

**T.C.**  
**ABDULLAH GUL UNIVERSITY**  
**SCHOOL OF ENGINEERING**  
**Electrical-Electronics Engineering Undergraduate Program**  
*(For students who start their undergraduate education in 2014 and 2015)*

**Freshman Year / FALL Semester**

Code	Course Name	Lec.	Lab	Credits	ECTS
MATH 101	Calculus I	4	0	4	5
SCI 101	Science of Nature I	3	2	4	7
COMP 101	Art of Computing	3	2	4	6
ENG 101	English I	4	0	4	4
HUM 101	Understanding Contemporary World	3	0	3	5
TURK 101	Turkish I	2	0	2	2
PDA 101	Professional Development Activities I	1	1	0	1
Total Credits		20	5	21	30

**Freshman Year / SPRING Semester**

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MATH 102	Calculus II	MATH 101	4	0	4	5
SCI 102	Science of Nature II	SCI 101	3	2	4	7
EE 102	Exploring Profession		3	2	4	6
ENG 102	English II	ENG 101	4	0	4	4
HUM 102	Imagining Future	HUM 101	3	0	3	5
TURK 102	Turkish II		2	0	2	2
PDA 102	Personal/Professional Development Activities II		1	1	0	1
Total Credits			20	5	21	30

**Sophomore Year / FALL Semester**

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MATH 201	Engineering Mathematics I	MATH 102	4	0	4	6
EE 201	Electric Circuits I		3	2	4	6
EE 203	Digital Design		3	2	4	6
BA 201	Entrepreneurship and Innovation		3	0	3	4
HIST 201	History of Modern Turkey I		2	0	2	2
COMP 201	Object Oriented Programming	COMP 101	3	2	4	6
Total Credits			18	6	21	30

**Sophomore Year / SPRING Semester**

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MATH 202	Engineering Mathematics II	MATH 201	4	0	4	6
EE 202	Electric Circuits II	EE 201	3	2	4	7
EE 204	Signals and Systems		3	2	4	7
HIST 202	History of Modern Turkey II		2	0	2	2
MATH 203	Linear Algebra		3	0	3	5
XXX	Nontechnical Elective		3	0	3	3
Total Credits			18	4	20	30

**Junior Year / FALL Semester**

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
EE 299	Summer Training I				0	4
MATH 301	Probability and Statistics	MATH 102	3	0	3	5
EE 301	Electronics I	EE 202	3	2	4	7
EE 303	Feedback Control Systems	EE 204	3	2	4	6
EE 305	Engineering Electromagnetics	MATH 201	3	0	3	5
XXX	Nontechnical Elective		3	0	3	3
	Total Credits		15	4	17	30

**Junior Year / SPRING Semester**

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
EE 302	Electronics II	EE 301	3	2	4	7
EE 304	Embedded Systems	EE 203	3	2	4	7
EE 306	Fundamentals of Telecommunications Engineering	EE 204 MATH 301	3	0	3	6
EE 308	Electric Machines and Drives		3	2	4	7
XXX	Nontechnical Elective					3
	Total Credits		15	6	18	30

**Senior Year / FALL Semester**

Code	Course Name	Lec.	Lab	Credits	ECTS
EE 399	Summer Training II			0	6
EE 491	Senior Project I	4	0	4	7
OHS 401	Occupational Health and Safety I	2	0	2	1
	Concentration Area Elective				5
	Concentration Area Elective				5
	Concentration Area Elective				5
	Nontechnical Elective Course				3
	Total Credits				32

**Senior Year / SPRING Semester**

Code	Course Name	Lec.	Lab	Credits	ECTS
EE 492	Senior Project II	4	0	4	9
OHS 402	Occupational Health and Safety II	2	0	2	1
	Concentration Area Elective				5
	Concentration Area Elective				5
	Concentration Area Elective				5
	Nontechnical Elective Course				3
	Total Credits				28

**Concentration Area Electives List**  
*(6 of these courses must be taken)*

Code	Course Name	Lec.	Lab	Credits	ECTS
EE 404	Antennas	3	0	3	5
EE 408	Microwave Engineering	3	0	3	5
EE 420	Flat Panel Display Technologies	3	0	3	5
EE 421	Geometrical Optics	3	0	3	5
EE 422	Nanophotonics	3	0	3	5
EE 423	Optics and Photonics	3	0	3	5
EE 424	Fiber Optic Communication	3	0	3	5
EE 432	Digital Signal Processing	3	0	3	5
EE 434	Sensors and Measurement	3	0	3	5
EE 440	Neural Engineering	3	0	3	5
EE 443	Biomedical Instrumentation and Signal Analysis	3	0	3	5
EE 445	Fundamentals of BioMEMS	3	0	3	5
EE 451	Power Electronics	3	0	3	5
EE 452	Electric Power Systems	3	0	3	5
EE 453	Power Distribution Systems	3	0	3	5
EE 454	High Voltage Techniques	3	0	3	5
EE 455	Introduction to Electric Drive Systems	3	0	3	5
EE 465	Data Mining	3	0	3	5
EE 473	Introduction to Robotics	3	0	3	5
EE 474	Applied Programmable Logic Controllers	3	0	3	5
EE 485	Semiconductor Device Fundamentals	3	0	3	5
EE 486	Semiconductor Process and Device Fabrication	3	0	3	5
COMP 301	Analysis of Algorithms	3	2	4	6
COMP 302	System Programming	3	2	4	5
COMP 303	Operating Systems	3	0	3	6
COMP 305	Computer Organization	3	0	3	6
COMP 306	Formal Languages and Automata Theory	3	2	4	6
COMP 308	Computer Networks	3	0	3	6
COMP 403	Blockchain and Cryptocurrencies	3	0	3	5
COMP 411	Communication Networks	3	0	3	5
COMP 430	Digital Image Processing	3	0	3	5
COMP 431	Computer Vision	3	0	3	5
COMP 455	Linux For Engineers and Scientists	3	0	3	6
COMP 461	Deep Learning	3	0	3	5
COMP 462	Bioinformatics	3	0	3	5
COMP 463	Computational Genomics	3	0	3	5
COMP 464	Pattern Recognition	3	0	3	5
COMP 465	Artificial Intelligence	3	0	3	5
COMP 482	Parallel Architectures	3	0	3	5