

Department of Mechatronics Engineering; Curriculum

(to be applied to students starting in or after 2006 fall term)

FIRST YEAR; I. Semester						
Code	Course name	T	A	Cr.	ECTS	
MATH 157	Extended Calculus I	4	2	5	7,5	
PHYS 101	Physics I	3	2	4	6,0	
CHEM 102	Chemistry	3	2	4	6,0	
COMPE 101	Introduction to Computers & Programming	2	2	3	4,5	
E 101	Fundamentals of Engineering	1	0	1	1,5	
ENG 111*	Introduction to Communication Skills	2	4	4	4,5	
ENG 113*	Listening and Note-taking Skills	3	0	3	4,5	
TURK 101	Turkish Language I	2	0	2	2,0	
Semester Credits		17/18	12/8	23/22	32,0	
FIRST YEAR; II. Semester						
Code	Course name	T	A	Cr.	ECTS	
MATH 158	Extended Calculus II	4	2	5	7,5	
PHYS 102	Physics II	3	2	4	6,0	
CompE 102	Computer Programming	2	2	3	4,5	
MECE 102	Fundamentals of Mechatronics Engineering	1	0	1	2,0	
MECE 104	Computer Aided Engineering Drawing	2	2	3	4,5	
ENG 104	Communication Skills II	2	2	3	4,0	
TURK 102	Turkish Language II	2	0	2	2,0	
Semester Credits		16	10	21	30,5	
SECOND YEAR; III. Semester						
Code	Course name	T	A	Cr.	ECTS	
MATH 275	Linear Algebra	4	0	4	6,0	
MECE 203	Engineering Mechanics I	2	2	3	5,0	
MATE 208	Introduction to Materials Engineering	3	0	3	5,0	
MECE 211	Electrical Systems Analysis	2	2	3	5,0	
IE 220	Probability and Statistics	3	0	3	5,0	
HIST 101	Princ. of Atatürk & Hist. of Turk. Rev. I	2	0	2	2,0	
ENG 211	Communication Skills III	1	2	2	3,0	
Semester Credits		17	6	20	31,0	
SECOND YEAR; IV. Semester						
Code	Course name	T	A	Cr.	ECTS	
MATH 276	Differential Equations	4	0	4	6,0	
MECE 212	Electronic Circuits	2	2	3	5,0	
MECE 202	Principles of Engineering Design	2	2	3	5,0	
MECE 204	Engineering Mechanics II	2	2	3	5,0	
MFGE 206	Manufacturing Processes	2	2	3	5,0	
HIST 102	Princ. of Atatürk & Hist. of Turk. Rev. I	2	0	2	2,0	
ENG 212	Technical Report Writing and Communications	2	0	2	3,0	
Semester Credits		16	8	20	31,0	
THIRD YEAR; V. Semester						
Code	Course name	T	A	Cr.	ECTS	
MECE 301	Numerical Methods	2	2	3	5,0	
MECE 303	Theory of Machines	2	2	3	5,0	
MECE 305	Digital Systems	2	2	3	5,0	
MECE 307	Signals and Mechatronic Systems	2	2	3	5,0	
IE 305	Engineering Economic Analysis	3	0	3	4,0	
NTE	Humanities & Social Sciences Elective	3	0	3	5,0	
MECE 399	Summer Practice I			NC	1,0	
Semester Credits		14	8	18	30,0	
THIRD YEAR; VI. Semester						
Code	Course name	T	A	Cr.	ECTS	
MECE 302	Mechatronic Components	2	2	3	5,0	
MECE 304	Mechanical Machine Elements	2	2	3	5,0	
MECE 306	Control Systems	3	0	3	5,0	
MECE 308	Microcontrollers	2	2	3	5,0	
MECE 310	Thermodynamics and Heat Transfer	3	0	3	5,0	
NTE	Humanities & Social Sciences Elective	3	0	3	5,0	
Semester Credits		15	6	18	30,0	
FOURTH YEAR; VII. Semester						
Code	Course name	T	A	Cr.	ECTS	
MECE 401	Mechatronic Design I	1	4	3	6,0	
MECE 403	Mechatronic Instrumentation	1	4	3	6,0	
MECE 407	Undergraduate Research Project I	1	4	3	6,0	
TE	Technical Elective	3	0	3	6,0	
TE	Technical Elective	3	0	3	6,0	
MECE 499	Summer Practice II			NC	1,0	
Semester Credits		9	12	15	31,0	
FOURTH YEAR; VIII. Semester						
Code	Course name	T	A	Cr.	ECTS	
MECE 402	Mechatronic Design II	1	4	3	6,0	
MECE 404	Intelligent Mechatronics	3	0	3	6,0	
MECE 408	Undergraduate Research Project II	1	4	3	6,0	
TE	Technical Elective	3	0	3	6,0	
TE	Technical Elective	3	0	3	6,0	
ORY 400	Social and Cultural Activities			NC	1,0	
Semester Credits		11	8	15	31,0	
Total Credits		* with ENG 111	117	66	151	246,5
		* with ENG 113	118	62	150	

*Students should register either ENG 111 or ENG 113 according to their performances in the English Qualification Examination.