MATHEMATICS EDUCATION (MHED) – Program for Students who Started Department in 2019

FIRST YEAR

First Semester

MATH 111	Fundamentals of Mathematics	(3-0) 3
MATH 115	Analytic Geometry	(3-0) 3
MATH 153	Calculus for Mathematics Students I	(4-2) 5
EDS 115	Introduction to Education	(2-0) 2
EDS 255	Educational Philosophy	(2-0) 2
ENG 101	English for Academic Purposes I	(4-1) 4
HIST 2201 or HIST 2205	History of The Turkish Revolution I	NC

Second Semester

2360112	Discrete Mathematics	(3-0) 3
2360116	Basic Algebraic Structures	(3-0) 3
2360154	Calculus for Mathematics Students II	(4-2) 5
4300105	Information Technology in Education	(3-0) 3
4540125	Educational Psychology	(2-0) 2
4540240	Educational Sociology	(2-0) 2
HIST 2202 or HIST 2206	History of the Turkish Revolution II	NC
ENG 102	English for Academic Purposes II	(4-1) 4

SECOND YEAR

Third Semester

MATH 251	Advanced Calculus I	(4-0) 4
MATH 261	Linear Algebra I	(4-0) 4
ENG 211	Academic Oral Presentation Skills	(3-0) 3
CENG 240	Programming with Python for Engineers	(2-2) 3
	Elective I	

Fourth Semester

MATH 252	Advanced Calculus II	(3-2) 4
MATH 262	Linear Algebra 2	(4-0) 4
MATH 254	Differential Equations	(4-0) 4
	Elective II	
	Elective III	

THIRD YEAR

Fifth Semester

MSE 326	Curriculum Dev. and Instruction in Science and Mathematics Education	(3-0) 3
ENG 311	Advanced Communication Skills	(3-0) 3
TURK 305	Oral Communication	(2-0) 2
STAT 201	Introduction to Probability and Statistics I	(3-0) 3
MSE 321	Teaching and Learning Secondary School Mathematics I	(3-0) 3
MSE 329	Instructional Technology and Material Development	(2-2) 3

Sixth Semester

MSE 305	Assessment of Learning in Science and Mathematics	(3-0) 3
MATH 201	Elementary Geometry	(3-0) 3
STAT 202	Introduction to Probability and Statistics II	(3-0) 3
MSE 322	Teaching and Learning Secondary School Mathematics II	(3-0) 3
TURK 306	Written Expression	(2-0) 2
MSE 288	Community Service	(1-4) 3
	Restricted Elective I	

FOURTH YEAR

Seventh Semester

MSE 417	School Experience	(1-4) 3
MSE 451	Teaching and Learning Secondary School Mathematics III	(3-0) 3
EDS 304	Classroom Management	(3-0) 3
MSE 431	Research Methods in Education	(3-0) 3
	Departmental Elective I	
	Restricted Elective II	

Eighth Semester

MSE 418	Practice Teaching	(2-6) 5
EDS 424	Guidance	(3-0) 3
MSE 452	Teaching and Learning Secondary School Mathematics IV	(3-0) 3
	Restricted Elective III	
	Departmental Elective II	

All electives must be at least 3 METU credits and 5 ECTS credits each unless otherwise stated.

Restricted Elective: 3xxx and 4xxx levels mathematics courses except Math 223, Math 321, Math 387, Math 388, Math 395, Math 396, Math 470, Math 486, Math 373

Departmental Elective: Courses offered by Department of Mathematics and Science Education (either with MSE or SSME codes)