

Üsküdar University
Faculty of Engineering and Natural Sciences
Department of Computer 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
COME103	Introduction to Computer Engineering	3	0	0	3	4		COME102	Introduction to Algorithms and Programming*	2	0	2	3	4	
MATH101	Calculus I*	3	2	0	4	6		COME104	Discrete Mathematics	3	0	0	3	4	
PHYS101	Physics I*	3	0	2	4	6		MATH102	Calculus II*	3	2	0	4	6	
CHEM101	General Chemistry I*	3	0	2	4	6		MATH104	Basic Linear Algebra*	2	0	2	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	
RCUI103	University Culture I*	0	2	0	1	4		RCUL104	University Culture II*	0	2	0	1	4	
Total Credits		17	4	4	21	33		Total Credits		15	4	6	20	31	

YEAR TWO

3rd Term							4th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
COME205	Data Structures*	2	0	2	3	5	COME102	COME204	Logic Circuits*	3	0	2	4	6	
COME209	Introduction to Signals and Systems*	2	2	0	3	5	MATH101/2	COME206	Object Oriented Programming*	3	0	2	4	6	COME205
COME215	Electronic Circuits*	3	0	2	4	6	PHYS102	COMEXXX	Departmental Elective I	3	0	0	3	5	
MATH203	Differential Equations*	2	2	0	3	5		MATH204	Statistics	3	0	0	3	5	
RPRE104	Entrepreneurship and Project Culture	2	0	0	2	3		TURK104	Turkish Language II	2	0	0	2	2	
TURK103	Turkish Language I	2	0	0	2	2		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		COME284	Summer Practice I**	0	0	0	0	5	
Total Credits		15	4	4	19	28		Total Credits		16	0	4	18	31	

YEAR THREE

5th Term							6th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
COME301	Database Management Systems*	2	0	2	3	5		COME302	Operating Systems	3	0	0	3	5	COME205
COME305	Analysis of Algorithms	3	0	0	3	5	COME205	COME322	Microprocessors*	2	0	2	3	5	COME315
COME315	Computer Architecture	3	0	0	3	5	COME204	COMEXXX	Departmental Elective III (Project Based)	3	0	0	3	5	
COMEXXX	Departmental Elective II (Project Based)	3	0	0	3	5		MATH302	Numerical Analysis	3	0	0	3	6	
XXXXXX	Field Elective I	3	0	0	3	5		COME384	Summer Practice II**	0	0	0	0	5	
XXXXXXXX	Elective (2nd Foreign Language)	3	0	0	3	5		XXXXXX	Social Elective I	3	0	0	3	5	
Total Credits		17	0	2	18	30		Total Credits		14	0	2	15	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
COME413	Computer Networks	3	0	0	3	5		COME492	Graduation Thesis*	0	0	4	2	8	COME491
COME491	Graduation Project	2	0	0	2	7		COMEXXX	Departmental Elective V	3	0	0	3	5	
COMEXXX	Departmental Elective IV	3	0	0	3	5		COMEXXX	Departmental Elective VI	3	0	0	3	5	
XXXXXX	Field Elective II	3	0	0	3	5		XXXXXX	Field Elective IV	3	0	0	3	5	
XXXXXX	Field Elective III	3	0	0	3	5		XXXXXX	Social Elective II	3	0	0	3	5	
Total Credits		14	0	0	14	27		Total Credits		16	0	4	18	32	

Total Course Credits for Graduation	143
Total Course ECTS for Graduation	243
Total Elective Courses ECTS	65
Elective Course Ratio	27%

COME284 Hardware based summer practice
COME384 Software based summer practice
* These courses are under the Applied Course status.
** These courses are under the Internship Course status.

Elective Course - Pool

Departmental Elective Courses							Elective Foreign Languages								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS	Prerequisite
COME214	Programming Languages	3	0	0	3	5		ESP123	Spanish I	3	0	0	3	5	
COME306	Digital Signal Processing	3	0	0	3	5		ESP124	Spanish II	3	0	0	3	5	ESP123
COME309	Web Programming	3	0	0	3	5		CHN123	Chinese I	3	0	0	3	5	
COME310	Real Time Systems	3	0	0	3	5		CHN124	Chinese II	3	0	0	3	5	CHN123
COME311	Data Security	3	0	0	3	5		ARB123	Arabic I	3	0	0	3	5	
COME312	User Interface Design	3	0	0	3	5		ARB124	Arabic II	3	0	0	3	5	ARB123
COME313	Mathematical Modelling	3	0	0	3	5		RSN123	Russian I	3	0	0	3	5	
COME314	Introduction to Control Systems	3	0	0	3	5		RSN124	Russian II	3	0	0	3	5	RSN123
COME317	Intelligent Robotics	2	0	2	3	5		GER123	German I	3	0	0	3	5	
COME318	Computer Graphics	3	0	0	3	5		GER124	German II	3	0	0	3	5	GER123
COME319	Mobile Programming	2	0	2	3	5		FRN123	French I	3	0	0	3	5	
COME324	Visual Programming	2	0	2	3	5		FRN124	French II	3	0	0	3	5	FRN123
COME401	Data Mining	3	0	0	3	5		JAP123	Japanese I	3	0	0	3	5	
COME402	Artificial Neural Networks	3	0	0	3	5		JAP124	Japanese II	3	0	0	3	5	JAP123
COME403	Software Engineering	3	0	0	3	5		ITA123	Italian I	3	0	0	3	5	
COME404	Fuzzy Controllers	3	0	0	3	5		ITA124	Italian II	3	0	0	3	5	ITA123
COME405	Artificial Intelligence	3	0	0	3	5									
COME406	Parallel Computing	3	0	0	3	5									
COME407	Image Processing	3	0	0	3	5									
COME408	Network Security	3	0	0	3	5									
COME409	Automata Theory	3	0	0	3	5									
COME410	Systems Programming	3	0	0	3	5									
COME411	System Analysis and Design	3	0	0	3	5									
COME412	Embedded Systems	3	0	0	3	5									
COME414	Optimization Techniques	3	0	0	3	5									
COME416	Compiler Design	3	0	0	3	5									
COME418	Natural Language Processing	3	0	0	3	5									
COME420	Biomedical and Laboratory Instrumentation	3	0	0	3	5									
COME422	Introduction to Brain Computer Interfaces	3	0	0	3	5									
COME424	Recommender Systems	3	0	0	3	5									

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 any course having appropriate credits from other faculties can be elected.