

ULUDAĞ UNIVERSITY INSTUTE OF NATURAL SCIENCES 2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF AUTOMOTIVE ENGINEERING

DEPARTMENT / PROGRAM Automotive Engineering/ Master'sDegree Program

		I. TERM / FALL								II. TERM / SPRING					
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U I	Credit	ECTS
	OTO5191	MASTER THESIS I	C	0	1	0	0	1	OTO5192	MASTER THESIS II	C	0	1 (0	1
									OTO5172	SEMINAR (CLASS)	C	0	2 (0	6
									OTO5102	NUMERICAL ANALYSIS AND OPTIMIZATION METHODS IN AUTOMOTIVE ENGINEERING	C	3	0 (3	6
	OTO5181	ADVANCED TOPICS IN MASTER THESIS I	E	4	0	0	0	5	OTO5182	ADVANCED TOPICS IN MASTER THESIS II	Е	4	0 (0	5
	OTO5101	AUTOMOTIVE ENGINEERING	Е	3	0	0	3	6	OTO5112	VEHICLE DYNAMICS	Е	3	0 () 3	6
	OTO5111	VEHICLE DESIGN	Е	3	0	0	3	6	OTO5114	ALTERNATIVE PROOULSION SYSTEMS	Е	3	0 () 3	6
	OTO5115	AUTOMOTIVE MATERIALS	Е	3	0	0	3	6	OTO5120	PRODUCTION AND ASSEMBLY TECHNOLOGIES	Е	3	0 () 3	6
	OTO5117	MOTOR VEHICLES AND THEIR EVOLUTION	Е	3	0	0	3	6	OTO5124	ENGINE DESIGN AND CONTROL FUNDAMENTALS	Е	3	0 (3	6
AGE	OTO5119	AUTOMOTIVE TRANSMISSION DESIGN	Е	3	0	0	3	6	OTO5128	FINITE ELEMENT APPLICATIONS IN AUTOMOTIVE ENGINEERING	Е	3	0 (3	6
COURSE STAGE	OTO5121	DEVELOPING FORMS AND DESIGNING THE BODY WORK	Е	3	0	0	3	6	OTO5130	VEHICLE INTERIOR DESIGN	Е	3	0 () 3	6
OUR	OTO5123	ELECTRIC AND ELECTRONIC SYSTEMS FOR VEHICLES	Е	3	0	0	3	6	OTO5134	AERODYNAMIC MODELLING FUNDAMENTALS	Е	3	0 (3	6
)	OTO5127	INTERNAL COMBUSTION ENGINE DESIGN	Е	3	0	0	3	6	OTO5136	ADVANCED TOPICS IN INTERNAL COMBUSTION ENGINES	Е	3	0 () 3	6
	OTO5129	MIXTURE FORMATION IN INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5138	VEHICLE OUT EMISSIONS AND THEIR CONTROL	Е	3	0 (3	6
	OTO5131	INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5140	ADVANCED MANUFACTURING TECHNIQUES FOR VEHICLES	Е	3	0 (3	6
	OTO5133	APPLICATION OF INTERNAL COMBUSTION ENGINES ON VEHICLE	Е	3	0	0	3	6	OTO5142	INTERFACE CIRCUITS IN AUTOMOTIVE ELECTRONICS	E	3	0 (3	6
	OTO5135	VIBRATION AND NOISE IN VEHICLES	Е	3	0	0	3	6	OTO5144	EMBEDDED CONTROL SYSTEMS IN VEHICLES	E	3	0 (3	6
	OTO5137	FUNDAMENTALS OF FINITE ELEMENT ANALYSIS	Е	3	0	0	3	6	OTO5146	INTERNAL COMBUSTION ENGINE TESTS	E	3	0 (3	6
	OTO5139	NUMERICAL MODELING AND SIMULATION	E	3	0	0	3	6	OTO5148	TRIBOLOGICAL SYSTEMS IN AUTOMOTIVE	E	3	0 (3	6

