

İSTİNYE UNIVERSITY
FACULTY OF ART AND SCIENCE
DEPARTMENT OF MATHEMATICS

1st Semester						2nd Semester					
CODE	COURSE	T	P	ECTS	Language of Instruction	CODE	COURSE	T	P	ECTS	Language of Instruction
MATH101	Calculus 1	3	1	6	EN	MATH102	Calculus 2	3	1	6	EN
MATH103	Computational Thinking	3	0	5	EN	MATH104	Computational Mathematics	3	2	7	EN
MATH107	Analytic Geometry 1	3	0	5	EN	MATH106	Analytic Geometry 2	3	0	5	EN
MATH109	Physics 1	3	1	6	EN	MATH108	Physics 2	3	1	6	EN
TRK101	Turkish Language 1	2	0	2	TR	TRK102	Turkish Language 2	2	0	2	TR
	University Elective	2	2	5	EN		University Elective	2	2	5	EN
TOTAL :		16	4	29		TOTAL :		16	6	31	

3rd Semester						4th Semester					
CODE	COURSE	T	P	ECTS	Language of Instruction	CODE	COURSE	T	P	ECTS	Language of Instruction
ATA101	Atatürk's Principles and History of Revolution 1	2	0	2	TR	ATA102	Atatürk's Principles and History of Revolution 2	2	0	2	TR
DIL101	General English 1	2	0	2	EN	DIL102	General English 2	2	0	2	EN
MATH201	Advanced Calculus 1	3	1	6	EN	MATH202	Advanced Calculus 2	3	1	6	EN
MATH203	Linear Algebra 1	3	1	6	EN	MATH204	Linear Algebra 2	3	1	6	EN
MATH205	Probability	3	1	6	EN	MATH206	Differential Equations	3	1	6	EN
MATH207	Computer Algebra Systems	3	2	7	EN	MATH208	Statistics	3	2	7	EN
SEG001	Manifest of İstinye 1	1	0	1	TR/EN	SEG002	Manifest of İstinye 2	1	0	1	TR/EN
TOTAL :		17	5	30		TOTAL :		17	5	30	

5th Semester						6th Semester					
CODE	COURSE	T	P	ECTS	Language of Instruction	CODE	COURSE	T	P	ECTS	Language of Instruction
MATH301	Complex Calculus	3	1	6	EN	MATH302	Metric Spaces	3	1	6	EN
MATH303	Abstract Algebra 1	3	2	7	EN	MATH304	Abstract Algebra 2	3	2	7	EN
MATH305	Partial Differential Equations	3	1	6	EN	MATH306	Elementary Number Theory	4	0	6	EN
	Department Elective	3	1	6	EN		Department Elective	3	1	6	EN
	University Elective	2	2	5	EN		University Elective	2	2	5	EN
TOTAL :		14	7	30		TOTAL :		15	6	30	

7th Semester						8th Semester					
CODE	COURSE	T	P	ECTS	Language of Instruction	CODE	COURSE	T	P	ECTS	Language of Instruction
MATH401	Seminar 1	4	0	6	EN	COE402	Seminar 2	4	0	6	EN
	Department Elective	3	1	6	EN		Department Elective	3	1	6	EN
	Department Elective	3	1	6	EN		Department Elective	3	1	6	EN
	Department Elective	3	1	6	EN		Department Elective	3	1	6	EN
	University Elective	2	2	5	EN		University Elective	3	1	5	EN
	İstinyelik Manifestosu 3	1	0	1	TR/EN		İstinyelik Manifestosu 4	0	1	1	TR/EN
TOTAL :		16	5	30		TOTAL :		16	5	30	

DESCRIPTION
T : Theoric
P : Practice
ECTS : European Credit Transfer System

Elective Major Area Courses					
CODE	COURSE	T	P	ECTS	Language of Instruction
MATH001	Introduction to Set Theory	3	1	6	EN
MATH002	Commutative Algebra	3	1	6	EN
MATH003	Introduction to Algebraic Geometry	3	1	6	EN
MATH004	Error Correcting Codes 1	3	1	6	EN
MATH005	Error Correcting Codes 2	3	1	6	EN
MATH006	Algebraic Number Theory	3	1	6	EN
MATH007	Finite Fields	3	1	6	EN
MATH008	Combinatorics	3	1	6	EN
MATH009	Graph Theory	3	1	6	EN
MATH010	Cryptography	3	1	6	EN
MATH011	Elliptic Curve Cryptography	3	1	6	EN
MATH012	Post Quantum Cryptography	3	1	6	EN
MATH013	Introduction to Optimal Control Theory	3	1	6	EN
MATH014	Dynamical Systems	3	1	6	EN
MATH015	Machine Learning Algorithms	3	1	6	EN
MATH016	Deep Learning Algorithms	3	1	6	EN