

OMU FOOD ENGINEERING DEPARTMENT
UNDERGRADUATE EDUCATION CURRICULUM (2022–2023)

1st YEAR	1st Semester Courses								2nd Semester Courses							
	Code	Course Name	T	U	L	C	ECTS	Prereq	Code	Course Name	T	U	L	C	ECTS	Prereq
	TBFİZ123	Physics I	3	0	2	4	6		TBFİZ124	Physics II	3	0	2	4	6	
	TBMAT113	Mathematics I	2	2	0	3	5		TBMAT114	Mathematics II	2	2	0	3	5	
	TBKİM113	General Chemistry	3	0	2	4	6		GMB110	Analytical Chemistry	2	0	2	3	7	
	TBBİO121	Biology	2	0	0	2	3		GMB112	Organic Chemistry	2	0	0	2	5	
	GMB101	Computer-Aided Drawing	1	2	0	2	3		GMB106	Introduction to Food Engineering	2	0	0	2	3	
	GMB105	Computer Applications in Engineering	1	2	0	2	3		ATİ102	Atatürk's Principles and History of Reforms II	2	0	0	2	2	
	YD113	Foreign Language I	1	2	0	2	2		YD114	Foreign Language II	1	2	0	2	2	
	ATİ101	Atatürk's Principles and History of Reforms I	2	0	0	2	2									
	TOTAL	15	8	4	21	30			TOTAL	14	4	4	18	30		
3rd Semester Courses								4th Semester Courses								
2nd YEAR	Code	Course Name	T	U	L	C	ECTS	Prereq	Code	Course Name	T	U	L	C	ECTS	Prereq
	GMB201	Food Chemistry I	2	0	0	2	3		GMB202	Food Chemistry II	2	0	0	2	3	
	GMB205	Differential Equations	3	0	0	3	4		GMB206	General Microbiology	2	0	2	3	4	
	GMB207	Mass and Energy Balances	3	0	0	3	5		GMB216	Statistical Methods in Engineering	2	0	0	2	3	
	GMB209	Fluid Mechanics	3	0	0	3	4		GMB218	Heat and Mass Transfer	3	0	0	3	4	
	GMB211	Thermodynamics	3	0	0	3	4		GMB212	Biochemistry	2	0	0	2	3	
	TDİ101	Turkish Language I	2	0	0	2	2		İSG102	Occupational Health and Safety II	2	0	0	2	2	
	YDİ213	Advanced English I	2	2	0	3	4		TDİ102	Turkish Language II	2	0	0	2	2	
	İSG101	Occupational Health and Safety I	2	0	0	2	2		YDİ214	Advanced English II	2	2	0	3	4	
	SSD1	Social Elective I	2	0	0	2	2		SSD2	Social Elective II	2	0	0	2	2	
		TOTAL	22	2	0	23	30			TOTAL	21	2	2	23	30	
									TECHNICAL ELECTİVES-2							
									GMB240	Food Additives (TE 2)	2	0	0	2	3	
									GMB242	Materials Science (TE 2)	2	0	0	2	3	
									GMB244	Traditional Foods (TE 2)	2	0	0	2	3	
3rd YEAR	5th Semester Courses								6th Semester Courses							
	Code	Course Name	T	U	L	C	ECTS	Prereq	Code	Course Name	T	U	L	C	ECTS	Prereq
	GMB301	Food Microbiology	3	0	2	4	5		GMB306	Fruit and Vegetable Technology	3	0	2	4	6	
	GMB309	Reaction Kinetics	2	0	0	2	3		GMB324	Meat Technology	3	0	2	4	6	
	GMB311	Instrumental Food Analysis	1	0	2	2	4		GMB318	Basic Operations in Food Engineering II	3	2	0	3	6	
	GMB313	Basic Operations in Food Engineering I	2	2	0	3	6		GMB320	Oil Technology	3	0	2	4	6	
	MUH301	Entrepreneurship and Innovation	2	0	0	2	5			Technical Elective-5	2	0	0	2	3	
		Technical Elective-3	2	0	2	3	4			Technical Elective-6	2	0	0	2	3	
		Technical Elective-4	2	0	0	2	3		GMB334	Internship *	0	0	0	0	10	
		TOTAL	14	2	6	18	30			TOTAL	15	2	6	19	30	
	TECHNICAL ELECTİVES-3								TECHNICAL ELECTİVES-5							
	GMB341	Physical Properties of Foods	2	0	2	3	4		GMB340	Food Safety Systems	2	0	0	2	3	
	GMB343	Sensory Analysis	2	0	2	3	4		GMB342	Food Laws and Regulations	2	0	0	2	3	
	GMB345	Alcoholic Beverages Technology	2	0	2	3	4		GMB344	Food Plant Management	2	0	0	2	3	
	TECHNICAL ELECTİVES-4								TECHNICAL ELECTİVES-6							
GMB347	Food Packaging	2	0	0	2	3		GMB346	Tea Technology	2	0	0	2	3		
GMB349	Food Machinery and Equipment	2	0	0	2	3		GMB348	Fruit and Vegetable Juice Technology	2	0	0	2	3		

