

DEPARTMENT OF AUTOMOTIVE ENGINEERING

DOUBLE MAJOR PROGRAM FOR STUDENTS FROM MECHANICAL ENGINEERING PROGRAM

UNDERGRADUATE CURRICULUM

Automotive Engineering Program			Equivalent Course from Mechanical Engineering Program		
1st Term			1st Term		
Course Code	Course Name	(T-A)E	Course Code	Course Name	(T-A)E
HIST111	Principles of Atatürk and History of Turkish Revolution I	(2-0)2	HIST111	Principles of Atatürk and History of Turkish Revolution I	(2-0)2
PHYS101	General Physics I	(3-2)6	PHYS101	General Physics I	(3-2)6
HIST221	History of Civilization	(3-0)3	HIST221	History of Civilization	(3-0)3
ENG101	English for Academic Purposes I	(4-0)3.5	ENG101	English for Academic Purposes I	(4-0)3.5
MATH151	Calculus I	(4-2)7	MATH151	Calculus I	(4-2)7
CHE105	General Chemistry	(3-2)5	CHE105	General Chemistry	(3-2)5
KRY111	Career Planning	(1-0)1	KRY111	Career Planning	(1-0)1
AE111	Fundamentals of Automotive Engineering	(3-0)3.5			
	Total Credit	(23-6)31			
2nd Term			2nd Term		
Course Code	Course Name	(T-A)E	Course Code	Course Name	(T-A)E
HIST112	Principles of Atatürk and History of Turkish Revolution II	(2-0)2	HIST112	Principles of Atatürk and History of Turkish Revolution II	(2-0)2
PHYS102	General Physics II	(3-2)6	PHYS102	General Physics II	(3-2)6
ENG102	English for Academic Purposes II	(4-0)3.5	ENG102	English for Academic Purposes II	(4-0)3.5
MATH152	Calculus II	(4-2)7	MATH152	Calculus II	(4-2)7
ME108	Computer Aided Solid Modeling	(1-3)4.5	ME108	Computer Aided Solid Modeling	(1-3)4.5
CMPE102	Computer Programming	(2-2)4	CMPE102	Computer Programming	(2-2)4
AE112	Basic Communication and Computational Tools for Automotive Engineers	(2-2)3			
	Total Credit	(18-11)30			
3rd Term			3rd Term		
Course Code	Course Name	(T-A)E	Course Code	Course Name	(T-A)E
MATH275	Linear Algebra	(4-0)6	MATH275	Linear Algebra	(4-0)6
MATE207	Introduction to Materials Engineering	(3-0)5	MATE207	Introduction to Materials Engineering	(3-0)5
ENG201	English for Academic Purposes III	(3-0)3	ENG201	English for Academic Purposes III	(3-0)3
ENE203	Thermodynamics I	(3-0)6	ENE203	Thermodynamics I	(3-0)6

ME201	Statics	(3-0)6
AE207	Automotive Laboratory I	(1-3)4
	Total Credit	(17-3)30

4th Term

Course Code	Course Name	(T-A)E
MATH276	Differential Equations	(4-0)6
ENG202	English for Academic Purposes IV	(3-0)3
ME210	Strength of Materials	(3-1)6
MECE204	Dynamics	(2-2)6
EE234	Introduction to Electrical Engineering	(3-1)5
AE214	Fuels and Combustion	(2-2)4
	Total Credit	(17-6)30

5th Term

Course Code	Course Name	(T-A)E
ENE301	Heat Transfer	(3-1)6
MECE303	Theory of Machines	(3-1)6
MATH380	Numerical Methods for Engineers	(3-1)5
ENG301	English for Occupational Purposes I	(3-0)3
AE307	Fluid Mechanics	(3-1)6
AE399*	Summer Practice I	(0-0)6
	General Elective	(0-0)4
	Total Credit	(15-4)30

6th Term

Course Code	Course Name	(T-A)E
ME316	Machine Elements	(3-1)7
ENG302	English for Occupational Purposes II	(3-0)3
MECE306	Control Systems I	(3-0)6
	General Elective	(3-0)4
AE312	Internal Combustion Engines	(3-1)5
AE308	Manufacturing and Material Technologies in Automotive Industry	(3-1)5
	Total Credit	(18-3)30

7th Term

ME201	Statics	(3-0)6

4th Term

Course Code	Course Name	(T-A)E
MATH276	Differential Equations	(4-0)6
ENG202	English for Academic Purposes IV	(3-0)3
ME210	Strength of Materials	(3-1)6
MECE204	Dynamics	(2-2)6
EE234	Introduction to Electrical Engineering	(3-1)5

5th Term

Course Code	Course Name	(T-A)E
ENE301	Heat Transfer	(3-1)6
MECE303	Theory of Machines	(3-1)6
MATH380	Numerical Methods for Engineers	(3-1)5
ENG301	English for Occupational Purposes I	(3-0)3
AE307	Fluid Mechanics	(3-1)6
ME399*	Summer Practice I	(0-0)6
	General Elective	(0-0)4

6th Term

Course Code	Course Name	(T-A)E
ME316	Machine Elements	(3-1)7
ENG302	English for Occupational Purposes II	(3-0)3
MECE306	Control Systems I	(3-0)6
	General Elective	(3-0)4

7th Term

Course Code	Course Name	(T-A)E	Course Code	Course Name	(T-A)E
TURK401	Turkish Language I	(2-0)2	TURK401	Turkish Language I	(2-0)2
IE305	Engineering Economy	(2-0)5	IE305	Engineering Economy	(2-0)5
AE499*	Summer Practice II	(0-0)6	ME499*	Summer Practice II	(0-0)6
	General Elective	(3-0)4		General Elective	(3-0)4
	Area Elective **	(3-0)5			
	Area Elective **	(3-0)5			
AE431	Capstone Project in Automotive Engineering I	(1-4)4			
AE435	Vehicle Dynamics	(3-1)5			
Total Credit		(17-5)30			

8th Term

Course Code	Course Name	(T-A)E
TURK402	Turkish Language II	(2-0)2
	Area Elective (Multidisciplinary Courses)	(0-0)5
AE432	Capstone Project in Automotive Engineering II	(1-4)8
AE436	Transmission Systems and Design	(3-1)5
AE434	Electric and Hybrid Vehicles	(3-1)5
	Area Elective **	(3-0)5
Total Credit		(12-6)30

8th Term

Course Code	Course Name	(T-A)E
TURK402	Turkish Language II	(2-0)2
	Area Elective (Multidisciplinary Courses)	(0-0)5

NOTES:

(1) General elective courses are the same for both programs.	
(2) The courses listed as bold fonts are needed to be taken as double major courses.	
* (3) The first summer practice should be taken from Double Major Program (Automotive Engineering Program) and the second summer practice course can be taken from Major Program (Mechanical Engineering Program)	
(4) The multidisciplinary area elective course for both programs is the same.	
** (5) Since Atilim University double major resolution obliges to take at least twelve (12) courses, not less than sixty (60) ECTS, for double major programs, apart from multidisciplinary area course, the remaining <i>three</i> area elective courses are needed to be taken from Automotive Engineering Department.	
Total Courses:	14 + Summer Practice I
Total ACTS:	66.5 + 6