T.C.
ERCİYES ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ
MAKİNA MÜHENDİSLİĞİ BÖLÜMÜ
2025-2026 EĞİTİM-ÖĞRETİM PLANI (%100 İngilizce)

1. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
PHYS 119	PHYSICS-I	3	1	6	6
CHEM 113	GENERAL CHEMISTRY	3	1	5	5
MATH 113	CALCULUS-I	4	0	6	6
	INTRODUCTION TO MECHANICAL ENGINEERING	2	0	2	3
	TECHNICAL DRAWING	2	2	4	4
	TECHNICAL ENGLISH	2	0	2	2
TD 101	TÜRK DİLİ-I	2	0	2	2
	LINEAR ALGEBRA	2	0	2	2
TOPLAM ECTS					**30**

2.MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
PHYS 118	PHYSICS-II	3	1	6	6
MATH 114	CALCULUS-II	4	0	6	6
TD 102	TÜRK DİLİ-II	2	0	2	2
	STATICS	3	0	4	5
	COMPUTATIONAL AIDED TECHNICAL DRAWING (NX, SOLIDWORKS)	2	2	3	4
	PROGRAMMING (PHYTON, C, MATLAB)	3	0	3	3
	KARİYER PLANLAMA	1	0	2	2
	ENGLISH FOR BUSINESS	2	0	2	2
TOPLAM ECTS					**30**

3. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
	DIFFERANTIAL EQUATIONS IN ENGINEERING	3	0	6	5
	DYNAMICS	4	0	5	5
	STRENGTH OF MATERIALS-I	3	0	4	4
	ENGINEERING MATH-I	3	0	5	4
	MATERIAL SCIENCE-I	3	0	4	4
	MEASUREMENT AND EVALUATION	2	0	3	3
	ELECTRONICS	2	0	3	3
	İŞ SAĞLIĞI VE GÜVENLİĞİ-I	2	0	2	2
TOPLAM ECTS					**30**

4. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
	ENGINEERING MATH-II	3	0	5	4
	STRENGTH OF MATERIALS-II	3	0	4	4
	THERMODYNAMICS-I	3	0	4	4
	MATERIAL SCIENCE-II	3	0	4	4
	MANUFACTURING PROCESS-I	3	0	4	5
	NUMERICAL METHODS (Excell, MATLAB)	3	0	4	4
	PROBABILITY AND STATISTICS	2	0	3	3
	İŞ SAĞLIĞI VE GÜVENLİĞİ II	2	0	2	2
TOPLAM ECTS					**30**

5. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
Aİ 301	ATATÜRK İLKE VE İNKILAP TARİHİ-I	2	0	2	2
	THERMODYNAMICS-II	3	0	4	4
	MACHINE ELEMENTS-I	3	0	4	5
	MECHANISMS	3	0	3	4
	MANUFACTURING PROCESS-II	3	0	3	4
	CONTROL SYSTEMS	3	0	3	4
	ENGINES	3	0	4	4
	SOCIAL ELECTIVE 1-1	2	0	2	3
TOPLAM ECTS					**30**

6. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
Aİ 302	ATATÜRK İLKE VE İNKILAP TARİHİ-II	2	0	2	2
	MACHINE ELEMENTS-II	3	0	4	5
	DYNAMICS OF MACHINERY	3	0	4	4
	FLUIDS MECHANICS	3	0	3	4
	HEAT TRANSFER	4	0	4	5
	DESIGN TECHNIQUE AND MANAGEMENT OF PROCESS AND PLANT	3	0	3	4
	TECHNICAL ELECTIVE-1-1	2	0	2	3
	TECHNICAL ELECTIVE-2-1	2	0	2	3
TOPLAM ECTS					**30**

