## Üsküdar University Faculty of Engineering and Natural Sciences Department of Software Engineering 2023-2024 Academic Year

							YEAR O	NE							
	1st Term								2nd Term						
Code	Course Name	T	P	L	С	ECTS	Prerequisite	Code	Course Name	Т	P	L	С	ECTS	Prerequisite
SE101	Introduction to Software Engineering*	2	2	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		PHYS102	Physics II*	3	0	2	4	6	
ENG101	English I	3	0	0	3	3		ENG102	English II	3	0	0	3	3	
RPSC109	Positive Psychology and Communication Skills	3	0	0	3	5		MATH104	Basic Linear Algebra*	2	0	2	3	5	
RCUL101	University Culture I*	0	2	0	1	1		RCUL102	University Culture II*	0	2	0	1	1	
	onversity culture i								onversey culture ii						
<b>Total Credits</b>		17	6	4	22	31		Total Credits		16	4	6	21	29	
							YEAR T	vo							
	3rd Term								4th Term						
Code	Course Name	Т	Р	L	С	ECTS	Prerequisite	Code	Course Name	Т	Р	L	С	ECTS	Prerequisite
SE201	Software Requirements Analysis	3	0	0	3	6	Trerequisite	SE202	Software Design and Architecture	3	0	0	3	6	Trerequisite
COME201	Object Oriented Programming I*	2	0	2	3	4		SE204	Software Construction*	2	0	2	3	5	
COME205	Data Structures*	2	0	2	3	5	COME102	COME202	Object Oriented Programming II*	2	0	2	3	4	
COME207	Computer Architecture	3	0	0	3	4	CONTLIDE	MATH204	Statistics	3	0	0	3	5	
MATH203	Differential Equations*	2	2	0	3	5		TURK102		2	0	0	2		
									Turkish Language II						
TURK101	Turkish Language I	2	0	0	2	3		ATA102	Principles of Atatürk and History of Turkish Revolution-II	2	0	0	2		
ATA101	Principles of Atatürk and History of Turkish Revolution-I	2	0	0	2	3		SE284	Summer Practice I**	0	0	0	0	5	
RPRE104	Entrepreneurship and Project Culture	2	0	0	2	3									
Total Credits		18	2	4	21	33		Total Credits		14	0	4	16	31	
Total Credits		10	-			33							10	31	
							YEAR TH	REE							
	5th Term							6th Term							
Code	Course Name	Т	P	L	С	ECTS	Prerequisite		Course Name	Т	P	L	С		Prerequisite
SE301	Software Validation and Testing*	2	0	2	3	5		SE302	Software Project Management*	2	0	2	3	5	
										-					
COME301	Database Management Systems*	2	0	2	3	5		MATH302	Numerical Analysis	3	0	0	3		
COME301 COME307	Database Management Systems* Operating Systems*	2	0	2	3	5 4		MATH302 XXXXXX						6 5	
									Numerical Analysis	3	0	0	3		
COME307	Operating Systems*	2	0	2	3	4		XXXXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based)	3	0	0	3	5	
COME307 SEXXX	Operating Systems* Departmental Elective I (Project Based)	2	0	0	3	4 5		XXXXXX SEXXX	Numerical Analysis Social Elective II	3 3 3	0	0	3 3	5 5	
COME307 SEXXX XXXXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I	2 3 3 3	0 0 0	0 0 0	3 3 3 3	4 5 5 5		XXXXXX SEXXX XXXXXX SE384	Numerical Analysis Social Elective II Oppartmental Elective II (Project Based) Field Elective II Summer Practice II**	3 3 3 0	0 0 0 0	0 0 0 0	3 3 3 0	5 5 5 5	
COME307 SEXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I	3	0 0	2 0 0	3	4 5 5		XXXXXX SEXXX XXXXXX	Numerical Analysis Social Elective II Oppartmental Elective II (Project Based) Field Elective II Summer Practice II**	3 3 3	0 0 0	0 0	3 3 3	5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I	2 3 3 3	0 0 0	0 0 0	3 3 3 3	4 5 5 5	VEAR	XXXXXX SEXXX XXXXXX SE384 Total Credits	Numerical Analysis Social Elective II Oppartmental Elective II (Project Based) Field Elective II Summer Practice II**	3 3 3 0	0 0 0 0	0 0 0 0	3 3 3 0	5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I	2 3 3 3	0 0 0	0 0 0	3 3 3 3	4 5 5 5	YEAR FO	XXXXXX SEXXX XXXXXX SE384 Total Credits	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**	3 3 3 0	0 0 0 0	0 0 0 0	3 3 3 0	5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I 7th Term	2 3 3 3 15	0 0 0 0	2 0 0 0	3 3 3 3 18	4 5 5 5 5 29		XXXXXX SEXXX XXXXXX SE384 Total Credits UR	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  8th Term	3 3 3 3 0	0 0 0 0	0 0 0 0 0	3 3 3 3 0	5 5 5 5 31	December
