



ULUDAĞ UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
2017-2018 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF	MECHANICAL ENGINEERING
DEPARTMENT / PROGRAM	/ MASTER'S DEGREE 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
	MAK5191	MSC THESIS CONSULTING I	C	0	1	0	0	1	MAK5191	MSC THESIS CONSULTING II	C	0	1	0	0	1
	MAK5001	ADVANCED ENGINEERING MATHEMATICS	C	3	0	0	3	6	MAK5172	SEMINAR	C	0	2	0	0	4
									MAK5000	RESEARCH TECHNIQUES and PUBLICATION ETHICS in MECHANICAL ENGINEERING	C	2	0	0	2	2
	MAK5181	SPECIAL TOPICS IN MSC THESIS I	C	4	0	0	0	5	MAK5182	SPECIAL TOPICS IN MSC THESIS II	C	4	0	0	0	5
	MAK5201	CONSTRUCTION RELIABILITY	E	3	0	0	3	6	MAK5002	NUMERICAL METHODS IN ENGINEERING	E	3	0	0	3	6
	MAK5203	SHAPING IN CONSTRUCTION	E	3	0	0	3	6	MAK5202	STATISTICAL PROCESS CONTROL	E	3	0	0	3	6
	MAK5205	ADVANCED MANUFACTURING METHODS	E	3	0	0	3	6	MAK5204	PROGRAMMING OF MACHINE SYSTEMS	E	3	0	0	3	6
	MAK5207	METHODICAL DESIGN PRINCIPLES AND APPLICATION	E	3	0	0	3	6	MAK5206	COMPUTER AIDED MANUFACTURING	E	3	0	0	3	6
	MAK5209	PHYSICAL METALLURGY	E	3	0	0	3	6	MAK5208	MODERN WELDING METHODS AND EQUIPMENTS	E	3	0	0	3	6
	MAK5211	THE LIGHT ALLOYS	E	3	0	0	3	6	MAK5210	ERGONOMICS IN MACHINE DESIGN	E	3	0	0	3	6
	MAK5213	TRIBOLOGY	E	3	0	0	3	6	MAK5212	ADVANCED CERAMIC MATERIALS	E	3	0	0	3	6
	MAK5215	SPECIFIC STEELS	E	3	0	0	3	6	MAK5214	MECHANICAL METALLURGY	E	3	0	0	3	6
	MAK5217	COMPUTER GRAPHICS	E	3	0	0	3	6	MAK5216	PHASE TRANSFORMATIONS	E	3	0	0	3	6
	MAK5219	COMPUTER AIDED DESIGN	E	3	0	0	3	6	MAK5218	INDUSTRIAL NOISE CONTROL	E	3	0	0	3	6
	MAK5221	ALTERNATIVE ENGINES AND PROPULSION TECHNOLOGIES	E	3	0	0	3	6	MAK5220	COMPUTER AIDED SETUP PLANNING AND FIXTURE DESIGN	E	3	0	0	3	6
	MAK5223	HEAT CONDUCTION	E	3	0	0	3	6	MAK5222	ADVANCED TOPICS IN INTERNAL COMBUSTION ENGINES	E	3	0	0	3	6
	MAK5225	FINITE ELEMENT ANALYSIS IN THERMOFLUIDS	E	3	0	0	3	6	MAK5224	MIXTURE FORMATION IN INTERNAL COMBUSTION ENGINES	E	3	0	0	3	6
	MAK5227	BOUNDARY LAYER FLOWS	E	3	0	0	3	6	MAK5226	RADIATIVE HEAT TRANSFER	E	3	0	0	3	6
	MAK5229	VISCOUS FLOWS	E	3	0	0	3	6	MAK5228	GAS DYNAMICS	E	3	0	0	3	6
	MAK5231	SOLAR ENERGY APPLICATIONS	E	3	0	0	3	6	MAK5230	SPECIAL TOPICS IN HEAT TRANSFER AND FLUID MECHANICS	E	3	0	0	3	6
	MAK5233	CONVECTION HEAT TRANSFER	E	3	0	0	3	6	MAK5232	TURBULENT FLOWS	E	3	0	0	3	6
	MAK5235	DESIGN OF THERMAL SYSTEMS	E	3	0	0	3	6	MAK5234	NUMERICAL METHODS IN HEAT TRANSFER AND FLUID DYNAMICS	E	3	0	0	3	6
	MAK5237	HEAT PUMP THEORY AND APPLICATIONS	E	3	0	0	3	6	MAK5236	CONDENSERS AND EVAPORATORS	E	3	0	0	3	6
	MAK5239	HEATING, VENTILATING AND AIR	E	3	0	0	3	6	MAK5238	HEAT AND MASS TRANSFER	E	3	0	0	3	6

