

Department of Metallurgical and Materials Engineering
Undergraduate Curriculum

ATACS Curriculum Name: “MATE-CUR-2016-2017 Güz Dönemi-1”

(valid for students who started the program between Fall 2016 and Spring 2020 semesters)

Course Code	Course Name	Credit	ECTS
1. Semester			
PHYS101	General Physics I	4	6
MFGE108 (ME108)	Computer Aided Solid Modeling	2	4
MATH157	Extended Calculus I	5	7,5
ENG101	English For Academic Purposes I	4	3,5
CEAC103 (CHE103)	General Chemistry I	4	5
HIST111	Principles of Atatürk and History of Turkish Revolution I	2	2
MATE103	Introduction to Metallurgical and Materials Engineering and Materials Industry	2	2
2. Semester			
MATH158	Extended Calculus II	5	7,5
ENG102	English for Academic Purposes II	3	3,5
PHYS102	General Physics II	4	6
HIST112	Principles of Atatürk and History of Turkish Revolution II	2	2
CMPE102	Computer Programming	3	4
HIST221	History of Civilization	3	3
CEAC104 (CHE104)	General Chemistry II	3	4,5
3. Semester			
ENG201	English for Academic Purposes III	3	3
ME211	Statics and Strength of Materials	3	6
MATH275	Linear Algebra	4	6
MATE201	Fundamentals of Materials Engineering	3	5
MATE203	Thermodynamics of Materials I	3	5
MATE-AE2FA1	Area Elective (1)	3	5
4. Semester			
MATE202	Mechanical Behavior and Testing of Materials	3	6,5
MATE204	Thermodynamics of Materials II	3	5,5
MATH276	Differential Equations	4	6
ENG202	English for Academic Purposes IV	3	3
MATE-AE2SP1	Area Elective (2)	3	5
MATE-GE2SP1	General Elective (1)	3	4
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
MATE-GE3FA1	General Elective (2)	3	4
MATE399	Summer Practice I	0	6
ENG301	English for Occupational Purposes I	3	3

Course Code	Course Name	Credit	ECTS
6. Semester			
MATE310	Polymeric Materials	3	5
MATE312	Iron and Steel Production Technologies	3	5
MATE314	Microstructure and Phase Relations	2	6
MATE316	Solidification Processes	2	5,5
MATE318	Materials Characterization	2	5,5
ENG302	English for Occupational Purposes II	3	3
7. Semester			
TURK401	Turkish Language I	2	2
MATE499	Summer Practice II	0	6
MATE409	Undergraduate Research	1	3
MATE-AE4FA1	Area Elective (3)	3	5
MATE-AE4FA2	Area Elective (4)	3	5
MATE-AE4FA3	Area Elective (5)	3	5
MATE-AE4FA4	Area Elective (6)	3	5
MATE-GE4FA1	General Elective (3)	3	4
8. Semester			
TURK402	Turkish Language II	2	2
MATE404	Metallic Materials	3	5
MATE410	Material Selection in Design	2	9
MATE420	Graduation Project	1	9
MATE-AE4SP1	Area Elective (7)	3	5