	GMB351	Engineering Economics	2	0	0	2	3		GMB350	Raw Materials of the Food Industry	2	0	0	2	3	
4th YEAR	7th Semester Courses								8th Semester Courses							
	Code	Course Name	T	U	L	C	ECTS	Prereq	Code	Course Name	T	U	L	C	ECTS	Prereq
	GMB411	Dairy Technology	3	0	2	4	6		GMB400	Graduation Project	1	2	0	2	6	
	GMB413	Cereal Technology	3	0	2	4	6		GMB410	Process Control	2	0	0	2	6	
	GMB415	Design in Food Engineering	2	2	0	3	6			Technical Elective-10	2	0	0	2	4	
	GMB419	Food Law and Ethics	2	0	0	2	3			Technical Elective-11	2	0	0	2	6	
		Technical Elective-7	2	0	0	2	3			Technical Elective-12	2	0	0	2	4	
		Technical Elective-8	2	0	0	2	3			Technical Elective-13	2	0	0	2	4	
		Technical Elective-9	2	0	0	2	3			TOTAL	11	2	2	13	30	
		TOTAL	16	2	4	19	30		GMB504	Vocational Practice Program **	11	2	2	13	30	
	TECHNICAL ELECTIVES-7								TECHNICAL ELECTIVES-10							
	GMB441	Problem-Solving Techniques in the Food Industry	2	0	0	2	3		GMB446	Poultry Meat and Egg Technology	2	0	0	2	4	
	GMB443	Food Preservation Techniques	2	0	0	2	3		GMB448	Fishery Products Processing Technology	2	0	0	2	4	
	GMB445	Institutional Foodservice Systems	2	0	0	2	3		GMB464	New Food Processing Technologies	2	0	0	2	4	
	TECHNICAL ELECTIVES-8								TECHNICAL ELECTIVES-11							
	GMB447	Principles of Nutrition	2	0	0	2	3		GMB452	Fermented Dairy Products Technology	2	0	2	3	6	
	GMB449	Functional Foods and Nutraceuticals	2	0	0	2	3		GMB454	Hygiene and Sanitation in the Food Industry	2	0	2	3	6	
	GMB451	Toxic Components in Foods	2	0	0	2	3		GMB456	Acidic Fermented Foods Technology	2	0	2	3	6	
	TECHNICAL ELECTIVES-9								TECHNICAL ELECTIVES-12							
	GMB453	Food Biotechnology	2	0	0	2	3		GMB458	Professional Development and Career Planning	2	0	0	2	4	
	GMB455	Food Industry Waste Management	2	0	0	2	3		GMB460	Sugar and Sugar Products Technology	2	0	0	2	4	
	GMB457	Fat Technology	2	0	0	2	3		GMB462	Product Development in Food Engineering	2	0	0	2	4	
									TECHNICAL ELECTIVES-13							
									GMB466	Foodborne Pathogens	2	0	0	2	4	
									GMB468	Concentrated Dairy Products	2	0	0	2	4	
									GMB470	Thermal Processing in Fruit and Vegetable Technology	2	0	0	2	4	
(*) Internship is 30 working days.																
(**) A student who successfully completes the Vocational Practice Program (VPP) is considered EXEMPT from all 8th-semester courses.																
(a)–Total National Credit Sum:						154			(d)–Total ECTS Credit Sum:						240	
(b)–National Credit Sum of Elective Courses:						30			(e)–ECTS Credit Sum of Elective Courses:						47	
Elective Ratio (b)to(a)(b) to (a)(b)to(a) (%):						19			Elective Ratio (d)to(e)(d) to (e)(d)to(e) (%):						20	
(c)–Total National Credit Sum (Excluding 5–I Courses):						125			Practical Course Ratio (%)						54	

12.09.2022
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