



**ULUDAĞ UNIVERSITY
INSTITUTE of SCIENCE**

2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF

FOOD ENGINEERING

DEPARTMENT / PROGRAM

Master's Program

COURSE STAGE	I. TERM / FALL							II. TERM / SPRING								
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	GMB5191	MA THESIS I	C	0	1	0	0	1	GMB5192	MA THESIS II	C	0	1	0	0	1
	GMB5001	SAFE FOOD PROCESSING TECHNIQUES	C	3	0	0	3	6	GMB5171	SEMINAR (CLASS)	C	0	2	0	0	5
	GMB5003	INSTRUMENTAL FOOD ANALYSIS TECHNIQUES	C	3	0	0	3	6	GMB5002	ADVANCED FOOD MICROBIOLOGY	C	2	0	2	3	7
	GMB5181	ADVANCED TOPICS IN M.Sc. THESIS I	E	4	0	0	0	5	GMB5182	ADVANCED TOPICS IN M.Sc. THESIS II	E	4	0	0	0	5
	GMB5011	INDUSTRIAL FOOD PROCESS ENGINEERING	E	3	0	0	3	6	GMB5010	DRYING TECHNIQUES OF FOODS	E	3	0	0	3	6
	GMB5013	INDUSTRIAL FRUIT JUICE PRODUCTION TECHNOLOGY	E	2	0	2	3	6	GMB5012	INDUSTRIAL CANNING TECHNOLOGY	E	2	0	2	3	6
	GMB5015	CHEMISTRY AND TECHNOLOGY OF EDIBLE FATS AND OILS	E	3	0	0	3	6	GMB5014	CHEMICAL MICROBIOLOGY	E	3	0	0	3	6
	GMB5017	CEREAL CHEMISTRY	E	2	0	2	3	6	GMB5016	FERMENTED CEREAL PRODUCTSTECHNOLOGIES	E	2	0	2	3	6
	GMB5019	TECHNOLOGY OF BISCUIT, CRACKER AND CAKE	E	2	0	2	3	6	GMB5018	PASTA AND NOODLE TECHNOLOGY	E	2	0	2	3	6
	GMB5021	STARTER PRODUCTION AND USE IN FOOD INDUSTRY	E	2	0	2	3	6	GMB5020	SAFETY, MICROBOLOGY AND CHEMISTRY OF FOODS	E	3	0	0	3	6
	GMB5023	IDENTIFICATION OF MICROORGANISMS CAUSING SPOILAGE IN FOODS	E	2	0	2	3	6	GMB5022	TECHNIQUES APPLIED IN FOOD PACKAGING	E	3	0	0	3	6
	GMB5025	MICROBIAL PROCESS TECHNOLOGY	E	3	0	0	3	6	GMB5024	COMMUNITY NUTRITION	E	3	0	0	3	6
	GMB5027	FOOD SANITATION	E	3	0	0	3	6	GMB5026	FUNCTIONAL FOODS AND NUTRACEUTICALS	E	3	0	0	3	6
	GMB5029	INDUSTRIAL FRUIT WINES TECHNOLOGY	E	2	0	2	3	6	GMB5028	WHISKY AND COGNAC PRODUCTION	E	2	0	2	3	6
	GMB5031	ENZYMES IN FOOD INDUSTRY	E	2	0	2	3	6	GMB5030	FOOD AROMA AND AROMA CHEMISTRY	E	2	0	2	3	6
	GMB5033	MALT AND BEER TECHNOLOGY	E	2	0	2	3	6	GMB5032	DAIRY PROCESSING TECHNOLOGY	E	2	0	2	3	6
	GMB5035	PROCEES DESIGN AND EVALUATION	E	3	0	0	3	6	GMB5034	FORTIFICATION OF FOODS WITH MINERALS AND BIOAVAILABILITY	E	3	0	0	3	6
	GMB5037	PHYSICS AND CHEMISTRY OF MILK AND DAIRY PRODUCTS	E	2	0	2	3	6	GMB5036	SHELFLIFE OF FOODS	E	3	0	0	3	6
	GMB5039	TRACE ELEMENTS IN FOODS	E	3	0	0	3	6	GMB5038	PROBIOTIC BACTERIA AND PROBIOTICS	E	2	0	2	3	8

