

MATHEMATICS EDUCATION (MHED) – Program for Students who Started Department in 2018

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
EDS 212	Instructional Principles and Methods	(2-0) 2
EDS 266	Instructional Technologies	(2-0) 2
MSE 268	Approaches to Teaching and Learning Mathematics	(2-0) 2
Elective*	ENG 211 Academic Oral Present. Skills	(3-0) 3
	Restricted Elective I	
	Educational Elective	

Fourth Semester

MATH 201	Elementary Geometry	(3-0) 3
MATH 262	Linear Algebra 2	(4-0) 4
EDS 213	History of Turkish Education	(2-0) 2
EDS 214	Research Methods in Education	(2-0) 2
MSE 262	Algorithms and Programming	(2-0) 2
MSE 269	Mathematics Curriculum	(2-0) 2
Elective*	MATH 252 Advanced Calculus II	(3-2) 4
Departmental Elective	MSE 373 Instructional Technology and Material Development	(2-0) 2
	Educational Elective	

THIRD YEAR

Fifth Semester

ENG 311	Advanced Communication Skills	(3-0) 3
STAT 201	Introduction to Probability and Statistics I	(3-0) 3
MSE 321	Teaching and Learning Secondary School Mathematics I	(3-0) 3
TURK 305	Oral Communication	(2-0) 2
	Restricted Elective II	
	Departmental Elective	

Sixth Semester

MATH 254	Differential Equations	(4-0) 4
MSE 305	Assessment of Learning in Science and Mathematics	(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

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
	Restricted Elective III	

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
	Elective	

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)

Elective: Courses offered by any department.

* According to the University Senate decision (Meeting Number: 2019/7; Decision Number:1), two of the courses in this category must be "6390211 Academic Oral Presentation Skills" and "2360252 Advanced Calculus II"