Programme Code: MAS

Master of Science in Mathematics

Department of Mathematics

The overall credits structure

Category	tegory PC		ос	Total
Credits	57	12	6	75

Program	Core						Differential Geometry	3		0	
MTD701	Project-I	0	0	10)5		Commutative Algebra	3	-	0	-
MTL501	Algebra	3	1	0	4		Representation of Finite Groups	3		0	
MTL502	Linear Algebra	3	1	0	4		Fractal Geometry	3	0	0	3
MTL503	Real Analysis	3	1	0	4		Operator Theory	3	0	0	3
MTL504	Ordinary Differential Equations	3	1	0	4	MTL743	Fourier Analysis	3	0	0	3
MTL505	Computer Programming	3	1	0	4	MTL744	Mathematical Theory of Coding	3	0	0	3
MTL506	Complex Analysis	3	1	0	4	MTL745	Advanced Matrix Theory	3	0	0	3
	Topology	3	1	0		MTL746	Methods of Applied Mathematics	3	0	0	3
	Mathematical Programming	3	1	0		MTL747	Mathematical Logic	3	0	0	3
	Numerical Analysis	3		0		MTL751	Symbolic Dynamics	3	0	0	3
	Measure and Integration		0			MTL755	Algebraic Geometry	3	0	0	3
	Probability and Statistics	3	-	0		MTL756	Lie Algebras and Lie Groups	3	0	0	3
	Functional Analysis	3		0		MTL757	Introduction to Algebraic Topology	3	0	0	3
MTL603	Partial Differential Equations	3	1	0	4	MTL760	Advanced Algorithms	3	0	0	3
	Total Credits				57	MTL761	Basic Ergodic Theory	3	0	0	3
Program	Electives						Probability Theory	3	-	0	-
	Project-II	Λ	0	12	26		Introduction to Game Theory	3	-	0	-
	Principles of Optimization Theory		0				Parallel Computing		-	0	-
	Numerical Optimization	3		0			Multivariate Statistical Methods			0	
	Database Management Systems		0				Graph Theory	3		0	
	Computational Methods for Differential Equations			2			Combinatorial Optimization		-	0	-
	Fuzzy Sets and Applications		0				Wavelets and Applications	3		0	
	Neurocomputing and Applications	3		0			Programming Languages	3	-	0	-
	Stochastic Processes and its Applications	3	0	0	3		Graph Algorithms	-	-	0	-
	Category Theory	3	0	0	3		Finite Element Theory and Applications			0	
MTL729	Computational Algebra and its Applications	3	0	0	3		Natural Language Processing	-	-	0	-
MTL730	Cryptography	3	0	0	3		Modern Methods in Partial Differential equations			0	
MTL731	Introduction to Chaotic Dynamical Systems	3	0	0	3	MTL793	Numerical Methods for Hyperbolic PDEs	3	0	0	3
MTL732	Financial Mathematics	3	0	0	3		Advanced Probability Theory	-	-	0	-
MTL733	Stochastic of Finance		0				Numerical Method for Partial Differential Equations Special Module in Dynamical System	3		0	

Sem.	Courses						Lecture	C	Credits				
Seili.	(Number, abbreviated title, L-T-P, credits)							Lect	L	Т	Р	Total	Cre
I	MTL501 Algebra (3-1-0) 4	MTL502 Linear Algebra (3-1-0) 4	MTL503 Real Analysis (3-1-0) 4	MTL504 Ordinary differential Equations (3-1-0) 4	MTL505 Computer Programming (3-1-0) 4								20
II	MTL506 Complex Analysis (3-1-0) 4	MTL507 Topology (3-1-0) 4	MTL508 Mathematical Programming (3-1-0) 4	MTL509 Numerical Analysis (3-1-0) 4	MTL510 Measure and Integration (3-0-2) 4								20
Summer													
III	MTL601 Probability and Statistics (3-1-0) 4	MTL602 Functional Analysis (3-1-0) 4	MTL603 Partial Differential Equations (3-1-0) 4	DE-1	MAD701 Project-I (0-0-10) 5								20
IV	DE-2	DE-3	DE-4	OC-1	OC-2								15