

**YILDIZ TECHNICAL UNIVERSITY
FACULTY OF MECHANICAL ENGINEERING
MECHANICAL ENGINEERING**

1. SEMESTER

CODE	COURSE	T	A	L	Cr
TDB 1010	Turkish	4	-	-	4
YDB 1011	Foreing Language 1	3	-	-	2
MAT 1311	Mathematic 1	4	2	-	5
FZL 1901	Physics 1	3	-	2	4
KML 1100	General Chemistry	3	-	2	4
MKM 1231	Engineering Drawing	2	2	-	3
TOTAL:		19	4	4	22

2. SEMESTER

CODE	COURSE	T	A	L	Cr
ATA 1010	History of National Revolutions	4	-	-	4
YDB 1012	Foreing Language 2	3	-	-	2
MAT 1312	Mathematic 2	4	2	-	5
MAT 1320	Lineer Algebra	2	-	-	2
FZL 1902	Physics 2	3	-	2	4
MKM 1532	Statics	3	-	-	3
MKM 1232	Engineering Drawing By Computer Aed	2	2	-	3
ENB 0110	Basic Information Tecnology	1	2	-	0
TOTAL:		22	6	2	23

3. SEMESTER

CODE	COURSE	T	A	L	Cr
YDB 2011	Foreing Language 3	3	-	-	2
MAT 2311	Differential Eguations	4	-	-	4
MKM 2321	Measurement Technigues and Evaluation	2	-	-	2
MKM 2531	Dynamics	3	-	-	3
MKM 2541	Strength of Materials	4	-	-	4
MKM 2341	Materials 1	4	-	-	4
ENB 0120	Basic Computer Sciences	2	2	-	3
TOTAL:		22	2	-	22

4. SEMESTER

CODE	COURSE	T	A	L	Cr
YDB 2012	Foreing Language 4	3	-	-	2
MKM 2342	Manufacturing Processes 1	4	-	-	4
MKM 2732	Fluid Mechanics 1	3	-	-	3
MKM 2742	Thermodynamics	4	-	-	4
	Elective Science Course I	3	-	-	3
	Elective Science Course II	2	-	-	2
	Elective Social Science Course I	3	-	-	3
TOTAL:		22	-	-	21

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5. SEMESTER

CODE	COURSE	T	A	L	Cr
MKM 3731	Heat Transfer	3	-	-	3
MKM 3231	Machine Elements 1	3	-	-	3
MKM 3031	Term Project 1	2	2	-	3
	Thermal Machines (Engines-Turbo)	3	-	-	3
	Elective Course 1 (Cumpolsory at Option)	3	-	-	3
	Elective Course 1	2	-	-	2
	Elective Course 1	2	-	-	2
TOTAL:		18	2	-	19

6. SEMESTER

CODE	COURSE	T	A	L	Cr
MKM 3432	Dynamics of Machinery 1	3	-	-	3
MKM 3232	Machine Elements 2	3	-	-	3
MKM 3032	Term Project 2	2	2	-	3
	Elective Course 2 (Cumpolsory at Option)	3	-	-	3
	Elective Course 3	2	-	-	2
	Elective Course 4	2	-	-	2
	Elective Social Science Course 2	3	-	-	3
TOTAL:		18	2	-	19

7. SEMESTER

CODE	COURSE	T	A	L	Cr
MKM 4033	Term Project 3	2	2	-	3
MKM 4027	Machinery Lab.	-	-	2	1
	Elective Course 3 (Cumpolsory at Option)	3	-	-	3
	Elective Course 5	2	-	-	2
	Elective Course 6	2	-	-	2
	Elective Course 7	2	-	-	2
	Elective Social Science Course 3	3	-	-	3
TOTAL:		14	2	2	16

8. SEMESTER

CODE	COURSE	T	A	L	Cr
MKM 4064	Graduation Project	3	6	-	6
MKM 4028	Special Machinery Lab.	-	-	2	1
	Elective Course 4 (Cumpolsory at Option)	3	-	-	3
	Elective Course 8	2	-	-	2
	Elective Social Science Course 4	3	-	-	3
	Elective Social Science Course 5	3	-	-	3
TOTAL:		14	6	2	18

