

EĞİTİMDE REVİZYON KAPSAMINDA ÖNERİLEN LİSANS PROGRAMI

OMU CHEMICAL ENGINEERING DEPARTMENT
UNDERGRADUATE COURSES (2022-2023)

1. YEAR	1. Semester Courses							2. Semester Courses								
	Code	Course Name	T	P	L	C	ECTS	PR	Code	Course Name	T	P	L	C	ECTS	PR
	KMB107	Computer Programming	2	2	0	3	4		TBMAT114	Calculus II	2	2	0	3	5	
	KMB109	Introduction to Chemical Engineering	1	0	0	1	3		TBKİM116	Chemistry II	3	0	2	4	6	
	TBKİM115	Chemistry I	3	0	2	4	6		KMB106	Computer Aided Technical Drawing	2	2	0	3	5	
	SSD1	Social Elective Course I	2	0	0	2	2		TBFİZ124	Physics II	3	0	2	4	6	
	TBFİZ123	Physics I	3	0	2	4	6		KMB108	Scientific Research Methods and Ethics	1	2	0	2	4	
	TBMAT113	Calculus I	2	2	0	3	5		ATİ102	Principles of Atatürk and History of Revolution II	2	0	0	2	2	
	ATİ101	Principles of Atatürk and History of Revolution I	2	0	0	2	2		YD114	Foreign Language-II	1	2	0	2	2	
	YD113	Foreign Language-I	1	2	0	2	2									
	TOTAL		16	6	4	21	30		TOTAL		14	8	4	20	30	
2. YEAR	3. Semester Courses							4. Semester Courses								
	Code	Course Name	T	P	L	C	ECTS	PR	Code	Course Name	T	P	L	C	ECTS	PR
	KMB201	Physical Chemistry	3	0	0	3	5		KMB202	Engineering Numerical Methods	3	0	0	3	5	
	KMB203	Chemical Process Calculations	4	0	0	4	5		KMB258	Fluid Mechanics	3	0	0	3	6	TBMAT113 TBMAT114
	KMB205	Engineering Statistical Methods	2	0	0	2	3		KMB260	Material Science	2	0	0	2	4	
	KMB215	Organic Chemistry	3	0	2	4	5		KMB262	Analytical Chemistry	2	0	2	3	5	
	KMB217	Differential Equations	3	0	0	3	4		İSG102	Occupational Health and Safety II	2	0	0	2	2	
	İSG101	Occupational Health and Safety I	2	0	0	2	2		TDİ102	Turkish Language II	2	0	0	2	2	
	TDİ101	Turkish Language I	2	0	0	2	2		YDİ214	Advanced English II	2	2	0	3	4	
	YDİ213	Advanced English I	2	2	0	3	4		SSD2	Social Elective Course II	2	0	0	2	2	
	TOTAL		21	2	2	23	30		TOTAL		18	2	2	20	30	
3. YEAR	5. Semester Courses							6. Semester Courses								
	Code	Course Name	T	P	L	C	ECTS	PR	Code	Course Name	T	P	L	C	ECTS	PR
	KMB343	Mass Transfer	3	0	0	3	4		KMB332	Chemical Reaction Engineering	4	0	0	4	6	
	KMB345	Labor Law	2	0	0	2	3		KMB334	Engineering Economics	2	0	0	2	3	
	KMB305	Chemical Engineering Laboratory I	0	0	4	2	5		KMB338	Separation Processes	3	0	0	3	5	
	MUH301	Entrepreneurship and Innovation	2	0	0	2	5		KMB310	Chemical Engineering Laboratory II	0	0	4	2	5	
	KMB309	Heat Transfer	3	0	0	3	5	KMB258	KMB314	Chemical Engineering Thermodynamics	3	0	0	3	6	KMB311
	KMB311	Thermodynamics	3	0	0	3	5	KMB201	KMB340	Mathematical Modelling in Chemical Engineering	3	0	0	3	5	KMB217
	KMB349	Instrumental Analysis	1	0	2	2	3		KMB336	Summer Practice	0	0	0	0	10	
	TOTAL		14	0	6	17	30		TOTAL		15	0	4	17	30	
4. YEAR	7. Semester Courses							8. Semester Courses								
	Code	Course Name	T	P	L	C	ECTS	PR	Code	Course Name	T	P	L	C	ECTS	PR
	KMB401	Process Control	3	0	0	3	4		KMB412	Chemical Engineering Design II	1	4	0	3	4	KMB437
	KMB437	Chemical Engineering Design I	1	4	0	3	5	KMB343 KMB309 KMB314	KMB492	Graduation Project*	1	2	0	2	6	
	KMB405	Chemical Engineering Laboratory III	0	0	4	2	3			ELECTIVE COURSE 4	3	0	0	3	4	
	KMB439	Chemical Technologies	3	0	0	3	4			ELECTIVE COURSE 5	3	0	0	3	4	
		ELECTIVE COURSE 1	3	0	0	3	4			ELECTIVE COURSE 6	3	0	0	3	4	
		ELECTIVE COURSE 2	3	0	0	3	5			ELECTIVE COURSE 7	3	0	0	3	4	
		ELECTIVE COURSE 3	3	0	0	3	5			ELECTIVE COURSE 8	3	0	0	3	4	
									KMB500	Professional Practice Program**	6	24	0	18	30	