COME307 SEXXX XXXXXX XXXXXX Total Credits Code	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  7th Term Course Name	2 3 3 3 15	0 0 0 0	2 0 0 0	3 3 3 3 18	4 5 5 5 5 29		XXXXXX SEXXX XXXXXX SE384 Total Credits DUR	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  8th Term Course Name	3 3 3 3 0 14	0 0 0 0 0	0 0 0 0 0	3 3 3 3 0	5 5 5 5 31	Prerequisite
COME307 SEXXX XXXXXX XXXXXX  Total Credits  Code SE491	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  Social Elective I  Tith Term  Course Name Graduation Project	2 3 3 3 15	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18	4 5 5 5 5 29 ECTS 8		XXXXXXX SEXXX XXXXXX SE384 Total Credits UR Code SE492	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  8th Term  Course Name Graduation Thesis*	3 3 3 3 0 14	0 0 0 0 0 0	0 0 0 0 0 2	3 3 3 3 0 15	5 5 5 5 5 <b>31</b> ECTS	Prerequisite COME 491
COME307 SEXXX XXXXXXX XXXXXX  Total Credits  Code SE491 SEXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Toth Term  Course Name Graduation Project Departmental Elective III	2 3 3 3 15	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18	4 5 5 5 5 29 ECTS 8 5		XXXXXXX SEXXX XXXXXX SE384  Total Credits  UR  Code SE492 SEXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  Course Name Graduation Thesis* Departmental Elective V	3 3 3 0 14 T 0 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4	3 3 3 3 0 15	5 5 5 5 31 ECTS 8 5	
COME307 SEXXX XXXXXXX XXXXXX  Total Credits  Code SE491 SEXXX SEXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  Social Elective I  Tohrem  Course Name Graduation Project Departmental Elective III Departmental Elective III	2 3 3 3 15 T 2 3 3	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 C 2 3 3	4 5 5 5 29 ECTS 8 5		XXXXXXX SEXXX XXXXXXX SE384 Total Credits UR Code SE492 SE492 SEXXX SEXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  String St	3 3 3 0 14 T 0 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0	3 3 3 3 0 15	5 5 5 5 31 ECTS 8 5	
COME307 SEXXX XXXXXX XXXXXX  Total Credits  Code SE491 SEXXX SEXXX SEXXX COME413	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks	2 3 3 3 15 T 2 3 3 3	0 0 0 0 0	2 0 0 0 6	3 3 3 18 C 2 3 3 3	4 5 5 5 5 29 ECTS 8 5 5 5 5		XXXXXXX SEXXX XXXXXXX SE384 Total Credits UR Code SE492 SEXXX SEXXX XXXXXX XXXXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  Course Name Graduation Thesis* Departmental Elective V Departmental Elective VI Field Elective IV	3 3 3 0 14 T 0 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 4 0 0	3 3 3 0 15 C 2 3 3 3	5 5 5 5 5 31 ECTS 8 5 5	
COME307 SEXXX XXXXXXX XXXXXXX  Total Credits  Code SE491 SEXXX SEXXX SEXXX SEXXX XEXXX XXXXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  Social Elective I  Tohrem  Course Name Graduation Project Departmental Elective III Departmental Elective III	2 3 3 3 15 T 2 3 3 3 3	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 C 2 3 3 3 3	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		XXXXXX SEXXX XXXXXX SE384 Total Credits UR Code SE492 SEXXX SEXXX SEXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  String St	3 3 3 0 14 T 0 3 3 3 3	0 0 0 0 0 0	0 0 0 0 2 2 L 4 0 0	3 3 3 3 0 15 C 2 3 3 3 3	5 5 5 5 5 31 ECTS 8 5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX  Total Credits  Code SE491 SEXXX SEXXX SEXXX COME413	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks	2 3 3 3 15 T 