			CONDITIONING															
	MAK5241	MICROSCALE FLOW AND HEAT TRANSFER	E	3	0	0	3	6	MAK5240	ADVANCED REFRIGERATION	E	3	0	0	3	6		
	MAK5243	FLUID POWER SYSTEMS AND CONTROL	E	3	0	0	3	6	MAK5242	DRYING TECHNOLOGY	E	3	0	0	3	6		
	MAK5245	MODELLING, ANALYSIS AND PROGRAM OF ENG. SYSTEMS	E	3	0	0	3	6	MAK5244	ABSORPTION REFRIGERATION SYSTEMS	E	3	0	0	3	6		
	MAK5247	PARTIAL DIFFERENTIAL EQUATIONS AND ENG. APPLICATIONS	E	3	0	0	3	6	MAK5246	COMPUTER CONTROLLED SYSTEMS	E	3	0	0	3	6		
	MAK5249	DYNAMICS OF MULTIBODY SYSTEMS	E	3	0	0	3	6	MAK5248	MECHATRONICS	E	3	0	0	3	6		
	MAK5251	NUMERICAL ANALYSIS OF MACHINE ELEMENTS	E	3	0	0	3	6	MAK5250	KINEMATICS AND SYNTHESIS OF MECHANISMS	E	3	0	0	3	6		
	MAK5253	COMPUTATIONAL FLUID DYNAMICS ON BUILDINGS	E	3	0	0	3	6	MAK5252	COMPOSITE MATERIALS	E	3	0	0	3	6		
	MAK5255	FLUID MECHANICS AND EXPERIMENTAL METHODS IN HEAT TRANSFER	E	3	0	0	3	6	MAK5254	FINITE ELEMENT METHOD	E	3	0	0	3	6		
	MAK5257	BONE MECHANICS	E	3	0	0	3	6	MAK5256	CLASSICAL THEORETICAL MECHANICS AND ITS APPLICATIONS	E	3	0	0	3	6		
	MAK5259	TOOL DESIGN	E	3	0	0	3	6	MAK5258	MATHEMATICAL THEORY OF ELASTICITY	E	3	0	0	3	6		
	MAK5261	MECHANICAL BEHAVIOUR OF MATERIALS AT HIGH TEMPERATURES AND CREEP MECHANICS	E	3	0	0	3	6	MAK5260	SUSTAINABLE DESIGN	E	3	0	0	3	6		
									MAK5262	NUMERICAL METHODS IN WIND ENERGY	E	3	0	0	3	6		
									MAK5264	FLOW AND HEAT TRANSFER FOR SEPERATED FLOWS	E	3	0	0	3	6		
									MAK5266	MULTIPHASE FLOWS	E	3	0	0	3	6		
							Total Credits	12	30							Total Credits	9	30
STAGE THESIS	III. TERM / FALL								IV. TERM / SPRING									
	MAK5183	SPECIAL TOPICS IN MSC THESIS III	C	4	0	0	0	5	MAK5184	SPECIAL TOPICS IN MSC THESIS IV	C	4	0	0	0	5		
	MAK5193	MSC THESIS CONSULTING III	C	0	1	0	0	25	MAK5194	MSC THESIS CONSULTING IV	C	0	1	0	0	25		
							Total Credits	0	30							Total Credits	0	30
TOTAL CREDITS: 23								- TOTAL ECTS: 120										



