

FIRST SEMESTERPrerequisite -
Co-requisite Current
ECTS
credits

EE	101	Introduction to Electrical Engineering	(2-0) 2		2
EE	103	Introduction to Programming	(3-2) 4		6
PHYS	101	General Physics I	(4-0)4		5
PHYS	111	General Physics Lab I	(0-2)1		2
CHEM	121	General Chemistry I	(3-0) 3		5
CHEM	141	General Chemistry Lab. I	(0-2) 1		2
MATH	141	Basic Calculus I	(3+2) 4		5
ENG	101	Development of Reading and Writing Skills I	(3-0) 3		3
OHS	101	Occupational Health and Safety I	(1-0)1		1

Total Number of Credits in the Semester :

23

31

SECOND SEMESTERPrerequisite -
Co-requisite Current
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credits

EE	142	Introduction to Logic Design	(3-2) 4		7
ENG	102	Development of Reading and Writing Skills II	(3-0) 3		3
PHYS	102	General Physics II	(4-0)4		5
PHYS	112	General Physics Lab II	(0-2)1		2
MATH	142	Basic Calculus II	(3-2)4		6
MATH	265	Basic Linear Algebra	(3-0) 3		4
GCC	101	Career Planning And Development	(2-0)NC		2
		Non-Technical Elective	(3-0) 3		3
OHS	102	Occupational Health and Safety II	(1-0)1		1

Total Number of Credits in the Semester :

23

33

THIRD SEMESTERPrerequisite -
Co-requisite Current
ECTS
credits

EE	201	Circuit Analysis I	(4-0) 4		7
EE	203	Electrical Circuits Laboratory	(0-4) 2		4
EE	221	Concepts of Modern Physics	(4-0) 4		7
MATH	241	Calculus III	(3+2)4		5
MATH	255	Differential Equations	(4-0) 4		6
TURK	201	Turkish Language I	(2-0)NC		2
TURK	203	Turkish for Foreigners I	(2-0)NC		2
HIST	201	Principles of Atatürk I	(2-0)NC		2
HIST	203	History of Turkish Revolution I	(2-0)NC		2

Total Number of Credits in the Semester :

18

33

(*) Mandatory courses for foreign students

FOURTH SEMESTERPrerequisite -
Co-requisite Current
ECTS
credits

EE	202	Circuit Analysis II	(4-0) 4		7
EE	204	Scientific Programming for Electrical Engineering	(2-2) 3		5
EE	212	Electronics I	(4-0) 4		6
EE	222	Electromagnetic Theory I	(4-0) 4		6
TURK	202	Turkish Language II	(2-0)NC		2
TURK	204	Turkish for Foreigners II	(2-0)NC		2
HIST	202	Principles of Atatürk II	(2-0)NC		2
HIST	204	History of Turkish Revolution II	(2-0)NC		2

		Non-Technical Elective	(3-0) 3		3
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Total Number of Credits in the Semester : 18 31

(*) Mandatory courses for foreign students

FIFTH SEMESTER

**Prerequisite -
Co-requisite Current
ECTS
credits**

EE	313	Electronics II	(4-0) 4		6
EE	315	Electronics Laboratory	(0-4) 2		3
EE	323	Electromagnetic Theory II	(3-0) 3		5
EE	331	Signals and Systems	(3-2) 4		7
EE	333	Fundamentals of Probability and Random Processes	(4-0) 4		6
EE	300	Summer Practice I	NC		5

Total Number of Credits in the Semester : 17 32

SIXTH SEMESTER

**Prerequisite -
Co-requisite Current
ECTS
credits**

EE	316	Electronics Design Project	(1-4) 3		6
EE	342	Digital System Design	(3-2) 4		7
EE	352	Communication Systems I	(3-2) 4		7
EE	362	Feedback Control Systems	(4-0) 4		6
		Mathematics / Science / Engineering Elective	(3-0) 3		5
EE	300	Summer Practice I	NC		