	GMB5041	ALTERNATIVE PRESERVATION TECHNIQUES IN DAIRY SCIENCE	E	3	0	0	3	6										
	GMB5043	MOLECULAR APPLICATIONS IN FOOD ENGINEERING	E	2	0	2	3	6	GMB5040	MODIFIED ATMOSPHERE PACKAGING OF FOOD	E	3	0	0	3	6		
	GMB5045	ASEPTIC PACKAGING TECHNOLOGY	E	3	0	0	3	6	GMB5042	GASTRONOMY AND FOOD HISTORY	E	3	0	0	3	6		
									GMB5044	YEASTS and BIOTECHNOLOGICAL APPLICATIONS OF YEASTS	E	3	0	0	3	6		
	GMB5047	CORN PRODUCTS AND SWEETENERS	E	3	0	0	3	6										
	GMB5049	INVESTMENT PROJECT PREPARATION, EVALUATION AND MONITORING METHODS IN FOOD INDUSTRY	E	3	0	0	3	6										
	GMB5051	RHEOLOGY AND TEXTURE OF DAIRY PRODUCTS	E	3	0	0	3	6										
	TOTAL Credits							12	30	TOTAL Credits							9	30
THESIS STAGE	III. TERM / FALL								IV. TERM / SPRING									
	GMB5173	SEMINAR (THESIS)	C	0	2	0	0	5	GMB51824	ADVANCED TOPICS IN M.Sc. THESIS IV	C	4	0	0	0	5		
	GMB5183	ADVANCED TOPICS IN M.Sc. THESIS III	C	4	0	0	0	5	GMB5194	MA. THESIS IV	C	0	1	0	0	25		
	GMB5193	MA THESIS III	C	0	1	0	0	20										
	TOTAL Credits							0	30	TOTAL Credits							0	30
TOTAL CREDITS: 21 - TOTAL ECTS: 120																		

Not: The student is expected to take a TOTAL of 7 or 8 credited at least 4 elective courses every academic term.

The student have the option of choosing one selective course from another department with the endorsement of the supervisor.



