Üsküdar University
Faculty of Engineering and Natural Sciences
Department of Electrical-Electronics Engineering
2023-2024 Academic Year
(100% English)

YEAR ONE

1st Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
MATH101	Calculus I*	3	2	0	4	6	
PHYS101	Physics I*	3	0	2	4	6	
CHEM101	General Chemistry I*	3	0	2	4	6	
EEE101	Orientation to Electrical Engineering	2	0	0	2	3	
ENG101	English I	3	0	0	3	3	
RPSC109	Positive Psychology and Communication Skills	3	0	0	3	5	
RCUL101	University Culture I*	0	2	0	1	1	
Total Credits		**17**	**4**	**4**	**21**	**30**	

2nd Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
COME102	Introduction to Algorithms and Programming*	2	0	2	3	4	
EEE102	Introduction to Digital Systems	3	0	0	3	5	
MATH102	Calculus II*	3	2	0	4	6	
MATH104	Basic Linear Algebra*	2	2	0	3	5	
PHYS102	Physics II*	3	0	2	4	6	
ENG102	English II	3	0	0	3	3	
RCUL102	University Culture II*	0	2	0	1	1	
Total Credits		**16**	**6**	**4**	**21**	**30**	

YEAR TWO

3rd Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE201	Circuit Theory I*	3	0	2	4	5	
EEE203	Computer Tools for Electrical Engineering	3	0	0	3	4	
EEE205	Digital Systems Design*	3	0	2	4	6	
EEE207	Probability and Random Variables	3	0	0	3	4	
TURK101	Turkish Language I	2	0	0	2	3	
MATH203	Differential Equations*	2	2	0	3	5	
ATA101	Principles of Atatürk and History of Turkish Revolution I	2	0	0	2	3	
RPRE104	Entrepreneurship and Project Culture	2	0	0	2	3	
Total Credits		**20**	**2**	**4**	**23**	**33**	

4th Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE202	Circuit Theory II*	3	0	2	4	5	
EEE204	Electromagnetic Field Theory	3	0	0	3	5	
EEE206	Numerical Methods for Electrical Engineering	3	0	0	3	5	
EEE208	Signals and Systems*	2	2	0	3	5	
TURK102	Turkish Language II	2	0	0	2	3	
ATA102	Principles of Atatürk and History of Turkish Revolution II	2	0	0	2	3	
EEE284	Summer Practice I**	0	0	0	0	5	
Total Credits		**15**	**2**	**2**	**17**	**31**	

YEAR THREE

5th Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE301	Electronics I*	3	0	2	4	6	EEE201
EEE303	Communication Engineering*	3	0	2	4	6	
EEE307	Introduction to Microprocessors*	2	0	2	3	5	
EEE305	Electromagnetic Waves	3	0	0	3	5	
XXXXXX	Social Elective I	3	0	0	3	5	
Total Credits		**14**	**0**	**6**	**17**	**27**	

6th Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE302	Electronics II*	3	0	2	4	6	EEE201
EEE304	Control Systems	3	0	0	3	5	
EEE3XX	Departmental Elective I	3	0	0	3	5	
EEE3XX	Departmental Elective II	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		**15**	**0**	**2**	**16**	**31**	

YEAR FOUR

7th Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE491	Graduation Project	2	0	0	2	8	
EEE4XX	Departmental Elective III	3	0	0	3	5	
EEE4XX	Departmental Elective IV	3	0	0	3	5	
XXXXXX	Field Elective I	3	0	0	3	5	
OHS401	Occupational Health and Safety I	2	0	0	2	2	
XXXXXX	Social Elective III	3	0	0	3	5	
Total Credits		**16**	**0**	**0**	**16**	**30**	

8th Term

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE492	Graduation Thesis*	0	4	0	2	8	
EEE4XX	Departmental Elective V	3	0	0	3	5	
EEE4XX	Departmental Elective VI	3	0	0	3	5	
XXXXXX	Field Elective II	3	0	0	3	5	
OHS402	Occupational Health and Safety II	2	0	0	2	2	
XXXXXX	Field Elective III	3	0	0	3	5	
Total Credits		**14**	**4**	**0**	**16**	**30**	

2023-2024	**Total Course Credits for Graduation**	147
	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

Code	Course Name	T	P	L	C	ECTS	Prerequisite
EEE306	Electrical Machinery*	3	0	2	4	5	
EEE308	Electromechanical Energy Conversion	3	0	0	3	5	
EEE310	Introduction to Data Structures and Algorithms	3	0	0	3	5	
EEE312	Introduction to Computational Electromagnetics	3	0	0	3	5	
EEE313	Electronics Laboratory and Instrumentation	3	0	0	3	5	
EEE401	Microcontrollers	3	0	0	3	5	
EEE402	Industrial Electronics and Automation	3	0	0	3	5	
EEE403	Health Effects of Electromagnetic Fields and Protection	3	0	0	3	5	
EEE404	Power Electronics	3	0	0	3	5	
EEE405	Introduction to Remote Sensing	3	0	0	3	5	
EEE406	Introduction to Electromagnetic Compatibility	3	0	0	3	5	
EEE407	Microwave Electronics	3	0	0	3	5	
EEE408	Introduction to Biomedical Signal Processing	3	0	0	3	5	
EEE409	Wireless Wave Propagation	3	0	0	3	5	
EEE410	Introduction to Robotics	3	0	0	3	5	
EEE411	Modeling and Simulation	3	0	0	3	5	
EEE412	Embedded Systems Design	3	0	0	3	5	
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	
EEE422	Distribution Systems	3	0	0	3	5	
EEE423	Power Systems	3	0	0	3	5	
EEE424	High Voltage Techniques	3	0	0	3	5	
EEE450-459	Special Topics	3	0	0	3	5	

Social Elective Courses (Foreign Languages)

Code	Course Name	T	P	L	C	ECTS	Prerequisite
ARB123	Arabic I	3	0	0	3	5	
ARB124	Arabic II	3	0	0	3	5	ARB123
CHN123	Chinese I	3	0	0	3	5	
CHN124	Chinese II	3	0	0	3	5	CHN123
ESP123	Spanish I	3	0	0	3	5	
ESP124	Spanish II	3	0	0	3	5	ESP123
FRN123	French I	3	0	0	3	5	
FRN124	French II	3	0	0	3	5	FRN123
GER123	German I	3	0	0	3	5	
GER124	German II	3	0	0	3	5	GER123
RSN123	Russian I	3	0	0	3	5	
RSN124	Russian II	3	0	0	3	5	RSN123

Field Elective Courses

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.