	OTO5141	VEHICLE HVAC SYSTEMS AND THERMAL COMFORT	Е	3	0	0	3	6	OTO5150	FLUID CONTROL SYSTEMS AND APPLICATION IN VEHICLES	Е	3	0	0	3	6
	OTO5143	SENSORS AND ACTUATORS IN VEHICLES	E	3	0	0	3	6								
	OTO5145	ON-BOARD DIAGNOSTIC SYSTEMS IN VEHICLES	E	3	0	0	3	6								
	OTO5147	MODELLING OF ENGINEERING SYSTEMS IN AUTOMOTIVE	Е	3	0	0	3	6								
	OTO5149	USE OF POLYMERS IN VEHICLES	E	3	0	0	3	6				<u> </u>				
	OTO5151	VEHICLE DİSCRETE-TIME CONTROL SYSTEMS	E	3	0	0	3	6								
			Tot	al C	red	its	12	30			Tota	al C	redi	its	9	30
SIS		III. TERM / FALL								IV. TERM / SPRING						
THE	OTO5183	ADVANCED TOPICS IN MASTER THESIS III	C	4	0	0	0	5	OTO5184	ADVANCED TOPICS IN MASTER THESIS IV	C	4	0	0	0	5
	OTO5173	SEMINAR (THESIS)	С	0	2	0	0	5	OTO5194	MASTER THESIS IV	С	0	1	0	0	25
AGE	OTO5193	MASTER THESIS III	С	0	1	0	0	20								
SI			Tot	al C	red	its	0	30			Tota	al C	redi	its	0	30
]	TOT	ΆL	CRED	ITS: 2	1 - TOTAL	ECTS: 120						

Not: The student have the option of choosing one selective course from another department with the endorsement of the supervisor.



ULUDAĞ UNIVERSITY INSTUTE OF NATURAL SCIENCES 2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF AUTOMOTIVE ENGINEERING

DEPARTMENT / PROGRAM Automotive Engineering/ Master's Degree Program (Secondary Education)

		I. TERM / FALL								II. TERM / SPRING						
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	OTO5191	MASTER THESIS I	С	0	1	0	0	1	OTO5192	MASTER THESIS II	C	0	1	ļ	0	1
				ļ		ļ			OTO5172	SEMINAR (CLASS)	C	0	2	0	0	6
									OTO5102	NUMERICAL ANALYSIS AND OPTIMIZATION METHODS IN AUTOMOTIVE ENGINEERING	C	3	0	0	3	6
	OTO5181	ADVANCED TOPICS IN MASTER THESIS I	Е	4	0	0	0	5	OTO5182	ADVANCED TOPICS IN MASTER THESIS II	Е	4	0	0	0	5
	OTO5101	AUTOMOTIVE ENGINEERING	Е	3	0	0	3	6	OTO5112	VEHICLE DYNAMICS	Е	3	0	0	3	6
	OTO5111	VEHICLE DESIGN	Е	3	0	0	3	6	OTO5114	ALTERNATIVE PROOULSION SYSTEMS	E	3	0	0	3	6
	OTO5115	AUTOMOTIVE MATERIALS	Е	3	0	0	3	6	OTO5120	PRODUCTION AND ASSEMBLY TECHNOLOGIES	Е	3	0	0	3	6
	OTO5117	MOTOR VEHICLES AND THEIR EVOLUTION	Е	3	0	0	3	6	OTO5124	ENGINE DESIGN AND CONTROL FUNDAMENTALS	Е	3	0	0	3	6
E	OTO5119	AUTOMOTIVE TRANSMISSION DESIGN	Е	3	0	0	3	6	OTO5128	FINITE ELEMENT APPLICATIONS IN AUTOMOTIVE ENGINEERING	Е	3	0	0	3	6
STAG	OTO5121	DEVELOPING FORMS AND DESIGNING THE BODY WORK	Е	3	0	0	3	6	OTO5130	VEHICLE INTERIOR DESIGN	Е	3	0	0	3	6
COURSE STAGE	OTO5123	ELECTRIC AND ELECTRONIC SYSTEMS FOR VEHICLES	Е	3	0	0	3	6	OTO5134	AERODYNAMIC MODELLING FUNDAMENTALS	Е	3	0	0	3	6
COI	OTO5127	INTERNAL COMBUSTION ENGINE DESIGN	Е	3	0	0	3	6	OTO5136	ADVANCED TOPICS IN INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6
	OTO5129	MIXTURE FORMATION IN INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5138	VEHICLE OUT EMISSIONS AND THEIR CONTROL	Е	3	0	0	3	6
	OTO5131	INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5140	ADVANCED MANUFACTURING TECHNIQUES FOR VEHICLES	Е	3	0	0	3	6
	OTO5133	APPLICATION OF INTERNAL COMBUSTION ENGINES ON VEHICLE	Е	3	0	0	3	6	OTO5142	INTERFACE CIRCUITS IN AUTOMOTIVE ELECTRONICS	Е	3	0	0	3	6
	OTO5135	VIBRATION AND NOISE IN VEHICLES	Е	3	0	0	3	6	OTO5144	EMBEDDED CONTROL SYSTEMS IN VEHICLES	E	3	0	0	3	6
	ОТО5137	FUNDAMENTALS OF FINITE ELEMENT ANALYSIS	Е	3	0	0	3	6	OTO5146	INTERNAL COMBUSTION ENGINE TESTS	E	3	0	0	3	6
	OTO5139	NUMERICAL MODELING AND SIMULATION	E	3	0	0	3	6	OTO5148	TRIBOLOGICAL SYSTEMS IN AUTOMOTIVE	E	3	0	0	3	6
	OTO5141	VEHICLE HVAC SYSTEMS AND THERMAL COMFORT	E	3	0	0	3	6	OTO5150	FLUID CONTROL SYSTEMS AND APPLICATION IN VEHICLES	E	3	0	0	3	6