ULUDAĞ UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
2017-2018 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF MECHANICAL ENGINEERING

DEPARTMENT / PROGRAM / DOCTORAL 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
	MAK6191	PHD THESIS CONSULTING I	C	0	1	0	0	1	MAK6192	PHD THESIS CONSULTING II	C	0	1	0	0	1
									MAK6172	SEMINAR (CLSASS)	C	0	2	0	0	4
	MAK6181	SPECIAL TOPICS IN PHD THESIS I	E	4	0	0	0	5	FEN6000	RESEARCH TECHNIQUES and PUBLICATION ETHICS	C	2	0	0	2	2
	MAK6101	OPTIMIZATION IN ENGINEERING	E	3	0	0	3	6	MAK6182	SPECIAL TOPICS IN PHD THESIS II	E	4	0	0	0	5
	MAK6201	MATERIALS CHARACTERIZATION	E	3	0	0	3	6	MAK6202	BEARINGS AND LUBRICATION THEORY	E	3	0	0	3	6
	MAK6203	PRINCIPLE OF SOLIDIFICATION	E	3	0	0	3	6	MAK6204	SURFACE PROCESSES IN INDUSTRY	E	3	0	0	3	6
	MAK6207	COMBUSTION TECHNOLOGY	E	3	0	0	3	6	MAK6208	CONTINUUM MECHANICS	E	3	0	0	3	6
	MAK6209	PARTICLE DYNAMICS	E	3	0	0	3	6	MAK6210	TURBO MACHINERY DESIGN PRINCIPLES	E	3	0	0	3	6
	MAK6211	TURBULENCE AND TURBULENCE MODELS	E	3	0	0	3	6	MAK6212	COMBINED HEAT-POWER SYSTEMS	E	3	0	0	3	6
	MAK6213	ADVANCED THERMODYNAMICS	E	3	0	0	3	6	MAK6214	SPECIAL TOPICS IN FLUID DYNAMICS	E	3	0	0	3	6
	MAK6215	ENERGY METHODS	E	3	0	0	3	6	MAK6216	SPECIAL TOPICS IN HEAT TRANSFER	E	3	0	0	3	6
	MAK6217	APPLIED TENSOR ANALYSIS	E	3	0	0	3	6	MAK6218	ADVANCED TOPICS IN MACHINE DYNAMICS	E	3	0	0	3	6
	MAK6219	THERMODYNAMIC OPTIMIZATION	E	3	0	0	3	6	MAK6220	ENERGY AND ENVIROMENT	E	3	0	0	3	6
	MAK6221	ANALYTICAL METHODS IN VIBRATION THEORY	E	3	0	0	3	6	MAK6222	DECISION ANALYSIS OF ENGINEERING DESIGN	E	3	0	0	3	6
	MAK6223	ADVANCED TECHNOLOGY ENERGY MECHANISMS	E	3	0	0	3	6	MAK6224	PRECISION DEVICE DESIGN	E	3	0	0	3	6
	MAK6225	MOBILE ROBOTICS	E	3	0	0	3	6	MAK6226	ATOMIZATION AND PULVERIZATION MECHANISMS	E	3	0	0	3	6
	MAK6227	ADVANCED BONDING TECHNIQUES	E	3	0	0	3	6								
	MAK6229	ENERGY MANAGEMENT AND SYSTEMS IN INDUSTRY	E	3	0	0	3	6								
	MAK6231	ADVANCED FLUID MECHANICS: FLOWS WITH CURVATURE	E	3	0	0	3	6								
	MAK6233	TECHNOLOGICAL INNOVATION MANAGEMENT	E	3	0	0	3	6								
	MAK6235	MECHANICAL PROPERTIES AT	E	3	0	0	3	6								