GENERAL OPTION						
5. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3233	Computer Aided Drawing (CAD)	3	-	-	3	
MKM 3335	Manufacturing Processes 2	3	-	-	3	
MKM 3733	Heating and Vantilation	3	-	-	3	
MKM 3633	Engine Design	3	-	-	3	
MKM 3121	Energy Economy I	2	-	-	2	
MKM 3323	Materials 2	2	-	-	2	
MKM 3325	Joining Techniques	2	-	-	2	
MKM 3723	Engineering Thermodynamics	2	-	-	2	
MKM 3727	Gas Installations	2	-	-	2	
ELM 3915	Electrical Machinery	2	-	-	2	
TOTAL:		24	-	-	24	
6. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3132	Gas Turbines	3	-	-	3	
MKM 3134	Hydraulic Machines	3	-	-	3	
MKM 3532	Strength of Materials 2	3	-	-	3	
MKM 3326	Jig and Fixtures	2	-	-	2	
MKM 3328	Plant Organization	2	-	-	2	
MKM 3422	Agricultural Machineries 1	2	-	-	2	
MKM 3724	Installation Technique	2	-	-	2	
MKM 3726	Refrigeration Techniques	2	-	-	2	
MKM 3622	Internal Combustion Engines I	2	-	-	2	
TOTAL:		21	-	-	21	
7. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4133	Turbo Machine Constructions	3	-	-	3	
MKM 4231	Transportation Tecniques I	3	-	-	3	
MKM 4331	Machine Tools	3	-	-	3	
MKM 4431	Automatic Control	3	-	-	3	
MKM 4733	Refrigeration and Air Conditioning	3	-	-	3	
MKM 4329	Plastic Materials and Their Forming	2	-	-	2	
MKM 4421	Dynamics of Machinery 2	2	-	-	2	
MKM 4423	Agricultural Machineries 2	2	-	-	2	
MKM 4425	Mechanisms I	2	-	-	2	
MKM 4723	Steam Bailers	2	-	-	2	
MKM 4725	Air Conditioning	2	-	-	2	
MKM 4621	Internal Combustion Engines 2	2	-	-	2	
MKM 4623	Motor Vehicles 1	2	-	-	2	
MKM 4221	Machine Elements 3	2	-	-	2	
TOTAL:		33	-	-	33	
8. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4134	Energy Plants	3	-	-	3	
MKM 4234	Transportation Techniques 2	3	-	-	3	
MKM 4734	Energy Management	3	-	-	3	
MKM 4124	New and Renewable Energy Sources	2	-	-	2	
MKM 4422	Mechanisms 2	2	-	-	2	
MKM 4424	Introduction to Robotics	2	-	-	2	
MKM 4426	Industrial Acoustics and Noise	2	-	-	2	
MKM 4726	Apparatus Design	2	-	-	2	
MKM 4728	Industrial Air Conditioning	2	-	-	2	
MKM 4622	Motor Vehicles 2	2	-	-	2	
TOTAL:		23	-	-	23	