	OTO5143	SENSORS AND ACTUATORS IN VEHICLES	E	3	0	0	3	6					<u>-</u>		
	OTO5145	ON-BOARD DIAGNOSTIC SYSTEMS IN VEHICLES	E	3	0	0	3	6							
	OTO5147	MODELLING OF ENGINEERING SYSTEMS IN AUTOMOTIVE	E	3	0	0	3	6							
	OTO5149	USE OF POLYMERS IN VEHICLES	E	3	0	0	3	6			<u> </u>				
	OTO5151	VEHICLE DİSCRETE-TIME CONTROL SYSTEMS	E	3	0	0	3	6							
			Tot	tal (Cred	lits	12	30			Tota	al C	redits	9	30
SIS		III. TERM / FALL								IV. TERM / SPRING					
HE	OTO5183	ADVANCED TOPICS IN MASTER THESIS III	C	4	0	0	0	5	OTO5184	ADVANCED TOPICS IN MASTER THESIS IV	С	4	0 0	0	5
GE T	OTO5173	SEMINAR (THESIS)	C	0	2	0	0	5	OTO5194	MASTER THESIS IV	C	0	1 0	0	25
AG	OTO5193	MASTER THESIS III	С	0	1	0	0	20							
\mathbf{S}			Tot	tal (Cred	lits	0	30			Tota	al C	redits	0	30
					ГОТ	AL	CRED	ITS: 2	1 - TOTAL	ECTS: 120					

Not: The student have the option of choosing one selective course from another department with the endorsement of the supervisor.