	HIGH STRAIN RATES																		
	Toplam Kredi							12	30		Toplam Kredi							11	30
STAGE THESIS	III. TERM / FALL							IV. TERM / SPRING											
	MAK6183	SPECIAL TOPICS IN PHD THESIS III	C	4	0	0	0	5	MAK6184	SPECIAL TOPICS IN PHD THESIS IV	C	4	0	0	0	5			
	MAK6193	PHD THESIS CONSULTING III	C	0	1	0	0	20	MAK6194	PHD THESIS CONSULTING IV	C	0	1	0	0	25			
	YET6177	PHD PROFICIENCY	C	0	0	0	0	5											
	Toplam Kredi							0	30	Toplam Kredi							0	30	
	V. TERM / FALL							VI. TERM / SPRING											
	MAK6185	SPECIAL TOPICS IN PHD THESIS V	C	4	0	0	0	5	MAK6186	SPECIAL TOPICS IN PHD THESIS VI	C	4	0	0	0	5			
	MAK6195	PHD THESIS CONSULTING V	C	0	1	0	0	25	MAK6196	PHD THESIS CONSULTING VI	C	0	1	0	0	25			
	Toplam Kredi							0	30	Toplam Kredi							0	30	
	VII. TERM / FALL							VIII. TERM / SPRING											
	MAK6187	SPECIAL TOPICS IN PHD THESIS VII	C	4	0	0	0	5	MAK6188	SPECIAL TOPICS IN PHD THESIS VIII	C	4	0	0	0	5			
	MAK6197	PHD THESIS CONSULTING VII	C	0	1	0	0	25	MAK6198	PHD THESIS CONSULTING VIII	C	0	1	0	0	25			
Toplam Kredi							0	30	Toplam Kredi							0	30		
TOTAL CREDITS: 23 - TOTAL ECTS: 240																			

Not: The student is expected to take a total of credited selective courses every academic term.

The student have the option of choosing one selective course from another department with the endorsement of the supervisor. *Success in Ph.D. qualifying exam is a prerequisite.



ULUDAĞ UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
2017-2018 ACADEMIC YEAR COURSE PLAN

ANABİLİM DALI

MECHANICAL ENGINEERING

BİLİM DALI / PROGRAMI

/ INTEGRATED DOCTORAL 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				
COURSE STAGE	MAK6191	PHD THESIS CONSULTING I	C	0	1	0	0	1	MAK6192	PHD THESIS CONSULTING II	C	0	1	0	0	1				
	MAK5001	ADVANCED ENGINEERING MATHEMATICS	C	3	0	0	3	6	MAK6182	SPECIAL TOPICS IN PHD THESIS II	E	4	0	0	0	5				
	MAK6181	SPECIAL TOPICS IN PHD THESIS I	E	4	0	0	0	5	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	Total Credits								12	30	Total Credits								12	30
THESIS STAGE	I. TERM / FALL								IV. TERM / SPRING											
	MAK6183	SPECIAL TOPICS IN PHD THESIS III	E	4	0	0	0	5	MAK6174	SEMINAR	C	0	2	0	0	4				
	MAK6193	PHD THESIS CONSULTING III	C	0	1	0	0	1	MAK6194	PHD THESIS CONSULTING IV	Z	0	1	0	0	1				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	FEN6000	RESEARCH TECHNIQUES and PUBLICATION ETHICS	C	2	0	0	2	2				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK6184	SPECIAL TOPICS IN PHD THESIS IV	E	4	0	0	0	5				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	MAK	ELECTIVE COURSE	E	3	0	0	3	6	MAK	ELECTIVE COURSE	E	3	0	0	3	6				
									MAK	ELECTIVE COURSE	E	3	0	0	3	6				
	Total Credits								12	30	Total Credits								11	30
	V. TERM / FALL								VI. TERM / SPRING											
	YET6177	PHD PROFICIENCY	C	0	0	0	0	5	MAK6186	SPECIAL TOPICS IN PHD THESIS VI	C	4	0	0	0	5				
	MAK6185	SPECIAL TOPICS IN PHD THESIS V	C	4	0	0	0	5	MAK6196	PHD THESIS CONSULTING VI	C	0	1	0	0	20				
	MAK6195	PHD THESIS CONSULTING V	C	0	1	0	0	20	MAK6176	SEMİNAR	C	0	2	0	0	5				
	Total Credits								0	30	Total Credits								0	30
VII. TERM / FALL								VIII. TERM / SPRING												
MAK6187	SPECIAL TOPICS IN PHD THESIS VII	C	4	0	0	0	5	MAK6188	SPECIAL TOPICS IN PHD THESIS VIII	C	4	0	0	0	5					
MAK6197	PHD THESIS CONSULTING VII	C	0	1	0	0	25	MAK6198	PHD THESIS CONSULTING VIII	C	0	1	0	0	25					
Total Credits								0	30	Total Credits								0	30	
IX. TERM / FALL								X. TERM / SPRING												
MAK6189	SPECIAL TOPICS IN PHD THESIS IX	C	4	0	0	0	7	MAK6190	SPECIAL TOPICS IN PHD THESIS X	C	4	0	0	0	5					
MAK6199	PHD THESIS CONSULTING IX	C	0	1	0	0	23	MAK6200	PHD THESIS CONSULTING X	C	0	1	0	0	25					
Total Credits								0	30	Total Credits								0	30	
TOTAL CREDITS: 47 - TOTAL ECTS: 300																				

