MUŞ ALPARSLAN ÜNİVERSİTESİ

Institute of Science

Mathematics

Matematik

1.Semester Course Plan				
Course Code	**Course Name**	**T+A+L**	**Compulsory/Elective**	**ECTS**
FSE500	Special Topics	8+0+0	Compulsory	0
FSE800	Scientific Research Methods and Publication Ethics	3+0+0	Compulsory	5
FSE900	Consulting	0+1+0	Compulsory	0
MAT501	Higher Differential Geometry I	3+0+0	Elective	7
MAT503	Advanced Analysis I	3+0+0	Elective	7
MAT505	Differential Geometry of Curves and Surfaces I	3+0+0	Elective	7
MAT507	Differentiable Manifolds I	3+0+0	Elective	7
MAT509	Semi-Riemannian Manifolds I	3+0+0	Elective	7
MAT511	Theory of Motions and Quaternions I	3+0+0	Elective	7
MAT513	Lorentzian Geometry I	3+0+0	Elective	7
MAT515	Algebraic Geometry I	3+0+0	Elective	7
MAT517	Advanced Projective Geometry I	3+0+0	Elective	7
MAT519	Computer Aided Design I	3+0+0	Elective	7
MAT521	Geometry of Lines I	3+0+0	Elective	7
MAT523	Global Affine Geometry	3+0+0	Elective	7
MAT525	Finsler Spaces I	3+0+0	Elective	7
MAT527	Advanced Functional Analysis I	3+0+0	Elective	7
MAT529	Divergent Series I	3+0+0	Elective	7
MAT531	Matrix Transformations I	3+0+0	Elective	7
MAT533	Operator Theory I	3+0+0	Elective	7
MAT535	Sequence Spaces and Series I	3+0+0	Elective	7
MAT537	Functional Analysis and Applications I	3+0+0	Elective	7
MAT539	Nonlinear differential equatios I	3+0+0	Elective	7
MAT541	Matrix Methods and Linear Transformations I	3+0+0	Elective	7
MAT543	delay Differential Equations I	3+0+0	Elective	7
MAT545	Integral Equations I	3+0+0	Elective	7
MAT547	Fractional Differential Equation Theory I	3+0+0	Elective	7
MAT549	Variational Calculus	3+0+0	Elective	7
MAT551	Integral Equations	3+0+0	Elective	7
MAT553	Numeric Solutions I	3+0+0	Elective	7
MAT555	Differential Equaitons Theory	3+0+0	Elective	7
MAT557	Professional Auxiliary Information	3+0+0	Elective	7
MAT559	Advanced Numeric Analysis I	3+0+0	Elective	7
MAT561	Numerical Methods for Ordinary Differential Equations	3+0+0	Elective	7
MAT563	Advanced Topology I	3+0+0	Elective	7
MAT565	Approximation Theory of Functions I	3+0+0	Elective	7
MAT567	Mathematical Physics Equations I	3+0+0	Elective	7
MAT569	Metric Spaces Topology I	3+0+0	Elective	7
MAT571	Non-Compactness Measure in Fixed-Point The. I	3+0+0	Elective	7
MAT573	Positive Operators I	3+0+0	Elective	7
MAT575	Banach Spaces I	3+0+0	Elective	7
MAT577	Mathematiical Thought I	3+0+0	Elective	7
MAT579	Advanced Real Analysis I	3+0+0	Elective	7
			Total ECTS	**285**

2.Semester Course Plan				
Course Code	**Course Name**	**T+A+L**	**Compulsory/Elective**	**ECTS**
MAT502	Higher Differential Geometry II	3+0+0	Elective	7
MAT504	Advanced Analysis II	3+0+0	Elective	7
MAT506	Differential Geometry of Curves and Surfaces II	3+0+0	Elective	7
MAT508	Differentiable Manifolds II	3+0+0	Elective	7
MAT510	Semi-Riemannian Manifolds II	3+0+0	Elective	7
MAT512	Theory of Motions and Quaternions II	3+0+0	Elective	7
MAT514	Lorentzian Geometry II	3+0+0	Elective	7
MAT516	Algebraic Geometry II	3+0+0	Elective	7
MAT518	Advanced Projective Geometry II	3+0+0	Elective	7
MAT520	Computer Aided Design II	3+0+0	Elective	7
MAT522	Geometry of Lines II	3+0+0	Elective	7
MAT524	Finsler Spaces II	3+0+0	Elective	7

MAT526	Advanced Functional Analysis II	3+0+0	Elective	7
MAT528	Divergent Series II	3+0+0	Elective	7
MAT530	Matrix Transformations II	3+0+0	Elective	7
MAT532	Operator Theory II	3+0+0	Elective	7
MAT534	Sequence Spaces and Series II	3+0+0	Elective	7
MAT536	Functional Analysis and Applications II	3+0+0	Elective	7
MAT538	Non-linear Differential Equations II	3+0+0	Elective	7
MAT540	Non-linear Differential Equations II	3+0+0	Elective	7
MAT542	delay Differential Equations II	3+0+0	Elective	7
MAT544	Integral Equations II	3+0+0	Elective	7
MAT546	Fractional Differential Equation Theory II	3+0+0	Elective	7
MAT548	Variational Calculus	3+0+0	Elective	7
MAT550	Integral Equations	3+0+0	Elective	7
MAT552	Numeric Solutions II	3+0+0	Elective	7
MAT554	Differential Equaitons Theory	3+0+0	Elective	7
MAT556	Numerical Calculation by Matlab	3+0+0	Elective	7
MAT558	Advanced Numeric Analysis II	3+0+0	Elective	7
MAT560	Numerical Methıds for Partially Differential Equ.	3+0+0	Elective	7
MAT562	Advanced Topology II	3+0+0	Elective	7
MAT564	Approximation Theory of Functions II	3+0+0	Elective	7
MAT566	Mathematical Physics Equations II	3+0+0	Elective	7
MAT568	Metric Spaces Topology II	3+0+0	Elective	7
MAT570	Non-Compactness Measure in Fixed-Point The. II	3+0+0	Elective	7
MAT572	Positive Operators II	3+0+0	Elective	7
MAT574	Banach Spaces II	3+0+0	Elective	7
MAT576	Mathematiical Thought II	3+0+0	Elective	7
MAT578	Advanced Real Analysis II	3+0+0	Elective	7
			Total ECTS	**273**

4.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
FSE600	Graduate Seminar	1+1+0	Compulsory	6
FSE700	Master's Thesis	0+0+0	Compulsory	60
			Total ECTS	**66**