

Üsküdar University
Faculty of Engineering and Natural Sciences
Department of Electrical-Electronics Engineering
2024-2025 Academic Year
(100% English)

YEAR ONE															
1st Term							2nd Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
MATH101	Calculus I*	3	2	0	4	6		COME102	Introduction to Algorithms and Programming*	2	0	2	3	4	
PHYS101	Physics I*	3	0	2	4	6		EEE102	Introduction to Digital Systems	3	0	0	3	5	
CHEM101	General Chemistry I*	3	0	2	4	6		MATH102	Calculus II*	3	2	0	4	6	
EEE101	Orientation to Electrical Engineering	2	0	0	2	3		MATH104	Basic Linear Algebra*	2	2	0	3	5	
ENG103	English I	2	0	0	2	2		PHYS102	Physics II*	3	0	2	4	6	
RPSC109	Positive Psychology and Communication Skills	3	0	0	3	5		ENG104	English II	2	0	0	2	2	
RCUL103	University Culture I*	0	2	0	1	4		RCUL104	University Culture II*	0	2	0	1	4	
Total Credits		16	4	4	20	32		Total Credits		15	6	4	20	32	

YEAR TWO															
3rd Term							4th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE201	Circuit Theory I*	3	0	2	4	5		EEE202	Circuit Theory II*	3	0	2	4	5	
EEE203	Computer Tools for Electrical Engineering	3	0	0	3	4		EEE204	Electromagnetic Field Theory	3	0	0	3	5	PHYS102
EEE205	Digital Systems Design*	3	0	2	4	6	EEE102	EEE206	Numerical Methods for Electrical Engineering	3	0	0	3	5	
EEE207	Probability and Random Variables	3	0	0	3	4		EEE208	Signals and Systems*	2	2	0	3	5	MATH102
TURK103	Turkish Language I	2	0	0	2	2		TURK104	Turkish Language II	2	0	0	2	2	
MATH203	Differential Equations*	2	2	0	3	5		ATA104	Principles of Atatürk and History of Turkish Revolution II	2	0	0	2	2	
ATA103	Principles of Atatürk and History of Turkish Revolution I	2	0	0	2	2		EEE284	Summer Practice I**	0	0	0	0	5	
RPRE104	Entrepreneurship and Project Culture	2	0	0	2	3									
Total Credits		20	2	4	23	31		Total Credits		15	2	2	17	29	

YEAR THREE															
5th Term							6th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE301	Electronics I*	3	0	2	4	6	EEE201	EEE302	Electronics II*	3	0	2	4	6	EEE201
EEE303	Communication Engineering*	3	0	2	4	6	EEE208	EEE304	Control Systems	3	0	0	3	5	
EEE307	Introduction to Microprocessors*	2	0	2	3	5	EEE102	EEE3XX	Departmental Elective I	3	0	0	3	5	
EEE305	Electromagnetic Waves	3	0	0	3	5		EEE3XX	Departmental Elective II	3	0	0	3	5	
XXXXXX	Social Elective I	3	0	0	3	5		XXXXXX	Social Elective II	3	0	0	3	5	
								EEE384	Summer Practice II**	0	0	0	0	5	
Total Credits		14	0	6	17	27		Total Credits		15	0	2	16	31	

YEAR FOUR															
7th Term							8th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE491	Graduation Project	2	0	0	2	8		EEE492	Graduation Thesis*	0	4	0	2	8	
EEE4XX	Departmental Elective III	3	0	0	3	5		EEE4XX	Departmental Elective V	3	0	0	3	5	
EEE4XX	Departmental Elective IV	3	0	0	3	5		EEE4XX	Departmental Elective VI	3	0	0	3	5	
XXXXXX	Field Elective I	3	0	0	3	5		XXXXXX	Field Elective II	3	0	0	3	5	
XXXXXX	Social Elective III	3	0	0	3	5		OHS404	Occupational Health and Safety	4	0	0	4	4	
								XXXXXX	Field Elective III	3	0	0	3	5	
Total Credits		14	0	0	14	28		Total Credits		16	4	0	18	32	

2024-2025	Total Course Credits for Graduation	145
	Total Course ECTS for Graduation	242
	Total Elective Courses ECTS	60
	Elective Course Ratio	25%

* These courses are under the Applied Course status.
 ** These courses are under the Internship Course status.

