

MECHATRONICS ENGINEERING (2019) CURRICULUM

1. Semester / Fall	Credits	L+PS+L	ECTS
MECT1110 Introduction to Mechatronics Engineering	1	1+0+0	1
ENGL1101 Academic English-I	3	3+0+0	4
MATH1101 (<i>MATH1111</i>) Calculus-I	4	3+2+0	6
CHEM1101 General Chemistry	3	3+0+0	5
MECH1120 Engineering Drawing	4	2+0+4	6
PHYS1101 (<i>PHYS1111</i>) Physics-I (Mechanics)	4	3+2+0	6
PHYS1103 (<i>PHYS1113</i>) Physics-I Lab.	1	0+0+2	2
Total	20		30

2. Semester / Spring	Credits	L+PS+L	ECTS
COMP1101 (<i>COMP1111</i>) Introduction to Programming	4	2+0+4	6
ENGL1102 Academic English-II	3	3+0+0	4
MATH1102 (<i>MATH1112</i>) Calculus-II	4	3+2+0	6
PHYS1102 (<i>PHYS1112</i>) Physics-II (Electricity & Magn.)	4	3+2+0	6
PHYS1104 (<i>PHYS1114</i>) Physics-II Lab. (Electricity)	1	0+0+2	2
ITEC1001 Computer Literacy	1	1+0+0	1
MATH2104 Linear Algebra	3	3+0+0	5
Total	20		30

3. Semester / Fall	Credits	L+PS+L	ECTS
MATH2105 Calculus-III	4	3+2+0	6
MATH2205 Probability & Statistics for Engineers	4	3+2+0	6
MECT2211 Engineering Mechanics-I	3	3+1+0	5
MECH2120 (<i>MECH2130</i>) Computational Meth. in Eng.	4	3+0+2	6
ELEC1401 (<i>ELEC1411</i>) Logic Design	3	3+1+0	5
ELEC1402 Logic Design Laboratory	1	0+0+2	2
Total	19		30

4. Semester / Spring	Credits	L+PS+L	ECTS
MATH2107 Differential Equations	4	3+2+0	6
MECT2222 Engineering Mechanics-II	3	3+1+0	5
MECT2520 Materials & Manufacturing	4	4+1+0	6
ELEC2205 Electrical Circuits	3	3+1+0	5
ELEC2207 Electrical Circuits Laboratory	1	0+0+2	2
ECON1005 Macro Economics	3	3+0+0	5
MECH2910 (<i>MECT3920</i>) Industrial Training-I	0	0+160+0	1
Total	18		30

5. Semester / Fall	Credits	L+PS+L	ECTS
MECH3111 Measurements & Instrumentation Lab.	2	1+0+2	3
MECH3211 Machine Design-I	4	3+2+0	6
MECH3311 (<i>ENGR2105</i>) Fluid Mechanics	3	3+1+0	5
MECH3422 Dynamic System Modelling & Control	3	3+1+0	5
ELEC3305 Electronics	3	3+1+0	5
ELEC3307 Electronics Lab	1	0+0+2	2
TURK1201 (<i>CORE0103</i>) Turkish-I (*)	2	2+0+0	2
HIST1101 (<i>CORE0101</i>) History of Turkish Republic-I (**)	2	2+0+0	2
Total	19		30

(*) [TURK2201](#) (*CORE1003*) for Foreigners

(**) [HIST1103](#) (*CORE1001*) for Foreigners

6. Semester / Spring	Credits	L+PS+L	ECTS
MECT3122 Mechatronics Engineering Laboratory	2	1+0+2	3
MECT3322 Fundamentals of Thermal Sciences	3	3+1+0	5
MECT3444 (<i>MECT3445</i>) Control System Design	3	2+0+2	4
MECH-AE-1 Area Elective-1	3	3+0+0	5
MECT-AE-2 Area Elective-2	3	3+0+0	5
MECH-GE-1 General Elective-1	3	3+0+0	5
TURK1202 (<i>CORE0104</i>) Turkish-II (*)	2	2+0+0	2
MECH3910 (<i>MECT4920</i>) Industrial Training-II	0	0+160+0	1
Total	19		30

(*) [TURK2202](#) (*CORE1004*) for Foreigners

7. Semester / Fall	Credits	L+PS+L	ECTS
ENGR4901 Introduction to Design Project	1	1+0+0	1
MECT4410 (<i>MECT4411</i>) Mechatronics System Design	4	2+0+2	6
MECT4470 Modern Control Theory	3	3+0+0	5
MECH-AE-3 Area Elective-3	3	3+0+0	5
MECH-GE-2 General Elective-2	3	3+0+0	5
MECH-GE-3 General Elective-3	3	3+0+0	5
HUSS1002 (<i>CORE0402</i>) Ethics	1	1+0+0	1
OHES4411 Occupational Health & Safety-I	0	2+0+0	2
Total	18		30

8. Semester / Spring	Credits	L+PS+L	ECTS
MECT4902 Graduation Design Project (Capstone)	3	0+6+0	6
MECT-AE-4	3	3+0+0	5
MECT-AE-5	3	3+0+0	5
MECH-GE-4	3	3+0+0	5
MECH-GE-5	3	3+0+0	5
HIST1102 (<i>CORE0102</i>) History of Turkish Republic-II (*)	2	2+0+0	2
OHES4412 Occupational Health & Safety-II	0	2+0+0	2
Total	17		30
Program Total	150		240

(*) [HIST1104](#) (*CORE1002*) for Foreigners

(Note: *Green Italic* codes in parentheses are indicating the current codes of the courses, if any)