Total Number of Credits in the Semester : 18 31

SEVENTH SEMESTER

**Prerequisite -
Co-requisite Current
ECTS
credits**

EE	451	Communication Systems II	(3-2) 4		7
		Electrical Engineering Elective	(3-0) 3		6
		Electrical Engineering Elective	(3-0) 3		6
		Mathematics / Science / Engineering Elective	(3-0) 3		6
		Mathematics / Science / Engineering Elective	(3-0) 3		6
EE	400	Summer Practice II	NC		5

Total Number of Credits in the Semester : 16 36

EIGHTH SEMESTER

**Prerequisite -
Co-requisite Current
ECTS
credits**

		Electrical Engineering Elective	(3-0) 3		6
		Electrical Engineering Elective	(3-0) 3		6
		Electrical Engineering Elective	(3-0) 3		6
		Mathematics / Science / Engineering Elective	(3-0) 3		6
		Mathematics / Science / Engineering Elective	(3-0) 3		6
EE	400	Summer Practice II	NC		

Total Number of Credits in the Semester : 15 30

**Total Credits :
148 257**

ELECTRICAL ENGINEERING ELECTIVE COURSE LIST

**Prerequisite -
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EE	311	Digital Electronics	(3-0) 3		6
EE	334	Introduction to Numerical Computation for Electrical Engineers	(3-0) 3		6
EE	401	Neural Networks	(3-0) 3		6
EE	402	Introduction To Natural Language Processing	(3-0) 3		6

EE	411	Fundamentals of Photonics	(3-0) 3		6
EE	412	Lightwave Communication	(3-0) 3		6
EE	423	Antennas	(3-0) 3		6
EE	425	Microwave Engineering	(3-0) 3		6
EE	426	Introduction to Microwave and Antenna Measurements	(1-4) 3		6
EE	430	Introduction to Systems Biology	(3-0) 3		6
EE	431	Introduction to Image and Video Processing	(3-0) 3		6
EE	432	Speech Processing	(3-0) 3		6
EE	433	Introduction to Digital Signal Processing	(3-0) 3		6
EE	434	Biomedical Signal Processing	(3-0) 3		6
EE	436	Mathematical Foundations of Signal Processing and Systems	(3-0) 3		6
EE	440	Wireless Networking Technologies	(3-0) 3		6
EE	442	Computer Networks	(3-0) 3		6
EE	443	Embedded Systems	(3-2) 4		6
EE	444	Introduction to CMOS Integrated Circuit Design	(3-0) 3		6
EE	445	Supplementary Curricular Courses	(3-0) 3		6
EE	446	Embedded Systems II	(3-2) 4	EE443 dersinin geçilmiş olması.	6
EE	452	Digital Coding of Waveforms	(3-0) 3		6
EE	453	Software Defined Communications	(3-0) 3		6
MTH	454	Introduction to Automotive Electronics and Software Development	(3-0) 3	EE103, EE142, EE204, EE313 derslerinin geçilmiş olması	6
EE	455	Introduction to Wireless Communications	(3-0) 3		6
EE	461	Nonlinear Control Systems	(3-0) 3		6
EE	462	Optimal Control	(3-0) 3		6
EE	463	Introduction to Robotics	(3-0) 3		6
EE	464	Industrial Automation Systems	(3-0) 3		6
EE	465	Industrial Power Electronics	(3-0) 3		6
EE	466	Advanced Industrial Power Electronics	(3-2) 4		6
EE	467	Introduction to Digital Control Systems	(3-0) 3		6
EE	470	Introduction To Software Engineering	(2-2) 3		6
EE	471	General Concepts of Software Development Practices and Technologies	(3-0)3		6
EE	472	Nonlinear Time Series Analysis	(3-0) 3		6
EE	473	Data Science for Engineering Applications	(3-0) 3		6
EE	491	Project	(1-4) 3		6
EE	492	Project	(1-4) 3		6
EE	499	Cooperative Education Course	(0-6) 3		10