

Üsküdar University Faculty of Engineering and Natural Sciences Department of Chemical Engineering 2022-2023 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
PHYS101	Physics I*	3	0	2	4	6		PHYS102	Physics II*	3	0	2	4	6
MATH101	Calculus I*	3	2	0	4	6		MATH102	Calculus II*	3	2	0	4	6
CHEM101	General Chemistry I*	3	0	2	4	6		CHEM102	General Chemistry II*	3	0	2	4	6
CHE105	Computer Aided Engineering Graphics*	2	0	2	3	4		CHE102	Introduction to Chemical Engineering	3	0	0	3	4
PSYC109	Positive Psychology and Communication Skills	3	0	0	3	5		MIBI104	General Biology*	2	0	2	3	4
RCUL101	University Culture I*	0	2	0	1	1		RCUL102	University Culture II*	0	2	0	1	1
TURK101	Turkish Language I	2	0	0	2	3		TURK102	Turkish Language II	2	0	0	2	3
Total Credits		16	4	6	21	31		Total Credits		16	4	6	21	30
YEAR TWO														
3rd Term						4th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS
CHE201	Mass and Energy Balances	3	2	0	4	5		CHE204	Chemical Engineering Thermodynamics *	4	2	0	3	5
CHE221	Introduction to Programming for Chemical Engineers**	2	0	2	3	4		CHE206	Fluid Mechanics and Applications	3	0	0	3	5
CHEM203	Physical Chemistry	3	0	0	3	4		CHE292	Summer Practice I**	0	0	0	0	5
MATH203	Differential Equations	2	2	0	3	5		CHEM104	Organic Chemistry*	3	0	2	4	6
ENRE104	Entrepreneurship and Project Culture	2	0	0	2	3		MATH104	Statistics	3	0	0	3	5
ATA101	Principles of Atatürk and History of Turkish Revolution I	2	0	0	2	3		ATA102	Principles of Atatürk and History of Turkish Revolution II	2	0	0	2	3
ENGL102	English II	3	0	0	3	3		ENGL102	English II	3	0	0	3	3
XXXXX	Social Elective I	3	0	0	3	5		Total Credits		16	2	2	18	32
Total Credits		20	4	2	23	32								
YEAR THREE														
5th Term						6th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS
CHE301	Heat Transfer	3	0	0	3	5		CHE310	Mass Transfer	3	0	0	3	5
CHE307	Chemical Reaction Engineering- I*	2	2	0	3	5		CHE312	Chemical Reaction Engineering- II*	2	2	0	3	5
EE111	Engineering Economics	3	0	0	3	4		CHE330	Chemical Engineering Laboratory I*	1	0	4	3	4
CHEXXX	Departmental Elective I (Project Based)	3	0	0	3	5		CHE392	Summer Practice II**	0	0	0	0	5
XXXXX	Social Elective II	3	0	0	3	5		CHEXXX	Departmental Elective II (Project Based)	3	0	0	3	5
XXXXX	Field Elective I	3	0	0	3	5		XXXXXX	Social Elective III	3	0	0	3	5
Total Credits		17	2	0	18	29		Total Credits		12	2	4	15	29
YEAR FOUR														
7th Term						8th Term								
Code	Course Name	T	P	L	C	ECTS	Prerequisite	Code	Course Name	T	P	L	C	ECTS
CHE401	Graduation Project*	2	2	0	3	5		CHE492	Graduation Thesis**	1	3	0	5	5
CHE403	Chemical Process Control	3	0	0	3	5		CHEXXX	Departmental Elective V	3	0	0	3	5
CHE421	Mathematical Modeling for Chemical Engineering	3	0	0	3	5		CHEXXX	Departmental Elective VI	3	0	0	3	5
CHE431	Chemical Engineering Laboratory II*	1	0	4	3	4		XXXXXX	Field Elective II	3	0	0	3	5
CHEXXX	Departmental Elective III	3	0	0	3	5		XXXXXX	Field Elective III	3	0	0	3	5

CHE449	Engineering Thermodynamics	3	0	0	3	5	CHE204
CHE453	Chemical Technology	3	0	0	3	5	
CHE455	Gas Purification Technology	3	0	0	3	5	
CHE457	Recycling Technology	3	0	0	3	5	
CHE460	Energy Management	3	0	0	3	5	
CHE433	Chemical Engineering Design - I	3	0	0	3	5	
CHE434	Chemical Engineering Design - II	3	0	0	3	5	CHE433

Important notes to be taken into consideration before registrations
1) Both chemical and chemical & biological engineering students will follow the same program, starting from CHE433
2) Major and minor applications will only be accepted towards chemical engineering, starting from CHE433