Not: Öğrenci, seçmeli derslerden her yarıyıl toplam kredilik ders seçecektir. Öğrenci isterse, danışmanının onayı ile her yarıyıl için 1 (bir) seçmeli dersini alan dışından da alabilir.

* Yeterlik Sınavından başarılı olmak ön koşuldur; III. yarıyılıda belirtilen dersleri alabilmek için yeterlik sınavına girip başarılı olmak gerekir. ** Mesleki Eğitim Dersi olarak tez aşamasında alınacaktır.



ULUDAĞ UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
2017-2018 ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)

ANABİLİM DALI

MECHANICAL ENGINEERING

BİLİM DALI / PROGRAMI

/ INTEGRATED DOCTORAL PROGRAM

COURSE STAGE	I. TERM / FALL								II. YARIYIL / BAHAR							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	MAK5201	CONSTRUCTION RELIABILITY	E	3	0	0	3	6	MAK5002	NUMERICAL METHODS IN ENGINEERING	E	3	0	0	3	6
	MAK5203	SHAPING IN CONSTRUCTION	E	3	0	0	3	6	MAK5202	STATISTICAL PROCESS CONTROL	E	3	0	0	3	6
	MAK5205	ADVANCED MANUFACTURING METHODS	E	3	0	0	3	6	MAK5204	PROGRAMMING OF MACHINE SYSTEMS	E	3	0	0	3	6
	MAK5207	METHODICAL DESIGN PRINCIPLES AND APPLICATION	E	3	0	0	3	6	MAK5206	COMPUTER AIDED MANUFACTURING	E	3	0	0	3	6
	MAK5209	PHYSICAL METALLURGY	E	3	0	0	3	6	MAK5208	MODERN WELDING METHODS AND EQUIPMENTS	E	3	0	0	3	6
	MAK5211	THE LIGHT ALLOYS	E	3	0	0	3	6	MAK5210	ERGONOMICS IN MACHINE DESIGN	E	3	0	0	3	6
	MAK5213	TRIBOLOGY	E	3	0	0	3	6	MAK5212	ADVANCED CERAMIC MATERIALS	E	3	0	0	3	6
	MAK5215	SPECIFIC STEELS	E	3	0	0	3	6	MAK5214	MECHANICAL METALLURGY	E	3	0	0	3	6
	MAK5217	COMPUTER GRAPHICS	E	3	0	0	3	6	MAK5216	PHASE TRANSFORMATIONS	E	3	0	0	3	6
	MAK5219	COMPUTER AIDED DESIGN	E	3	0	0	3	6	MAK5218	INDUSTRIAL NOISE CONTROL	E	3	0	0	3	6
	MAK5221	ALTERNATIVE ENGINES AND PROPULSION TECHNOLOGIES	E	3	0	0	3	6	MAK5220	COMPUTER AIDED SETUP PLANNING AND FIXTURE DESIGN	E	3	0	0	3	6
	MAK5223	HEAT CONDUCTION	E	3	0	0	3	6	MAK5222	ADVANCED TOPICS IN INTERNAL COMBUSTION ENGINES	E	3	0	0	3	6
	MAK5225	FINITE ELEMENT ANALYSIS IN THERMOFLUIDS	E	3	0	0	3	6	MAK5224	MIXTURE FORMATION IN INTERNAL COMBUSTION ENGINES	E	3	0	0	3	6
	MAK5227	BOUNDARY LAYER FLOWS	E	3	0	0	3	6	MAK5226	RADIATIVE HEAT TRANSFER	E	3	0	0	3	6
	MAK5229	VISCOUS FLOWS	E	3	0	0	3	6	MAK5228	GAS DYNAMICS	E	3	0	0	3	6
	MAK5231	SOLAR ENERGY APPLICATIONS	E	3	0	0	3	6	MAK5230	SPECIAL TOPICS IN HEAT TRANSFER AND FLUID MECHANICS	E	3	0	0	3	6
	MAK5233	CONVECTION HEAT TRANSFER	E	3	0	0	3	6	MAK5232	TURBULENT FLOWS	E	3	0	0	3	6
	MAK5235	DESIGN OF THERMAL SYSTEMS	E	3	0	0	3	6	MAK5234	NUMERICAL METHODS IN HEAT TRANSFER AND FLUID DYNAMICS	E	3	0	0	3	6
	MAK5237	HEAT PUMP THEORY AND APPLICATIONS	E	3	0	0	3	6	MAK5236	CONDENSERS AND EVAPORATORS	E	3	0	0	3	6
	MAK5239	HEATING, VENTILATING AND AIR CONDITIONING	E	3	0	0	3	6	MAK5238	HEAT AND MASS TRANSFER	E	3	0	0	3	6
	MAK5241	MICROSCALE FLOW AND HEAT TRANSFER	E	3	0	0	3	6	MAK5240	ADVANCED REFRIGERATION	E	3	0	0	3	6
	MAK5243	FLUID POWER SYSTEMS AND CONTROL	E	3	0	0	3	6	MAK5242	DRYING TECHNOLOGY	E	3	0	0	3	6
	MAK5245	MODELLING, ANALYSIS AND PROGRAM OF ENG. SYSTEMS	E	3	0	0	3	6	MAK5244	ABSORPTION REFRIGERATION SYSTEMS	E	3	0	0	3	6

