Department of Metallurgical and Materials Engineering

Undergraduate Curriculum

ATACS Curriculum Name: "MATE-CUR-2006-2007 Güz Dönemi-1"

(valid for students who started the program between Fall 2013 and Spring 2016 semesters)

Course Code	Course Name	Credit	ECTS
1. Semester			
PHYS101	General Physics I	4	6
MFGE156 (ME108)	Computer Aided Solid Modeling	2	4,5
MATH157	Extended Calculus I	5	7,5
ENG101	English For Academic Purposes I	4	3,5
MATE101	Engineering Fundamentals	1	2,5
TURK101 (TURK401)	Turkish Language I	2	2
CMPE101	Introduction to Computers and Programming	3	3
2. Semester			
MATH158	Extended Calculus II	5	7,5
ENG102	English for Academic Purposes II	3	3,5
PHYS102	General Physics II	4	6
MATE102	Introduction to Metallurgical and Materials Engineering and Materials Industry	2	2
CMPE102	Computer Programming	3	4
CHEM106	General Chemistry for Materials Engineering	4	6,5
3. Semester			
MATE201	Materials Engineering I	3	5
MATE203	Thermodynamics of Materials I	3	5
ENG201	English for Academic Purposes III	3	3
MFGE203 (ME211)	Engineering Mechanics	2	5
HIST101	Principles of Atatürk and History of Turkish Revolution I	2	2
MATH275	Linear Algebra	4	6
MATE-GE2FA1	General Elective	3	4
4. Semester			
MATE202	Materials Engineering II	3	6,5
MATE204	Thermodynamics of Materials II	3	5,5
TURK102 (TURK402)	Turkish Language II	2	2
MATH276	Differential Equations	4	6
ENG204	Report Writing Skills	2	3
HIST101	Principles of Atatürk and History of Turkish Revolution I	2	2
IE220	Probability and Statistics	3	5
5. Semester			
MATE301	Fundamentals and Applications of Mechanical Shaping	4	6
MATE303	Chemical Principles in Production of Metals	3	5,5
MATE311	Ceramics and Refractory Materials	3	5
MATE313	Phase Transformations and Kinetic Processes in Materials	3	5,5
ECON211	Fundamentals of Economics	4	4
MATE399	Summer Practice I	0	6

Course Code	Course Name	Credit	ECTS
6. Semester			
MATE310	Polymeric Materials	3	4,5
MATE312	Iron and Steel Production Technologies	3	5
MATE314 (MATE307)	Microstructure and Phase Relations	3	5,5
MATE316 (MATE309)	Solidification Processes	3	5,5
MATE304	Metallic Materials	3	4,5
IE305	Engineering Economic Analysis	3	5
7. Semester			
MATE499	Summer Practice II	0	6
MATE401 (MATE441)	Casting Processes and Applications	2	5
MATE403 (MATE318)	Materials Characterization	2	5,5
MATE405 (MATE445)	Heat Treatment and Surface Hardening of Materials	2	5
MATE419	Undergraduate Seminar	1	1
MATE-AE4FA1	Area Elective (1)	3	5
MATE-AE4FA2	Area Elective (2)	3	5
8. Semester			
MATE410	Material Selection in Design	2	7
MATE420	Graduation Project	1	12
MATE-AE4SP1	Area Elective (3)	3	5
MATE-AE4SP2	Area Elective (4)	3	5