

**ISTINYE UNIVERSITY
(MECHANICAL ENGINEERING)**

1st SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ENS101	Calculus I	2	2	5	English
ENS103	Computational Thinking	3	2	6	English
ENS105	Physics 1	4	1	6	English
ENS107	Computing Literacy	2	2	4	English
ENS111	Occupational Health and Safety 1	2	0	2	English
TRK101	Turkish Language 1	2	0	2	Turkish
ENS109	Engineering Design	3	0	4	English
TOTAL		18	7	28	

2nd SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ENS102	Linear Algebra with Applications	2	2	5	English
ENS104	Computational Mathematics	3	2	6	English
ENS106	Physics 2	4	1	6	English
ENS108	Computer Aided Design	2	2	5	English
ENS110	Calculus II	2	2	5	English
ENS112	Occupational Health and Safety 2	2	0	2	English
TRK102	Turkish Language 2	2	0	2	Turkish
TOTAL		17	8	31	

3rd SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ATA101	Ataturk's Principles and History of Revolution	2	0	2	Turkish
DIL101	General English 1	2	0	0	English
ENS201	Differential Equations	2	2	6	English
ENS203	Material Science	3	1	6	English
ENS205	Human Body	2	2	4	English
ENS213	Statics	2	2	4	English
SEG001	Manifest of Istinye 1	0	1	1	English
	Department Elective	2	2	5	English
TOTAL		15	10	28	

4th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ATA102	Ataturk's Principles and History of Revolution	2	0	2	Turkish
DIL102	General English 2	2	0	2	English
MEE252	Dynamics	2	1	4	English
MEE254	Strength of Materials	2	2	6	English
MEE256	Thermodynamics I	2	1	4	English
ENS202	Probability and Statistics	3	2	6	English
SEG002	Manifest of Istinye 2	0	1	1	English
MEE258	Numerical Methods and Programming	2	2	5	English
TOTAL		15	9	30	

5th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ENS301	Electromechanical Energy Conversion	3	2	6	English
MEE306	Thermodynamics 2	2	1	4	English
MEE351	Manufacturing Processes and Operations Analysis	3	2	6	English
MEE353	Fluid Mechanics 1	2	1	4	English
MEE355	Machine Design 1	2	1	4	English
MEE481	Summer Practice 1	0	1	1	English
	Department Elective	2	2	5	English
TOTAL		14	10	30	

6th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
MEE302	Heat Transfer	2	1	4	English
MEE304	Machine Design 2	2	1	4	English
MEE310	Theory of Machines	2	2	4	English
MEE308	Fluid Mechanics	2	1	4	English
ENS302	Control systems	3	2	6	English
MEE350	Biomechanics	2	1	3	English
	Department Elective	2	2	5	English
MEE310	Theory of machines	2	1	4	English
TOTAL		17	11	34	

7th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
MEE492	Summer Practice II	0	1	1	English
MEE401	Capstone Project 1	2	0	2	English
SEG003	Manifest of Istinye 3	0	1	1	English
	Department Elective	2	2	5	English
	Department Elective	2	2	5	English
	Department Elective	2	2	5	English
	University Elective	2	2	5	English
TOTAL		10	10	24	

8th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
MEE404	Mech. Engineering Student Lab.	1	2	4	English
MEE402	Capstone Project 2	3	2	6	English
SEG004	Manifest of Istinye 4	0	1	1	English
	Department Elective	2	2	5	English
	Department Elective	2	2	5	English
	University Elective	2	2	5	English
	Department Elective	2	2	5	English
TOTAL		12	13	31	

DESCRIPTION
T: Theoric
P: Practice
ECTS: European Credit Transfer System
Language of Instruction: Defines the medium of the course regardless of the language of instruction of the department.

Code	COURSE	T	P	ECTS	Language of Instruction
ENT007	Principals of Artificial Intelligence	2	2	5	English
ENT009	Fundamentals of Engineering Economics	2	2	5	English
ENT001	Directed Research	2	2	5	English
ENT002	Engineering Ethics	2	2	5	English
ENT003	Community Engagement Through Volunteering	2	2	5	English
ENT004	History of Science and Technology	2	2	5	English
ENT005	Innovation and Entrepreneurship	2	2	5	English
ENT008	Problem Solving with Computers in C	2	2	5	English
ENT006	Fundamentals of Machine Learning	2	2	5	English
ENT072	Introduction to MEMS	2	2	5	English
ENT073	Biomedical Instrumentation	2	2	5	English
ENT148	Advanced Manufacturing Processes	2	2	5	English
ENT147	Microcontrollers	2	2	5	English
ENT122	Introduction to Robotics	2	2	5	English
ENT123	Finite Element Methods (FEM)	2	2	5	English
ENT124	Composite Materials	2	2	5	English
ENT125	Renewable and Sustainable Energy	2	2	5	English
ENT126	Computer Aided Manufacturing (CAM)	2	2	5	English
ENT127	Nano Materials	2	2	5	English
ENT128	Computational Fluid Dynamics	2	2	5	English
ENT129	Heating Ventilation and Air Conditioning (HVAC)	2	2	5	English
ENT130	Gas Turbines	2	2	5	English
ENT131	Gas Dynamics	2	2	5	English
ENT132	Turbo Machinery	2	2	5	English
ENT133	Internal Combustion Engines (ICEs)	2	2	5	English
ENT134	Fuel Economy	2	2	5	English
ENT135	Alternative fuels	2	2	5	English
ENT136	Vehicle Technology	2	2	5	English
ENT137	Electrical and Hybrid Vehicles	2	2	5	English
ENT138	Mechatronics	2	2	5	English
ENT139	Hydraulic and Pneumatic	2	2	5	English
ENT140	Computer Aided Mechanical Design and Analysis	2	2	5	English
ENT141	Acoustics and Vibration	2	2	5	English
ENT142	Biofluid Mechanics	2	2	5	English
ENT143	Biomaterials	2	2	5	English
ENT144	Biomimetics	2	2	5	English
ENT145	Aeronautical Engineering	2	2	5	English
MEE017	Measurement and Instrumentation	2	2	5	English
ENT146	Data Acquisition and Signal Processing	2	2	5	English
TOTAL		74	78	199	