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DEPARTMENT OF		FOOD ENGINEERING														
DEPARTMENT / PROGRAM		Doctorate Program														
COURSE STAGE	I. TERM / FALL								II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	GMB6191	PHD THESIS CONSULTING I	C	0	1	0	0	1	GMB6192	PHD THESIS CONSULTING II	C	0	1	0	0	1
	GMB6001	ADVANCED STERILISATION TECHNIQUES	C	3	0	0	3	5	GMB6172	SEMINAR (CLASS)	C	0	2	0	0	4
	ENS6001	RESEARCH METHODS	C	2	0	0	2	4								
	GMB6181	ADVANCED TOPICS IN PHD THESIS I	E	4	0	0	0	5	GMB6182	ADVANCED TOPICS IN PHD THESIS II	E	4	0	0	0	5
	GMB6009	CLARIFICATION AND FILTRATION TECHNIQUES	E	3	0	0	3	5	GMB6008	FOOD PRESERVATION TECHNOLOGY	E	3	0	0	3	5
	GMB6011	HYDROGENATION OF FATS AND MARGARINE TECHNOLGY	E	3	0	0	3	5	GMB6010	LIPIDS	E	3	0	0	3	5
	GMB6013	CHEMISTRY AND TECHNOLOGY OF STARCH	E	2	0	2	3	5	GMB6012	STATISTICAL QUALITY CONTROL IN FOOD INDUSTRY	E	3	0	0	3	5
	GMB6015	FOOD MYCOLOGY	E	2	0	2	3	5	GMB6014	ADVANCED FOOD CHEMISTRY	E	3	0	0	3	5
	GMB6017	AROMA-ACTIVE FOOD COMPONENTS	E	2	0	2	3	5	GMB6016	MILLING TECHNOLOGY	E	2	0	2	3	5
	GMB6019	FOOD-ORIGINATED SULPHUR COMPOUNDS	E	2	0	2	3	5	GMB6018	SPECIAL CEREAL PRODUCTS	E	2	0	2	3	5
	GMB6021	ADVANCED DAIRY TECHNOLOGY	E	3	0	0	3	5	GMB6020	FOOD TOXICOLOGY	E	3	0	0	3	5
	GMB6023	ADVANCED FOOD BIOCHEMISTRY	E	3	0	0	3	5	GMB6022	CHEMICAL CHANGES OCCURED DURING FOOD PROCESSING	E	3	0	0	3	5
	GMB6025	RESEARCH METHODS IN FOOD SCIENCE	E	3	0	0	3	5	GMB6024	FOOD FERMENTATIONS	E	3	0	0	3	5
	GMB6027	LACTIC ACID BACTERIA and BIOTECHNOLOGICAL APPLICATIONS OF LACTIC ACID BACTERIA	E	3	0	0	3	5	GMB6026	TECHNOLOGY OF FLAVOR AND PHENOLIC COMPOUNDS	E	2	0	2	3	5
									GMB6028	CHEMISTRY AND TECHNOLOGY OF FERMENTED DAIRY PRODUCTS	E	3	0	0	3	5
									GMB6030	PHYSICAL PROPERTIES OF FOOD	E	3	0	0	3	5
									GMB6032	FOOD INGREDIENTS AND ADDITIVES IN PRODUCT DEVELOPMENT	E	3	0	0	3	5
									GMB6034	THE PROTEOM AND METABOLOM ANALYSIS USED IN DETERMINATION OF MICROBIOLOGICAL FOOD QUALITY	E	3	0	0	3	5
									GMB6036	THE SPICES USED IN FOOD INDUSTRY	E	3	0	0	3	5

										AND THEIR PROPERTIES																	
TOTAL										14		30		TOTAL										12		30	
THESIS STAGE	III. TERM / FALL										IV. TERM / SPRING																
	GMB6183	ADVANCED TOPICS IN PHD THESIS III	C	4	0	0	0	5	GMB6174	SEMINAR (THESIS)	C	0	2	0	0	5											
	GMB6193	PHD THESIS III	C	0	1	0	0	20	GMB6184	ADVANCED TOPICS IN PHD THESIS IV	C	4	0	0	0	5											
	YET6177	PHD PROFICIENCY EXAMINATION	C	0	0	0	0	5	GMB6194	PHD THESIS IV	C	0	1	0	0	20											
TOTAL										0		30		TOTAL										0		30	
THESIS STAGE	V. TERM / FALL										VI. TERM / SPRING																
	ENS6121	DEVELOPMENT AND LEARNING	C	3	0	0	0	5	ENS6122	PLANNING AND EVALUATION IN EDUCATION	C	3	2	0	0	5											
	GMB6185	ADVANCED TOPICS IN PHD THESIS V	C	4	0	0	0	5	GMB6186	ADVANCED TOPICS IN PHD THESIS VI	C	4	0	0	0	5											
	GMB6195	PHD THESIS V	C	0	1	0	0	20	GMB6196	PHD THESIS VI	C	0	1	0	0	20											
TOTAL										0		30		TOTAL										0		30	
THESIS STAGE	VII. TERM / FALL										VIII. TERM / SPRING																
	GMB6187	ADVANCED TOPICS IN PHD THESIS VII	C	4	0	0	0	5	GMB6188	ADVANCED TOPICS IN PHD THESIS VIII	C	4	0	0	0	5											
	GMB6197	PHD THESIS VII	C	0	1	0	0	25	GMB618	PHD THESIS VIII	C	0	1	0	0	25											
	TOTAL										0		30		TOTAL										0		30
TOTAL CREDITS: 26 - TOTAL ECTS: 240																											