



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MECHANICAL EDUCATION



MASTER (MSc) PROGRAM

FIRST YEAR

FIRST SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAK-5501	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAK-5601	THESIS PREPARATION	C	0	1	1	0	1	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
TOTAL			20	1	21	12	30	

SECOND SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAK-5502	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAK-5602	THESIS PREPARATION	C	0	1	1	0	1	
MAK-5701	SEMINAR	C	0	2	2	0	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
TOTAL			17	3	20	9	30	



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SECOND YEAR

THIRD SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAK-5503	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAK-5603	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	

FOURTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAK-5504	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAK-5604	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	



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ELECTIVE COURSES

COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
FBE-5001	SCIENTIFIC RESEARCH AND METHODS	E	3	0	3	3	5
MAK-5001	NON-TRADITIONAL MACHINING PROCESSES	E	3	0	3	3	5
MAK-5002	SCHOLARLY WRITING AND PRESENTATION TECHNOLOGIES	E	3	0	3	3	5
MAK-5003	COMPUTER CONTROLLED MANUFACTURING	E	3	0	3	3	5
MAK-5004	THEORY OF ELASTICITY	E	3	0	3	3	5
MAK-5005	NATURAL ENERGY SOURCES	E	3	0	3	3	5
MAK-5006	ADVANCED DYNAMICS AND ITS APPLICATIONS	E	3	0	3	3	5
MAK-5007	ADVANCED COMPUTER AIDED DESIGN	E	3	0	3	3	5
MAK-5008	CONTACT MECHANICS	E	3	0	3	3	5
MAK-5009	NEW APPROACH TO PRODUCTION DESIGN	E	3	0	3	3	5
MAK-5010	SOLUTION OF ENGINEERING PROBLEMS BY USING MATLAB	E	3	0	3	3	5
MAK-5011	COMPUTATIONAL FRACTURE MECHANICS	E	3	0	3	3	5
MAK-5012	MECHANISM DESIGN AND KINEMATICS	E	3	0	3	3	5
MAK-5013	MECHATRONIC	E	3	0	3	3	5
MAK-5014	ENGINE INJECTION SYSTEMS	E	3	0	3	3	5
MAK-5015	FUEL AND BURNING EVENTS IN ENGINE	E	3	0	3	3	5
MAK-5016	ENGINEERING MATHEMATICS	E	3	0	3	3	5
MAK-5017	FAILURE ANALYSIS IN ENGINEERING	E	3	0	3	3	5
MAK-5018	FINITE ELEMENT METHOD	E	3	0	3	3	5
MAK-5019	METAL CUTTING THEORY	E	3	0	3	3	5
MAK-5020	OPTIMIZATION IN DESIGN AND MANUFACTURING	E	3	0	3	3	5
MAK-5021	VEHICLE DYNAMICS	E	3	0	3	3	5
MAK-5022	VEHICLE DAMAGE AND ACCIDENT ANALYSIS	E	3	0	3	3	5
MAK-5023	VEHICLE EMISSIONS AND CONTROL TECHNIQUES	E	3	0	3	3	5
MAK-5024	MECHANICS OF COMPOSITE MATERIALS	E	3	0	3	3	5
MAK-5025	ENERGY CONVERSION IN THERMAL ENGINES	E	3	0	3	3	5
MAK-5026	VIBRATION ENGINEERING	E	3	0	3	3	5
MAK-5027	FATIGUE	E	3	0	3	3	5
MAK-5028	MECHANICAL BEHAVIOR OF MATERIALS	E	3	0	3	3	5
MAK-5029	MECHATRONIC DESIGN	E	3	0	3	3	5
MAK-5030	AUTOMATION TECHNOLOGY	E	3	0	3	3	5



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COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
MAK-5031	EXPERIMENTAL DESIGN AND ITS ANALYSIS	E	3	0	3	3	5
MAK-5032	EXPERT SYSTEMS AND INDUSTRIAL APPLICATIONS	E	3	0	3	3	5
MAK-5033	ADVANCED FLUIDS MECHANICS	E	3	0	3	3	5
MAK-5034	INDUSTRIAL ROBOTS	E	3	0	3	3	5
MAK-5035	EXPERIMENTAL METHODS IN MECHANIC	E	3	0	3	3	5