ENERGY OPTION						
5. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3335	Manufacturing Processes 2	3	-	-	3	
MKM 3635	Dynamics of Engines	3	-	-	3	
MKM 3633	Engine Desingn	3	-	-	3	
MKM 3121	Energy Economy I	2	-	-	2	
MKM 3123	Nuclear Energy Power Plants 1	2	-	-	2	
MKM 3325	Joining Techniques	2	-	-	2	
MKM 3723	Engineering Thermodynamics	2	-	-	2	
MKM 3727	Gas Installations	2	-	-	2	
MKM 3729	Heating Technique	2	-	-	2	
TOTAL:		21	-	-	21	
6. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3132	Gas Turbines	3	-	-	3	
MKM 3134	Hydraulic Machines	3	-	-	3	
MKM 3632	Vehicle Vibration	3	-	-	3	
MKM 3122	Energy Economy 2	2	-	-	2	
MKM 3124	Nuclear Energy Power Plants 2	2	-	-	2	
MKM 3328	Plant Organization	2	-	-	2	
MKM 3622	Internal Combustion Engines 1	2	-	-	2	
ELM 3936	Electrical Machinery	2	-	-	2	
TOTAL:		19	-	-	19	
7. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4131	Hydraulic and Pnematic	3	-	-	3	
MKM 4133	Turbo Machine Constructions	3	-	-	3	
MKM 4431	Automatic Control	3	-	-	3	
MKM 4121	Industriel Hydraulic	2	-	-	2	
MKM 4621	Internal Combustion Engines 2	2	-	-	2	
MKM 4623	Motor Vehicles 1	2	-	-	2	
MKM 4723	Steam Boilers	2	-	-	2	
MKM 4725	Air Conditioning	2	-	-	2	
TOTAL:		19	-	-	19	
8. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4132	Compressors	3	-	-	3	
MKM 4134	Energy Plants	3	-	-	3	
MKM 4632	Fuels and Combustion	3	-	-	3	
MKM 4634	Vehicle and Environment Pollution	3	-	-	3	
MKM 4122	Energy Systems and their Usage	2	-	-	2	
MKM 4124	Renewable Energy Systems	2	-	-	2	
MKM 4222	Transportation Machinery	2	-	-	2	
MKM 4622	Motor Vehicles 2	2	-	-	2	
MKM 4728	Industrial Air Conditioning	2	-	-	2	
TOTAL:		22	-	-	22	

MANUFACTURING OPTION						
5. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3331	Metal Forming 1	3	-	-	3	
MKM 3333	Industrial Materials	3	-	-	3	
MKM 3125	Hydraulic and Pneumatic Systems	2	-	-	2	
MKM 3223	Fundamentals of (CAD)	2	-	-	2	
MKM 3225	Introduction to Desingning Techniques	2	-	-	2	
MKM 3321	Pressure Casting	2	-	-	2	
TOTAL:		14	-	-	14	
6. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3332	Machining 1	3	-	-	3	
MKM 3334	Welding Techniques	3	-	-	3	
MKM 3322	Metal Forming 2	2	-	-	2	
MKM 3324	Selection of Materials in Mechanical Engineering	2	-	-	2	
MKM 3326	Jig and Fixtures	2	-	-	2	
MKM 3328	Plant Organization	2	-	-	2	
MKM 3424	Mechanisms 1	2	-	-	2	
TOTAL:		16	-	-	16	
7. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4331	Machine Tools	3	-	-	3	
MKM 4333	Die Manufacturing Techniques	3	-	-	3	
MKM 4321	Machining 2	2	-	-	2	
MKM 4323	Welding Techniques 2	2	-	-	2	
MKM 4325	Casting of Non-Ferrous Metals	2	-	-	2	
MKM 4327	Composites in the Manufacture	2	-	-	2	
MKM 4329	Plastic Materials and Their Forming	2	-	-	2	
MKM 4427	Introduction to Automatic Control	2	-	-	2	
TOTAL:		18	-	-	18	
8. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4332	Gravity Casting	3	-	-	3	
MKM 4334	Computer Aided Manufacturing (CAM)	3	-	-	3	
MKM 4222	Transportation Machinery	2	-	-	2	
MKM 4322	Numerical Controlled Machine Tools	2	-	-	2	
MKM 4324	Quality Management	2	-	-	2	
MKM 4326	Manufacturing Systems	2	-	-	2	
MKM 4328	PLC Control in Manufacturing	2	-	-	2	
MKM 4424	Introduction to Robotics	2	-	-	2	
ELM 4928	Electrical Machinery	2	-	-	2	
TOTAL:		20	-	-	20	

