Engineering Faculty

Electrical & Electronics Engineering (English) - 2020 | Major Program

Overall | Mean Course per semester = [53 / 8 = 6,62] + 3 = 9 | T = 132 | U = 38 | Total Hours = 170 | Credits = 260 | ECTS = 260

1. SEMESTER

No	Course Code	Course Name	T	U	Credit	ECTS
1	CHEM1007	Basic Chemistry	4	0	6	6
2	CSE1145	Introduction to Computer Programming	3	2	5	5
3	ENG1001	Academic Presentation Skills for Engineers	2	0	3	3
4	ISG121	İş Sağlığı ve Güvenliği I	2	0	2	2
5	MATH1001	Calculus I	4	0	6	6
6	PHYS1101	Physics I	3	0	4	4
7	PHYS1103	Physics I Lab.	0	2	2	2
8	TDR121	Türk Dili I	2	0	2	2
		TOTAL	20	4	30	30

2. SEMESTER

No	Course Code	Course Name	T	U	Credit	ECTS
1	EE1004	Object-Oriented Programming	3	2	7	7
2	EE1100	Introduction to Electrical Engineering	2	0	3	3
3	ISG122	İş Sağlığı ve Güvenliği II	2	0	2	2
4	MATH1002	Calculus II	4	0	6	6
5	MATH2056	Linear Algebra	3	0	4	4
6	PHYS1102	Physics II	3	0	4	4
7	PHYS1104	Physics II Lab.	0	2	2	2
8	TDR122	Türk Dili II	2	0	2	2
		TOTAL	19	4	30	30

3. SEMESTER

No	Course Code	Course Name	T	U	Credit	ECTS
1	EE2001	Electrical Circuits I	3	2	7	7
2	EE2003	Digital Design	3	2	7	7
3	MATH2055	Differential Equations	3	0	4	4
4	MATH2057	Discrete Mathematics	3	0	5	5
5	MSE2072	Introduction to Materials Science	3	0	4	4
6	NTE_1	Non-Technical Elective - 1	2	0	3	3
		TOTAL	17	4	30	30

4. SEMESTER

No	Course Code	Course Name	T	U	Credit	ECTS
1	EE2002	Electrical Circuits II	3	2	7	7
2	EE3011	Electronics I	3	2	7	7
3	EE2004	Microprocessor Systems	3	2	6	6
4	MATH2059	Numerical Methods	3	0	4	4
5	MATH2052	Engineering Mathematics	3	0	6	6
		TOTAL	15	6	30	30

5. SEMESTER						
No	Course Code	Course Name	T	U	Credit	ECTS
1	EE3000	Summer Practice I	0	0	10	10
2	EE3012	Electronics II	3	2	7	7
3	EE3061	Signals and Systems	3	2	7	7
4	EE3014	Energy Conversion	3	2	7	7
5	EE3016	Fundamentals of Electromagnetics	3	0	5	5
6	STAT2056	Probability and Random Variables	3	0	4	4
		TOTAL	15	6	40	40

6. SEMESTER						
No	Course Code	Course Name	T	U	Credit	ECTS
1	EE3072	Dynamic Systems and Control	3	2	7	7
2	EE3082	Communication Engineering	3	2	7	7
3	EE4051	Electromagnetic Waves	3	0	5	5
4	EE4077	Fundamentals of Machine Learning	3	0	5	5
5	EE4002	Introduction to Digital Signal Processing	3	2	6	6
		TOTAL	15	6	30	30

7. SEMESTER						
No	Course Code	Course Name	T	U	Credit	ECTS
1	ATA121	Atatürk İlkeleri ve İnkılap Tarihi I	2	0	2	2
2	ECON2004	Engineering Economy	2	0	4	4
3	EE4000	Summer Practice II	0	0	10	10
4	EE4297	Engineering Project I	0	4	6	6
5	NTE_1	Non-Technical Elective - 1	2	0	3	3
6	TE-1	Technical Elective - 1	3	0	5	5
7	TE-2	Technical Elective - 2	3	0	5	5
8	TE-3	Technical Elective - 3	3	0	5	5
		TOTAL	15	4	40	40