ULUDAĞ UNIVERSITY INSTUTE OF NATURAL SCIENCES 2015-2016 ACADEMIC YEAR COURSE PLAN

AUTOMOTIVE ENGINEERING DEPARTMENT OF DEPARTMENT / PROGRAM Automotive Engineering / Doctoral Program II. TERM / SPRING I. TERM / FALL $|\mathbf{T}|\mathbf{U}|\mathbf{L}$ Credit ECTS **Course Title** T U L Credit ECTS Code Course Title Code Type Type 0 OTO6191 PHD THESIS I 0 OTO6192 PHD THESIS II 0 0 2 0 0 0 2 0 FEN6001 RESEARCH METHODS OTO6172 | SEMINAR (CLASS) AUTOMOTIVE DESIGN. 3 0 0 OTO6101 MANUFACTURING AND PROJECT 3 5 **MANAGEMENT** OTO6181 ADVANCED TOPICS IN PHD THESIS I 4 0 0 0 OTO6182 | ADVANCED TOPICS IN PHD THESIS II Ε 4 0 00 5 CONTROL SYSTEMS IN AUTOMOTIVE 3 3 0 5 OTO6111 VEHICLE CRASH ANALYSIS METHODS 0 0 3 OTO6112 0 **ENGINEERING** STAGE THE USAGE OF ADVANCED OTO6113 3 0 0 3 OTO6114 VEHICLE BRAKING SYSTEMS Ε 3 0 0 3 5 MATERIALS IN VEHICLES COMPUTATIONAL FLUID DYNAMICS SPECIAL TOPICS IN AUTOMOTIVE COURSE OTO6115 3 0 0 3 OTO6116 E 3 0 0 3 5 METHODS OF VEHICLES **ENGINEERING** MECHATRONICS IN AUTOMOTIVE OTO6117 3 0 0 3 OTO6118 EMISSION CONTROL AND MONITORING E 3 0 0 3 5 **ENGINEERING** ADVANCED LEVEL PROGRAMMING IN AUTOMOTIVE COMPOSITES AND 3 0 OTO6119 0 OTO6120 3 0 0 **AUTOMOTIVE ENGINEERING** E 3 5 SANDWICH STRUCTURES OTO6122 **FUELL CELLS** E 3 0 0 3 5 DESIGNING OF ELECTRONIC CONTROL 0 0 OTO6124 5 **UNITS FOR VEHICLES** DAMAGE ANALYSIS OF VEHICLES OTO6126 5 30 **Total Credits** 14 30 **Total Credits** 12 III. TERM / FALL IV. TERM / SPRING PHD PROFICIENCY EXAMINATION 0 0 0 OTO6184 ADVANCED TOPICS IN PHD THESIS IV 4 0 0 5 YET6177 10 0 2 0 25 OTO6194 PHD THESIS IV 0 1 0 OTO6171 SEMINAR (THESIS) 0 $0 \mid 0$ OTO6183 ADVANCED TOPICS IN PHD THESIS III 4 5 OTO6193 PHD THESIS III 0 1 0 10 0 THESIS **Total Credits** 30 **Total Credits** 30 V. TERM / FALL VI. TERM / SPRING STAGE PLANNING AND EVALUATION IN 3 3 2 ENS6121 DEVELOPMENT AND LEARNING* 0 0 3 ENS6122 \mathbf{C} 0 5 **EDUCATION*** OTO6185 | ADVANCED TOPICS IN PHD THESIS V C 4 0 OTO6186 ADVANCED TOPICS IN PHD THESIS VI 4 0 0 5 PHD THESIS V 0 20 OTO6196 PHD THESIS VI 0 0 20 OTO6195 0 0 **Total Credits** 30 **Total Credits** 30 VII. TERM / FALL VIII. TERM / SPRING OTO6187 ADVANCED TOPICS IN PHD THESIS OTO6188 ADVANCED TOPICS IN PHD THESIS VIII C 4 0 0 C 4 0 0

	VII														
OTO6197	PHD THESIS VII	С	0 1	0	0	25	OTO6198	PHD THESIS VIII	(7	0	1	0	0	25
		To	tal Cr	edits	0	30				Tota	ıl C	redit	ts	0	30
			7	OTA	L CREI	ITS: 2	6 - TOTAL	ECTS: 240							