MAK5247	PARTIAL DIFFERENTIAL EQUATIONS AND ENG. APPLICATIONS	E	3	0	0	3	6	MAK5246	COMPUTER CONTROLLED SYSTEMS	E	3	0	0	3	6	
MAK5249	DYNAMICS OF MULTIBODY SYSTEMS	E	3	0	0	3	6	MAK5248	MECHATRONICS	E	3	0	0	3	6	
MAK5251	NUMERICAL ANALYSIS OF MACHINE ELEMENTS	E	3	0	0	3	6	MAK5250	KINEMATICS AND SYNTHESIS OF MECHANISMS	E	3	0	0	3	6	
MAK5253	COMPUTATIONAL FLUID DYNAMICS ON BUILDINGS	E	3	0	0	3	6	MAK5252	COMPOSITE MATERIALS	E	3	0	0	3	6	
MAK5255	FLUID MECHANICS AND EXPERIMENTAL METHODS IN HEAT TRANSFER	E	3	0	0	3	6	MAK5254	FINITE ELEMENT METHOD	E	3	0	0	3	6	
MAK5257	BONE MECHANICS	E	3	0	0	3	6	MAK5256	CLASSICAL THEORETICAL MECHANICS AND ITS APPLICATIONS	E	3	0	0	3	6	
MAK5259	TOOL DESIGN	E	3	0	0	3	6	MAK5258	MATHEMATICAL THEORY OF ELASTICITY	E	3	0	0	3	6	
MAK5261	MECHANICAL BEHAVIOUR OF MATERIALS AT HIGH TEMPERATURES AND CREEP MECHANICS	E	3	0	0	3	6	MAK5260	SUSTAINABLE DESIGN	E	3	0	0	3	6	
								MAK5262	NUMERICAL METHODS IN WIND ENERGY	E	3	0	0	3	6	
								MAK5264	FLOW AND HEAT TRANSFER FOR SEPERATED FLOWS	E	3	0	0	3	6	
								MAK5266	MULTIPHASE FLOWS	E	3	0	0	3	6	
I. TERM / FALL								IV. YARIYIL / BAHAR								
COURSE STAGE	MAK6101	OPTIMIZATION IN ENGINEERING	E	3	0	0	3	6	MAK6202	BEARINGS AND LUBRICATION THEORY	E	3	0	0	3	6
	MAK6201	MATERIALS CHARACTERIZATION	E	3	0	0	3	6	MAK6204	SURFACE PROCESSES IN INDUSTRY	E	3	0	0	3	6
	MAK6203	PRINCIPLE OF SOLIDIFICATION	E	3	0	0	3	6	MAK6208	CONTINUUM MECHANICS	E	3	0	0	3	6
	MAK6207	COMBUSTION TECHNOLOGY	E	3	0	0	3	6	MAK6210	TURBO MACHINERY DESIGN PRINCIPLES	E	3	0	0	3	6
	MAK6209	PARTICLE DYNAMICS	E	3	0	0	3	6	MAK6212	COMBINED HEAT-POWER SYSTEMS	E	3	0	0	3	6