Elective Course Pool															
Departmental Elective Courses								Social Elective Courses (Foreign Languages)							
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE306	Electrical Machinery*	3	0	2	4	5	EEE202	ARB123	Arabic I	3	0	0	3	5	
EEE310	Introduction to Data Structures and Algorithms	3	0	0	3	5		ARB124	Arabic II	3	0	0	3	5	ARB123
EEE312	Introduction to Computational Electromagnetics	3	0	0	3	5		CHN123	Chinese I	3	0	0	3	5	
EEE313	Electronics Laboratory and Instrumentation	3	0	0	3	5		CHN124	Chinese II	3	0	0	3	5	CHN123
EEE314	Electromechanical Energy Conversion	2	0	2	3	5	EEE202	ESP123	Spanish I	3	0	0	3	5	
EEE401	Microcontrollers	3	0	0	3	5		ESP124	Spanish II	3	0	0	3	5	ESP123
EEE402	Industrial Electronics and Automation	3	0	0	3	5		FRN123	French I	3	0	0	3	5	
EEE403	Health Effects of Electromagnetic Fields and Protection	3	0	0	3	5		FRN124	French II	3	0	0	3	5	FRN123
EEE405	Introduction to Remote Sensing	3	0	0	3	5		GER123	German I	3	0	0	3	5	
EEE406	Introduction to Electromagnetic Compatibility	3	0	0	3	5		GER124	German II	3	0	0	3	5	GER123
EEE407	Microwave Electronics	3	0	0	3	5		JAP123	Japanese I	3	0	0	3	5	
EEE408	Introduction to Biomedical Signal Processing	3	0	0	3	5		JAP124	Japanese II	3	0	0	3	5	JAP123
EEE409	Wireless Wave Propagation	3	0	0	3	5		ITA123	Italian I	3	0	0	3	5	
EEE410	Introduction to Robotics	3	0	0	3	5		ITA124	Italian II	3	0	0	3	5	ITA123
EEE411	Modeling and Simulation	3	0	0	3	5		RSN123	Russian I	3	0	0	3	5	
EEE412	Embedded Systems Design	3	0	0	3	5		RSN124	Russian II	3	0	0	3	5	RSN123
EEE413	Introduction to Image Processing	3	0	0	3	5									
EEE414	Introduction to Digital Signal Processing	3	0	0	3	5									
EEE415	Mobile Communication	3	0	0	3	5									
EEE416	Introduction to Digital Communication	3	0	0	3	5									
EEE417	Introduction to Analog VLSI Circuits	3	0	0	3	5									
EEE418	Integrated Circuit Design	3	0	0	3	5									
EEE419	Control Technology and Design	3	0	0	3	5									
EEE420	Applications of Radio Wave Propagation	3	0	0	3	5									
EEE421	Energy Systems	3	0	0	3	5									
EEE424	High Voltage Techniques	3	0	0	3	5									
EEE451	Power System Reliability	3	0	0	3	5									
EEE467	Advanced Digital Design	3	0	0	3	5									
EEE465	Introduction to Microwave Engineering	3	0	0	3	5	EEE204								
EEE460	Power Systems	2	0	2	3	5	EEE202								
EEE461	Power Electronics	2	0	2	3	5	EEE202								
EEE462	Introduction to Satellite Communications	3	0	0	3	5									
EEE463	Distribution Systems	2	0	2	3	5	EEE202								

For Field Elective courses, any departmental elective course having appropriate credits from other departments of Faculty of Engineering and Natural Sciences can be elected.

Social Elective Courses
 For Social Elective courses, either foreign language course or course having appropriate credits from other faculties can be elected.