U LUDAĞ UNIVERSITY INSTUTE OF NATURAL SCIENCES 2015-2016 ACADEMIC YEAR COURSE PLAN

2015-2016 ACADEMIC YEAR COURSE PLAN AUTOMOTIVE ENGINEERING **DEPARTMENT OF DEPARTMENT / PROGRAM** | Automotive Engineering / IntegratedDoctoral Program II. TERM / SPRING I. TERM / FALL Type T U L Credit ECTS Type T U L Credit ECTS Code **Course Title** Code **Course Title** OTO6191 PHD THESIS I C 0 1 0 OTO6192 PHD THESIS II C 0 0 0 0 Е 4 0 0 Е OTO6181 ADVANCED TOPICS IN PHD THESIS I 0 5 OTO6182 ADVANCED TOPICS IN PHD THESIS II 4 0 0 0 5 NUMERICAL ANALYSIS AND OPTIMIZATION OTO5102 C 3 0 0 3 6 METHODS IN AUTOMOTIVE ENGINEERING 3 0 ELECTIVE COURSE 3 0 0 ELECTIVE COURSE Ε 6 Ε 0 3 6 3 0 0 Е 3 ELECTIVE COURSE 3 6 ELECTIVE COURSE Ε 0 0 3 6 STAGE 3 0 0 3 0 0 ELECTIVE COURSE Ε 6 ELECTIVE COURSE Е 3 6 ELECTIVE COURSE Ε 3 0 0 3 6 30 12 30 **Total Credits Total Credits** 12 COURSE III. TERM / FALL IV. TERM / SPRING C 0 1 0 OTO6193 PHD THESIS III 0 OTO6194 PHD THESIS IV C 0 1 0 0 2 0 0 FEN6001 RESEARCH METHODS 4 OTO6172 SEMINAR (CLASS) C 0 2 0 0 4 5 OTO6183 ADVANCED TOPICS IN PHD THESIS III C 4 0 0 OTO6184 ADVANCED TOPICS IN PHD THESIS IV \mathbf{C} 4 0 5 0 0 0 AUTOMOTIVE DESIGN. 3 0 0 OTO6101 MANUFACTURING AND PROJECT C 3 5 **MANAGEMENT** 3 0 0 3 0 0 3 **ELECTIVE COURSE** Ε 5 ELECTIVE COURSE Ε 3 5 3 0 0 3 0 0 **ELECTIVE COURSE** Е 3 5 **ELECTIVE COURSE** Ε 3 5 Е 3 0 0 5 3 0 0 **ELECTIVE COURSE** 3 **ELECTIVE COURSE** Ε 3 5 Ε 3 0 0 ELECTIVE COURSE 3 5 **Total Credits** 14 30 12 **30 Total Credits** V. TERM / FALL VI. YARIYIL / BAHAR YET6177 PHD PROFICIENCY EXAMINATION 0 0 0 OTO6186 ADVANCED TOPICS IN PHD THESIS VI C 10 C 4 0 0 0 5 С C 2 0 0 0 1 0 OTO6171 SEMINAR (THESIS) 0 5 OTO6196 PHD THESIS VI 0 25 OTO6185 ADVANCED TOPICS IN PHD THESIS V 4 0 0 C 0 5 OTO6195 PHD THESIS V C 0 1 0 0 10 30 STAGE THESIS **Total Credits Total Credits** 0 30 VII. TERM / FALL VIII. TERM / SPRING PLANNING AND EVALUATION IN 3 0 0 2 ENS6121 DEVELOPMENT AND LEARNING \mathbf{C} 3 5 ENS6122 0 0 5 **EDUCATION** 4 0 0 5 OTO6188 ADVANCED TOPICS IN PHD THESIS VIII OTO6187 ADVANCED TOPICS IN PHD THESIS VII C 4 0 0 5 0 OTO6197 PHD THESIS VII C 0 1 0 20 OTO6198 PHD THESIS VIII 0 1 0 0 20 **Total Credits** 30 **Total Credits** 30 IX. TERM / FALL X. TERM / SPRING OTO6189 | ADVANCED TOPICS IN PHD THESIS IX OTO6190 ADVANCED TOPICS IN PHD THESIS X C | 4 | 0 | 0С 4 0 5 0 1 0 25 0 1 0 25 OTO6199 PHD THESIS IX 0 OTO6290 PHD THESIS X 0