	MAK6211	TURBULENCE AND TURBULENCE MODELS	E	3	0	0	3	6	MAK6214	SPECIAL TOPICS IN FLUID DYNAMICS	E	3	0	0	3	6
	MAK6213	ADVANCED THERMODYNAMICS	E	3	0	0	3	6	MAK6216	SPECIAL TOPICS IN HEAT TRANSFER	E	3	0	0	3	6
	MAK6215	ENERGY METHODS	E	3	0	0	3	6	MAK6218	ADVANCED TOPICS IN MACHINE DYNAMICS	E	3	0	0	3	6
	MAK6217	APPLIED TENSOR ANALYSIS	E	3	0	0	3	6	MAK6220	ENERGY AND ENVIROMENT	E	3	0	0	3	6
	MAK6219	THERMODYNAMIC OPTIMIZATION	E	3	0	0	3	6	MAK6222	DECISION ANALYSIS OF ENGINEERING DESIGN	E	3	0	0	3	6
	MAK6221	ANALYTICAL METHODS IN VIBRATION THEORY	E	3	0	0	3	6	MAK6224	PRECISION DEVICE DESIGN	E	3	0	0	3	6
	MAK6223	ADVANCED TECHNOLOGY ENERGY MECHANISMS	E	3	0	0	3	6	MAK6226	ATOMIZATION AND PULVERIZATION MECHANISMS	E	3	0	0	3	6
MAK6225	MOBILE ROBOTICS	E	3	0	0	3	6									
MAK6227	ADVANCED BONDING TECHNIQUES	E	3	0	0	3	6									

MAK6229	ENERGY MANAGEMENT AND SYSTEMS IN INDUSTRY	E	3	0	0	3	6												
MAK6231	ADVANCED FLUID MECHANICS: FLOWS WITH CURVATURE	E	3	0	0	3	6												
MAK6233	TECHNOLOGICAL INNOVATION MANAGEMENT	E	3	0	0	3	6												
MAK6235	MECHANICAL PROPERTIES AT HIGH STRAIN RATES	E	3	0	0	3	6												

Not: Öğrenci, seçmeli derslerden her yarıyıl toplam kredilik ders seçecektir. Öğrenci isterse, danışmanının onayı ile her yarıyıl için 1 (bir) seçmeli dersini alan dışından da alabilir.

* Yeterlik Sınavından başarılı olmak ön koşuldur; III. yarıyıldan belirtilen dersleri alabilmek için yeterlik sınavına girip başarılı olmak gerekir. ** Mesleki Eğitim Dersi olarak tez aşamasında alınacaktır.