8. SEMESTER						
No	Course Code	Course Name	T	U	Credit	ECTS
1	ATA122	Atatürk İlkeleri ve İnkılap Tarihi II	2	0	2	2
2	EE4298	Engineering Project II	0	4	5	5
3	ENG-FTE	Faculty Technical Electives	3	0	5	5
4	ENG-UE	University Elective	2	0	3	3
5	TE-4	Technical Elective - 4	3	0	5	5
6	TE-5	Technical Elective - 5	3	0	5	5
7	TE-6	Technical Elective - 6	3	0	5	5
		TOTAL	16	4	30	30

TE1..6: 7-8. SEMESTER						
No	Course Code	Course Name	T	U	Credit	ECTS
1	CSE4072	Machine Learning	3	0	5	5
2	EE4010	VLSI Circuit Design	3	0	5	5
3	EE4011	Electronic Measurement and Instrumentation Techniques	3	0	5	5
4	EE4012	Digital Electronics	3	0	5	5
5	EE4013	Communication Electronics	3	0	5	5
6	EE4014	Industrial Electronics	3	0	5	5
7	EE4015	Op-Amps and Applications	3	0	5	5
8	EE4016	Design with Integrated Circuits	3	0	5	5
9	EE4017	Electrical Equipment and Applications	3	0	5	5
10	EE4021	Introduction to Microelectromechanical Devices and Systems	3	0	5	5
11	EE4025	Introduction to BioMEMS	3	0	5	5
12	EE4026	Biomedical Instrumentation	3	0	5	5
13	EE4034	Numerical System Applications	3	0	5	5
14	EE4035	Introduction to Embedded Systems	3	0	5	5
15	EE4037	Microcontroller Based System Design	3	0	5	5
16	EE4039	Microcontroller Applications	3	0	5	5
17	EE4042	Utilization of Electrical Energy	3	0	5	5
18	EE4043	Static Power Conversion	3	0	5	5
19	EE4044	Power System Analysis I	3	0	5	5
20	EE4045	Power System Analysis II	3	0	5	5
21	EE4046	Electrical Distribution Systems	3	0	5	5
22	EE4047	High Voltage Techniques I	3	0	5	5

23	EE4048	High Voltage Techniques II	3	0	5	5
24	EE4049	Power System Protection	3	0	5	5
25	EE4052	Antennas and Propagation	3	0	5	5
26	EE4053	Microwaves	3	0	5	5
27	EE4054	Introduction to Information Systems	3	0	5	5
28	EE4056	Introduction to Information Systems Management	3	0	5	5
29	EE4057	Introduction to Systems Security	3	0	5	5
30	EE4062	Introduction to Image Processing	3	0	5	5
31	EE4064	Introduction to Machine Vision	3	0	5	5
32	EE4065	Introduction to Embedded Image Processing	3	0	5	5
33	EE4066	Introduction to Real-time Digital Signal Processing	3	0	5	5
34	EE4068	Fundamentals of Cryptography	3	0	5	5
35	EE4070	Introduction Principles of Programming Languages	3	0	5	5
36	EE4071	Linear System Theory	3	0	5	5
37	EE4072	Control Technology and Design	3	0	5	5
38	EE4073	Introduction to Optimization Theory	3	0	5	5
39	EE4074	Discrete Time Systems	3	0	5	5
40	EE4075	Nonlinear Control Systems	3	0	5	5
41	EE4076	Process Control	3	0	5	5
42	EE4078	Fundamentals to Computer Networks	3	0	5	5
43	EE4081	Introduction to Information Theory	3	0	5	5
44	EE4082	Digital Communication	3	0	5	5

45	EE4083	Mobile Communication	3	0	5	5
46	EE4085	Fundamentals of Data Structures	3	0	5	5
47	EE4091	Special Topics in Electrical and Electronics Engineering	3	0	5	5
48	EE4092	Selected Topics in Electrical and Electronics Engineering	3	0	5	5
49	EE4095	Robotics and Automation	3	0	5	5
50	EE4096	Advanced Programming for Electrical Engineering	3	0	5	5
51	EE4099	Renewable Energy Systems Design	3	0	5	5
		TOTAL	153	0	255	255