TOTAL CREDITS:50 -TOTAL ECTS: 300

30

Total Credits

30

Total Credits

		I. TERM / ELECTIVE (COURS	ES						II. TERM / ELECTIVE COU	RSES					
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	OTO5101	AUTOMOTIVE ENGINEERING	Е	3	0	0	3	6	OTO5112	VEHICLE DYNAMICS	Е	3	0	0	3	6
	OTO5111	VEHICLE DESIGN	Е	3	0	0	3	6	OTO5114	ALTERNATIVE PROOULSION SYSTEMS	Е	3	0	0	3	6
	OTO5115	AUTOMOTIVE MATERIALS	Е	3	0	0	3	6	OTO5120	PRODUCTION AND ASSEMBLY TECHNOLOGIES	Е	3	0	0	3	6
	ОТО5117	MOTOR VEHICLES AND THEIR EVOLUTION	Е	3	0	0	3	6	OTO5124	ENGINE DESIGN AND CONTROL FUNDAMENTALS	Е	3	0	0	3	6
	OTO5119	AUTOMOTIVE TRANSMISSION DESIGN	Е	3	0	0	3	6	OTO5128	FINITE ELEMENT APPLICATIONS IN AUTOMOTIVE ENGINEERING	Е	3	0	0	3	6
Œ	OTO5121	DEVELOPING FORMS AND DESIGNING THE BODY WORK	Е	3	0	0	3	6	OTO5130	VEHICLE INTERIOR DESIGN	Е	3	0	0	3	6
STAGE	OTO5123	ELECTRIC AND ELECTRONIC SYSTEMS FOR VEHICLES	Е	3	0	0	3	6	OTO5134	AERODYNAMIC MODELLING FUNDAMENTALS	Е	3	0	0	3	6
COURSE	OTO5127	INTERNAL COMBUSTION ENGINE DESIGN	Е	3	0	0	3	6	OTO5136	ADVANCED TOPICS IN INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6
00	OTO5129	MIXTURE FORMATION IN INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5138	VEHICLE OUT EMISSIONS AND THEIR CONTROL	Е	3	0	0	3	6
	OTO5131	INTERNAL COMBUSTION ENGINES	Е	3	0	0	3	6	OTO5140	ADVANCED MANUFACTURING TECHNIQUES FOR VEHICLES	Е	3	0	0	3	6
	OTO5133	APPLICATION OF INTERNAL COMBUSTION ENGINES ON VEHICLE	Е	3	0	0	3	6	OTO5142	INTERFACE CIRCUITS IN AUTOMOTIVE ELECTRONICS	S	3	0	0	3	6
	OTO5135	VIBRATION AND NOISE IN VEHICLES	Е	3	0	0	3	6	OTO5144	EMBEDDED CONTROL SYSTEMS IN VEHICLES	S	3	0	0	3	6
	OTO5137	FUNDAMENTALS OF FINITE ELEMENT ANALYSIS	Е	3	0	0	3	6	OTO5146	INTERNAL COMBUSTION ENGINE TESTS	S	3	0	0	3	6
	OTO5139	NUMERICAL MODELING AND SIMULATION	Е	3	0	0	3	6	OTO5148	TRIBOLOGICAL SYSTEMS IN AUTOMOTIVE	S	3	0	0	3	6
	OTO5141	VEHICLE HVAC SYSTEMS AND THERMAL COMFORT	E	3	0	0	3	6	OTO5150	FLUID CONTROL SYSTEMS AND APPLICATION IN VEHICLES	S	3	0	0	3	6
	OTO5143	SENSORS AND ACTUATORS IN VEHICLES	E	3	0	0	3	6	OTO6114	VEHICLE BRAKING SYSTEMS	Е	3	0	0	3	6
	OTO5145	ON-BOARD DIAGNOSTIC SYSTEMS IN VEHICLES	E	3	0	0	3	6	OTO6122	FUELL CELLS	Е	3	0	0	3	6
	OTO5147	MODELLING OF ENGINEERING SYSTEMS IN AUTOMOTIVE	E	3	0	0	3	6								
	OTO5149	USE OF POLYMERS IN VEHICLES	E	3	0	0	3	6								