7. MID-TERM					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
	PROJECT	0	3	3	3
	MACHINE LABORATORY	0	2	3	3
	INTERNSHIP	0	6	6	6
	TECHNICAL ELECTIVE-1-2	2	0	2	3
	TECHNICAL ELECTIVE-2-2	2	0	2	3
	TECHNICAL ELECTIVE-3-1	2	0	2	3
	TECHNICAL ELECTIVE-4-1	2	0	2	3
	TECHNICAL ELECTIVE-5-1	2	0	2	3
	TECHNICAL ELECTIVE-5-2	2	0	2	3
TOPLAM ECTS					**30**

8. MID-TERM (7+1)					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
	GRADUATION PROJECT	0	3	3	5
	VOCATIONAL EDUCATION APPLICATION	5	20	5	25
TOPLAM ECTS					30

8. MID-TERM (OPTIONAL)					
Course Code	**Course Name**	**T**	**P**	**K**	**ECTS**
	GRADUATION PROJECT	0	3	3	5
	PROJECT-II	0	3	3	4
	INTERNSHIP-II	0	6	6	6
	SOCIAL ELECTIVE 1-2	2	0	2	3
	TECHNICAL ELECTIVE-2-3	2	0	2	3
	TECHNICAL ELECTIVE-3-2	2	0	2	3
	TECHNICAL ELECTIVE-4-2	2	0	2	3
	TECHNICAL ELECTIVE-5-3	2	0	2	3
TOTAL ECTS					30

SOCIAL ELECTIVE-1	
	ENTREPRENEURSHIP
	ENGINEERING MANAGEMENT AND HUMAN RELATIONS
	SCIENCE, TECHNOLOGY AND ENGINEERING

TECHNICAL ELECTIVE-1	
	INTRODUCTION TO FINITE ELEMENT METHOD
	COMPUTATIONAL FLUID DYNAMICS
	COMPUTER-AIDED DYNAMIC ANALYSIS OF MECHANICAL SYSTEMS
	INTRODUCTION TO COMPUTER AIDED STRESS ANALYSIS
	NUMERICAL ANALYSIS OF MECHANICAL BEHAVIOR OF MATERIALS
	APPLICATION OF FINITE ELECTRIC METHOD IN ENGINEERING DESIGN
	COMPUTER AIDED STRESS ANALYSIS-II
	COMPUTATIONAL HEAT TRANSFER

TECHNICAL ELECTIVE-2	
	INDUSTRIAL HEAT TREATMENTS
	POLYMERIC MATERIALS
	SHEET METAL PRODUCT DESIGN
	MOLD DESIGN
	COMPOSITE MATERIALS
	ARMOR MATERIALS AND DESIGN
	NON-DESTRUCTIVE MATERIAL TESTING
	MECHANICS OF COMPOSITE MATERIALS-I
	INDUSTRIAL VIBRATIONS
	MOTOR VEHICLES-I
	CNC PROGRAMMING
	POWER TRANSMISSION MECHANISMS
	INDUSTRIAL NOISE CONTROL
	MOTOR VEHICLES-II
	MECHANICS OF COMPOSITE MATERIALS-II

TECHNICAL ELECTIVE-3	
	TURBO MACHINERY
	HEATING AND VENTILATION
	HEAT TRANSFER-II

TECHNICAL ELECTIVE-4	
	MACHINE TOOLS
	MECHANICAL VIBRATIONS
	TRANSPORT TECHNIQUE

TECHNICAL ELECTIVE-5	
	AIR CONDITIONING SYSTEMS AND DESIGN
	NATURAL GAS SYSTEMS
	ENERGY STORAGE TECHNOLOGIES
	ENGINES-2
	AERODYNAMIC
	INDUSTRIAL FLUID MECHANICS
	COMBUSTION AND COMBUSTION SYSTEMS

	ENERGY MANAGEMENT
	THERMODYNAMICS III
	HYDROGEN ENERGY
	AIR CONDITIONING
	COMPUTATIONAL HEAT TRANSFER
	HEAT EXCHANGERS
	COOLING TECHNIQUE
	INTRODUCTION TO ROCKET TECHNOLOGY
	STEAM SYSTEM
	PLUMBING
	HEAT INSULATION
	STEAM BOILERS
	HYDRAULIC MACHINES