2 3 3 3	0 0 0 0 0	2 0 0 0 6	3 3 3 18 C 2 3 3 3	4 5 5 5 5 29 ECTS 8 5 5 5 5		XXXXXXX SEXXX XXXXXXX SE384 Total Credits UR Code SE492 SEXXX SEXXX XXXXXX XXXXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice II**  Course Name Graduation Thesis* Departmental Elective V Departmental Elective VI Field Elective IV	3 3 3 0 14 T 0 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 4 0 0	3 3 3 0 15 C 2 3 3 3	5 5 5 5 5 31 ECTS 8 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I  Social Elective I  Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks Field Elective III	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXXX  Total Credits  Code SE491 SEXXX SEXXX SEXXX SEXXX XEXXX XXXXXX XXXXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I  Social Elective I  Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks Field Elective III	2 3 3 3 15 T 2 3 3 3 3	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 C 2 3 3 3 3	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		XXXXXX SEXXX XXXXXX SE384 Total Credits UR Code SE492 SEXXX SEXXX SEXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXX	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3	0 0 0 0 0 0	0 0 0 0 2 2 L 4 0 0	3 3 3 3 0 15 C 2 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I  Social Elective I  Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks Field Elective III	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0	2 0 0 0 0 6 8 L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0	2 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6 8 L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXXX XXXXXX Total Credits  Code SE491 SEXXX SEXXX COME413 XXXXXX OHS401	Operating Systems* Operating Systems* Operating Systems* Operating Systems* Social Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective III Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation Total Theoretical Hours	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX XXXXXX XXXXX XXXXX XXXX	Operating Systems* Operating Systems* Operating Systems* Social Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective III Departmental Elective III Operating Systems Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation Total Theoretical Hours Total Tractice Hours Total Total Elective Hours Total Total Elective III Total Course Credits for Graduation Total Tractice Hours Total Total Course Tractice Hours Total Total Tractice Hours Total Total Tractice Hours	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX XXXXXX XXXXX XXXXX XXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective II Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation Total Theoretical Hours Total Practice Hours Total Laboratory Hours	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6 <b>L</b> 0 0 0 0 0 0 0 0 0	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX XXXXXX XXXXX XXXXX XXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I  Social Elective I  Social Elective I  Social Elective I  Course Name Graduation Project Departmental Elective III Departmental Elective III Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation Total Theoretical Hours Total Laboratory Hours Total Laboratory Hours Total Elective Courses ECTS Total Elective Courses ECTS	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	
