%	
Lab Work for Waves and Vibrations	1	1			1h00	15h00	10h00	100%	
Basic Technology	1	1	1h30			22h30	02h30		100%
Metrology	1	1	1h30			22h30	02h30		100%
Technical English	1	1	1h30			22h30	02h30		100%
Total	30	17	13h30	7h30	4h00	375h00	375h00		

Spring Semester

Courses	Credits	Coefficient	weekly time load			Time load/semester (15 weeks)	Additional Work in Consultation (15 weeks)	Evaluation mode	
			Lectures	DW	PW			continuous assessment	Final Exam
Thermodynamics 2	4	2	1h30	1h30		45h00	55h00	40%	60%
Mechanical Manufacturing	2	1	1h30			22h30	27h30		100%
Mathematics 4	4	2	1h30	1h30		45h00	55h00	40%	60%
Numerical Methods	4	2	1h30	1h30		45h00	55h00	40%	60%
Strength of Materials	4	2	1h30	1h30		45h00	55h00	40%	60%
Computer-Aided Design (CAD)	2	1			1h30	22h30	27h30	100%	
Lab Work for Fluid Mechanics	2	1			1h30	22h30	27h30	100%	
Lab Work for Numerical Methods	2	1			1h30	22h30	27h30	100%	
Lab Work for Strength of Materials	1	1			1h00	15h00	10h00	100%	
Lab Work for Mechanical Manufacturing	2	1			1h30	22h30	27h30	100%	
Industrial Electricity	1	1	1h30			22h30	02h30		100%
Materials Science	1	1	1h30			22h30	02h30		100%
Techniques of Expression, Information, and Communication.	1	1	1h30			22h30	02h30		100%
Total	30	17	12h00	6h00	7h00	375h00	375h00		

3rd year**Fall Semester**

Courses	Credits	Coefficient	weekly time load			Time load/semester (15 weeks)	Additional Work in Consultation (15 weeks)	Evaluation mode	
			Lectures	DW	PW			continuous assessment	Final Exam
Fluid Mechanics 2	6	3	3h00	1h30		67h30	82h30	40%	60%
Heat Transfer 1	4	2	1h30	1h30		45h00	55h00	40%	60%
Turbomachines 1	4	2	1h30	1h30		45h00	55h00	40%	60%
Energy Conversion	4	2	1h30	1h30		45h00	55h00	40%	60%
Lab Work for Heat Transfer	2	1			1h30	22h30	27h30	100%	
Lab Work for Turbomachines 1	2	1			1h30	22h30	27h30	100%	
Lab Work for Energy Conversion	2	1			1h30	22h30	27h30	100%	
Measurement and Instrumentation	3	2	1h30		1h00	37h30	37h30	40%	60%
Introduction to Machine Elements	1	1	1h30			22h30	02h30		100%
Control Systems and Regulation	1	1	1h30			22h30	02h30		100%
Environment and Sustainable Development	1	1	1h30			22h30	02h30		100%
Total	30	17	13h30	6h00	5h30	375h00	375h00		

Spring Semester

Courses	Credits	Coefficient	weekly time load			Time load/semester (15 weeks)	Additional Work in Consultation (15 weeks)	Evaluation mode	
			Lectures	DW	PW			continuous assessment	Final Exam
Turbomachines 2	6	3	3h00	1h30		67h30	82h30	40%	100%
Internal Combustion Engines	4	2	1h30	1h30		45h00	55h00	40%	100%
Refrigeration Machines and Heat Pumps	4	2	1h30	1h30		45h00	55h00	40%	100%
Heat Transfer 2	4	2	1h30	1h30		45h00	55h00	40%	100%
End-of-Cycle Project	4	2			3h00	45h00	55h00	100%	
Lab Work for Refrigeration Machines and Heat Pumps	2	1			1h30	22h30	27h30	100%	
Lab Work for Internal Combustion Engines	1	1			1h00	15h00	10h00	100%	
Lab Work for Control Systems and Regulation	2	1			1h30	22h30	27h30	100%	
Renewable Energies	1	1	1h30			22h30	02h30		100%
Cryogenics	1	1	1h30			22h30	02h30		100%
Entrepreneurship and Business Management	1	1	1h30			22h30	02h30	100%	
Total	30	17	12h00	6h00	7h00	375h00	375h00		