	OTO5151	VEHICLE DİSCRETE-TIME CONTROL SYSTEMS	E	3	0	0	3	6								
		III. TERM / ELECTIVE COU	RSES							IV. TERM / ELECTIVE COU	IRSES					
AGE	OTO6111	VEHICLE CRASH ANALYSIS METHODS	Е	3	0	0	3	5	II OTO6112 I	CONTROL SYSTEMS IN AUTOMOTIVE ENGINEERING	Е	3	0	0	3	5
SE ST.	OTO6113	THE USAGE OF ADVANCED MATERIALS IN VEHICLES	Е	3	0	0	3	5	II ()T()6116 I	SPECIAL TOPICS IN AUTOMOTIVE ENGINEERING	Е	3	0	0	3	5
OURSE	OTO6115	COMPUTATIONAL FLUID DYNAMICS METHODS OF VEHICLES	Е	3	0	0	3	5	11 ()1()6118 1	EMISSION CONTROL AND MONITORING	Е	3	0	0	3	5
\circ	OTO6117	MECHATRONICS IN AUTOMOTIVE ENGINEERING	Е	3	0	0	3	5	∥ OTO6120 ±	AUTOMOTIVE COMPOSITES AND SANDWICH STRUCTURES	Е	3	0	0	3	5
	OTO6119	ADVANCED LEVEL PROGRAMMING IN AUTOMOTIVE ENGINEERING	E	3	0	0	3	5	II OTO6124	DESIGNING OF ELECTRONIC CONTROL UNITS FOR VEHICLES	S	3	0	0	3	5
									OTO6126	DAMAGE ANALYSIS OF VEHICLES	S	3	0	0	3	5



ULUDAĞ UNIVERSITY INSTUTE OF NATURAL SCIENCES 2015-2016ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF AUTOMOTIVE ENGINEERING

DEPARTMENT / PROGRAM Automotive Engineering/ Master'sDegree Program (WithoutThesis)

		I, TERM / FALL	, 1,14,5001		5.00	- 1105	(/	II. TERM / SPRING									
	Code	Course Title	Type	T	U	L Cr	edit	Code	Course Title	Type	T	U	L	Credit	ECTS		
	OTO5001	VEHICLE DESIGN	C	3	0	0	3	7.5	OTO5002	VEHICLE DYNAMICS	С	3	0	0	3	7.5	
	OTO5003	MOTOR VEHICLES AND THEIR EVOLUTION	С	3	0	0	3	7.5	OTO5004	NUMERICAL MODELING AND SIMULATION	С	3	0	0	3	7.5	
	OTO5005	AUTOMOTIVE TRANSMISSION DESIGN	С	3	0	0	3	7.5	OTO5008	COMBUSTION ENGINE APPLICATION TO VEHICLE	С	3	0	0	3	7.5	
	OTO5007	PRODUCTION AND ASSEMBLY TECHNOLOGIES	C	3	0	0	3	7.5									
									OTO5010	FLUID POWER SYSTEMS FOR VEHICLES	Е	3	0	0	3	7,5	
			Tot	al C	redi	its	12	30			To	tal (<u> Cre</u>	dits	12	30	
闰		III. TERM / FALL	ı			T			IV. TERM / SPRING								
STAGE	OTO5009	DEVELOPING FORMS AND DESIGNING THE BODY WORK	С	0	3	OTO5000	PROJECT	С	0	1	0		25				
COURSE	OTO5011	ELECTRIC AND ELECTRONIC SYSTEMS FOR VEHICLES	C	3	0	0	3	7.5	OTO5100	SEMINAR	С	0	0	0		5	
100	OTO5031	INTERNAL COMBUSTION ENGINES	E	3	—	0	3	7,5					↓			<u>.</u>	
	OTO5033	INTERIORS DESIGN	E	3	0	0	3	7,5					ļ	ــــــــــــــــــــــــــــــــــــــ		ļ	
	OTO5035	EMISSION CONTROL AND TECHN. EVOLUTION OF ENGINE	Е	3	0	0	3	7,5									
	OTO5037	ALTERNATIVE PROPULSION SYSTEMS	Е	3	0	0	3	7,5									
	OTO5039	TRANSPORT SYSTEMS AND TRAFFIC ENGINEERING	Е	3	0	0	3	7,5									
	OTO5043	RUBBER AND TIRE TECHNOLOGY	E	3	0	0	3	7,5					T				
	OTO5045	INFORMATION SYSTEMS FOR VEHICLES	Е	3	0	0	3	7,5									
	OTO5047	AUTOMOTIVE MATERIALS	Е	3	0	0	3	7,5				_	<u> </u>	_	<u> </u>		
														<u></u>		2.2	
			Tot	al C			12	30	(mom + 7 :	DOMO 440	To	tal (<u> </u>	dits	0	30	
					T	UTAI	L CRE	EDITS:3	6 -TOTAL	ECTS: 120							