COME307 SEXXX XXXXXX XXXXXX XXXXXX XXXXX XXXXX XXXX	Operating Systems* Departmental Elective I (Project Based) Field Elective I Social Elective I Social Elective I  Course Name Graduation Project Departmental Elective II Departmental Elective III Departmental Elective IV Computer Networks Field Elective III Occupational Health and Safety I  Total Course Credits for Graduation Total Theoretical Hours Total Practice Hours Total Laboratory Hours	2 3 3 3 15 T 2 3 3 3 3 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 6 <b>L</b> 0 0 0 0 0 0 0 0 0	3 3 3 3 18 18 C 2 3 3 3 3 3 2	4 5 5 5 5 29 ECTS 8 5 5 5 5 5 2		XXXXXX SEXXX XXXXXX SE384  Total Credits UR  Code SE492 SEXXX SEXXX XXXXX XXXXX XXXXX OHS402	Numerical Analysis Social Elective II Departmental Elective II (Project Based) Field Elective II Summer Practice III**  Summer Practice III**  Sth Term  Course Name Graduation Thesis* Departmental Elective V Departmental Elective V Departmental Elective VI Field Elective IV Social Elective III	3 3 3 0 14 T 0 3 3 3 3 3	0 0 0 0 0	0 0 0 0 0 2 2 L 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 5 5 5 31 ECTS 8 5 5 5 5 5	

	Total Course Credits for Graduation	145
	Total Theoretical Hours	124
	Total Practice Hours	12
2023-2024	Total Laboratory Hours	30
	Total Course ECTS for Graduation	244
	Total Elective Courses ECTS	65
	Elective Course Ratio	26,64

Elective Course Pool														
Departmental Elective Courses	т	Р	L	С	ECTS	Prerequisite		Social Elective Courses (Foreign Languages)	т	Р	L	С	ECTS	Prerequisite
SE303 Software Quality Assurance	3	0	0	3	5			ARB123 Arabic I	3	0	0	3	5	
SE305 Algorithms and Optimization Methods (Project Based)	3	0	0	3	5			ARB124 Arabic II	3	0	0	3	5	ARB123
COME309 Web Programming	3	0	0	3	5			CHN123 Chinese I	3	0	0	3	5	
SE304 Software Engineering Ethics	3	0	0	3	5			CHN124 Chinese II	3	0	0	3	5	CHN123
SE306 Large Scale Software Development (Project Based)	3	0	0	3	5			ESP123 Spanish I	3	0	0	3	5	
COME304 Visual Programming	3	0	0	3	5			ESP124 Spanish II	3	0	0	3	5	ESP123
COME308 Mobile Programming	3	0	0	3	5			FRN123 French I	3	0	0	3	5	
SE401 Human-Computer Interaction	3	0	0	3	5			FRN124 French II	3	0	0	3	5	FRN123
SE403 Computer Games and Simulation	3	0	0	3	5			GER123 German I	3	0	0	3	5	
SE405 Rapid Application Development	3	0	0	3	5			GER124 German II	3	0	0	3	5	GER123
COME311 Data Security	3	0	0	3	5			RSN123 Russian I	3	0	0	3	5	
SE407 Knowledge Engineering	3	0	0	3	5			RSN124 Russian II	3	0	0	3	5	RSN123
SE409 System Modeling and Simulation (Project Based)	3	0	0	3	5									
SE402 Formal Methods in Software Engineering	3	0	0	3	5									
SE404 Agile Methods in Software Development	3	0	0	3	5									
SE406 Emerging Technologies (Project Based)	3	0	0	3	5									
SE408 Analysis and Design of User Interfaces	3	0	0	3	5									
COME410 Systems Programming	3	0	0	3	5									
COME416 Compiler Design	3	0	0	3	5									
SE412 Software and Systems Security	3	0	0	3	5									
COME408 Network Security	3	0	0	3	5									
COME305 Analysis of Algorithms	3	0	0	3	5									
COME306 Digital Signal Processing	3	0	0	3	5									
SE413 Data Mining and Applications (Project Based)	3	0	0	3	5									
SE414 Artificial Intelligence and Applications (Project Based)	3	0	0	3	5									
COME407 Image Processing	3	0	0	3	5					-				
SE307 Programming with Python	3	0	0	3	5					-				
SE415 Semantic Web Technologies	3	0	0	3	5					-				
SE308 Metaverse Technologies And Applications (Project Based)	3	0	0	3 5 For Field Elective courses, any departmental elective course having appropriate credits from other		m other								
SE410 Theoretical and Computational Neuroscience		0	0	3	5			departments of Faculty of Engineering and N						ouici
								İ						
								For Social Elective courses, either foreign language course of	cours	e havin	g appr	opriate	credits	from other
							faculties can be elec				O . PP.			
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