									KMB504	Industrial Practice (4 Elective Course (4,5,6,7))***	0	24	0	12	16	
	TOTAL		16	4	4	20	30		TOTAL		17	6	0	20	30	
	ELECTIVE COURSE 1							ELECTIVE COURSE 4								
	KMB445	Total Quality Assurance in Chemical Industry (EC 1)	3	0	0	3	4		KMB438	Fundamentals of Electrochemical Engineering (EC 4)	3	0	0	3	4	
	KMB447	Chemical Safety (EC 1)	3	0	0	3	4		KMB458	Transport Phenomena (EC 4)	3	0	0	3	4	
	KMB449	Energy Technologies (EC 1)	3	0	0	3	4		KMB460	Nanotechnology (EC 4)	3	0	0	3	4	
	KMB459	Nanoadsorbents for Water Treatment (EC 1/New)	3	0	0	3	4		KMB462	Composite Materials (EC 4)	3	0	0	3	4	
									KMB464	Computer Controlled Processes in Chemical Engineering (EC 4)	3	0	0	3	4	
	ELECTIVE COURSE 2							ELECTIVE COURSE 5								
	KMB461	Nuclear Power Reactors (EC 2)	3	0	0	3	5									
	KMB463	Colloid Chemistry (EC 2)	3	0	0	3	5									
	KMB465	Academic English (EC 2)	3	0	0	3	5									
	KMB467	Linear Algebra Applications in Engineering (EC 2)	3	0	0	3	5		KMB468	Polymer Chemistry and Technology (EC 5)	3	0	0	3	4	
	KMB469	Biocatalysts (EC 2)	3	0	0	3	5		KMB470	Catalysis and Catalytic Processes (EC 5)	3	0	0	3	4	
									KMB472	Basis of Industrial Wastewater and Treatment (EC 5)	3	0	0	3	4	
									KMB474	Anorganic Chemistry (EC 5)	3	0	0	3	4	
									KMB484	Pharmaceutical Chemistry (EC 5)	3	0	0	3	4	
	ELECTIVE COURSE 3							ELECTIVE COURSE 6								
	KMB473	New and Renewable Energy Sources (EC 3)	3	0	0	3	5		KMB466	Drug Delivery Systems (EC 6)	3	0	0	3	4	
	KMB475	Boron Technology (EC 3)	3	0	0	3	5		KMB476	Organic Technology (EC 6)	3	0	0	3	4	
	KMB477	Introduction to Polymer (EC 3)	3	0	0	3	5		KMB478	Ceramic Chemistry (EC 6)	3	0	0	3	4	
	KMB441	Chemical Plants and Environmental Safety (EC 3)	3	0	0	3	5		KMB480	Plastics Recycling (EC 6)	3	0	0	3	4	
									KMB482	Petroleum Technology (EC 6)	3	0	0	3	4	
									ELECTIVE COURSE 7							
									KMB442	Plant Organization (EC 7)	3	0	0	3	4	
									KMB444	Chemical Enrichment Technology (EC 7)	3	0	0	3	4	
									KMB446	Bioreaction Engineering (EC 7)	3	0	0	3	4	
									KMB450	Occupational Health and Safety in Chemistry Industry (EC 7)	3	0	0	3	4	
									ELECTIVE COURSE 8							
									KMB428	Reactor Design (EC 8)	3	0	0	3	4	
									KMB430	Novel Separation Technologies (EC 8)	3	0	0	3	4	
									KMB490	Technical Report Preparation and Presentation (EC 8)	3	0	0	3	4	
									KMB456	Integrated Waste Management in Chemical Industry (EC 8)	3	0	0	3	4	
									KMB448	Conceptual Design of Chemical Processes (EC 8)	3	0	0	3	4	
									KMB452	Fuel Cell Theory and Applications (EC 8)	3	0	0	3	4	
									KMB454	Coal Technology (EC 8)	3	0	0	3	4	
*Graduation Project may be opened during the fall semester for the 9th and the upper semester students.																
**According to PPP, students are exempt from 8. semester courses.																
***Students who are registered to Industrial Practice course must not register to Elective 4, Elective 5, Elective 6 and Elective 7 courses.																
(a)-Total General Credits: 158							(c)-Total ECTS Credits: 240									
(b)-Total Elective Courses Credits: 28							(d)-Total Elective Courses ECTS Credits: 38									
Elective Courses [(b)/(a)] (%): 18							Elective Courses [(d)/(c)] (%): 16									
(c)-Total General Credits (excluding 5-i courses): 136							Practical Courses (%): 42									