CONSTRUCTION OPTION						
5. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3233	Computer Aided Drawing (CAD)	3	-	-	3	
MKM 3235	Construction Elements	3	-	-	3	
MKM 3337	Die Manufacturing Techniques	3	-	-	3	
MKM 3221	Geometry for Designing 1	2	-	-	2	
MKM 3321	Pressure Casting	2	-	-	2	
MKM 3325	Joining Techniques	2	-	-	2	
ELM 3915	Electrical Machinery	2	-	-	2	
TOTAL:		17	-	-	17	
6. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3234	Fundamentals of (CAD)	3	-	-	3	
MKM 3332	Machining 1	3	-	-	3	
MKM 3532	Strength of Materials 2	3	-	-	3	
MKM 3222	Geometry for Designing 2	2	-	-	2	
MKM 3322	Metal Forming 2	2	-	-	2	
MKM 3324	Selection of Materials in Mechanical Engineering	2	-	-	2	
MKM 3328	Plant Organization	2	-	-	2	
MKM 3422	Agricultural Machineries 1	2	-	-	2	
TOTAL:		19	-	-	19	
7. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4231	Transportation Techniques 1	3	-	-	3	
MKM 4233	Designing Techniques 1	3	-	-	3	
MKM 4431	Automatic Control	3	-	-	3	
MKM 4221	Machine Elements 3	2	-	-	2	
MKM 4329	Plastic Materials and Their Forming	2	-	-	2	
MKM 4421	Machine Elements 3	2	-	-	2	
MKM 4423	Agricultural Machineries 2	2	-	-	2	
MKM 4425	Mechanisms 1	2	-	-	2	
TOTAL:		19	-	-	19	
8. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4232	Designing Techniques 2	3	-	-	3	
MKM 4234	Transportation Techniques 2	3	-	-	3	
MKM 4336	Machine Tools	3	-	-	3	
MKM 4422	Mechanisms 2	2	-	-	2	
MKM 4424	Introduction to Robotics	2	-	-	2	
MKM 4426	Industrial Acoustics and Noise	2	-	-	2	
MKM 4324	Quality Management	2	-	-	2	
TOTAL:		17	-	-	17	

HEAT OPTION						
5. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3733	Heating and Ventilation	3	-	-	3	
MKM 3721	Fluid Mechanics II	2	-	-	2	
MKM 3723	Engineering Thermodynamics	2	-	-	2	
MKM 3725	Advanced Thermodynamics	2	-	-	2	
MKM 3727	Gas Installations	2	-	-	2	
TOTAL:		11	-	-	11	
6. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 3732	Energy Management	3	-	-	3	
MKM 3734	Thermal Processes	3	-	-	3	
MKM 3328	Plant Organization	2	-	-	2	
MKM 3722	Measurement Techniques	2	-	-	2	
MKM 3724	Installation Techniques	2	-	-	2	
MKM 3726	Refrigeration Techniques	2	-	-	2	
MKM 3728	Engineering Economy	2	-	-	2	
TOTAL:		16	-	-	16	
7. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4131	Hydraulic and Pnematic	3	-	-	3	
MKM 4135	Gas Turbines	3	-	-	3	
MKM 4137	Hydraulic Machines	3	-	-	3	
MKM 4731	Process Control	3	-	-	3	
MKM 4721	Heat Transfer II	2	-	-	2	
MKM 4723	Steam Boilers	2	-	-	2	
MKM 4725	Air Conditioning	2	-	-	2	
MKM 4727	Plant Design	2	-	-	2	
MKM 4729	Mass Transfer I	2	-	-	2	
TOTAL:		22	-	-	22	
8. SEMESTER						
CODE	COURSE	T	A	L	Cr	
MKM 4732	General Process Techniques	3	-	-	3	
MKM 4720	Process Design	2	-	-	2	
MKM 4722	Mass Transfer II	2	-	-	2	
MKM 4724	Solar Energy and Heat Pump Systems	2	-	-	2	
MKM 4726	Apparatus Design	2	-	-	2	
MKM 4728	Industrial Air Conditioning	2	-	-	2	
TOTAL:		13	-	-	13	