

Studies Plan

Mathématiques 2023-24

Block "Basic sciences"

Courses			Bachelor 3	Bachelor 4	Bachelor 5	Bachelor 6	Exam Session	Exam	Credit	
Language	Code	Section	Teacher	l e p	l e p	l e p	l e p			
F	Analysis III MATH-200 MA		Hongler	4h 3h				Win	Written	9
E	Analysis IV MATH-205 MA		Colombo		3h 2h			Sum	Written	7
F	Differential geometry MATH-213 MA		Troyanov	3h 3h				Win	Written	5
E	Discrete optimization MATH-261 MA		Pinchasi		2h 2h			Sum	Written	5
F	Group Theory MATH-211 MA		Hess Bellwald	2h 2h				Win	Written	5
E	Metric and topological spaces MATH-220 MA		Zanardini	2h 2h				Win	Written	5
F	Numerical analysis MATH-250 MA		Deparis		2h 2h			Sum	Written	5
F	Probability MATH-230 MA		Ott	2h 2h				Win	Written	5
F	Rings and fields MATH-215 MA		Patakfalvi		2h 2h			Sum	Written	5
F	Statistics MATH-240 MA		Panaretos		2h 2h			Sum	Written	5
F	Topology MATH-225 MA		Scherer		2h 2h			Sum	Written	5

Group "Optional courses"

Courses			Bachelor 3	Bachelor 4	Bachelor 5	Bachelor 6	Exam Session	Exam	Credit	
Language	Code	Section	Teacher	l e p	l e p	l e p	l e p			
E	Advanced numerical analysis MATH-351 MA		Picasso			2h 2h		Win	Written	5
E	Algebraic geometry I - Curves MATH-328 MA		Wyss				2h 2h	Sum	Oral	5
E	Algebra IV - Rings and modules MATH-311 MA		Patakfalvi			2h 2h		Win	Written	5
E	Algebra V - Galois theory MATH-317 MA		Michel			2h 2h		Win	Written	5
E	Algorithms I CS-250 IN		Kapralov Svensson				4h 2h	Sum	Written	8
E	Continuous optimization MATH-329 MA		Boumal			2h 2h		Win	Written	5
E	Coxeter groups MATH-335 MA		Lachowska				2h 2h	Sum	Written	5
E	Differential geometry III - Riemannian geometry MATH-344 MA		Moschidis				2h 2h	Sum	Written	5
E	Differential geometry II - Smooth manifolds MATH-322 MA		Tsakanikas			2h 2h		Win	Written	5
F	Evolutional partial differential equations MATH-421 MA		Buffoni				2h 2h	Sum	Written	5
F	Functional analysis I MATH-302 MA		Buffoni			2h 2h		Win	Written	5
E	Functional analysis II MATH-404 MA		Dolce Galeati				2h 2h	Sum	Written	5
F	General physics : quanta PHYS-207(c) PH		Pasquarello				2h 2h	Sum	Written	4
E	Graph theory MATH-360 MA		Pinchasi			2h 2h		Win	Written	5
E	Introduction to partial differential equations MATH-305 MA		Nobile			2h 2h		Win	Oral	5

F	Lie Algebras MATH-319	MA		2h 2h		Win	Written	5
E	Linear models MATH-341	MA	Masák	2h 2h		Win	Written	5
F	Martingales et mouvement brownien MATH-330	MA	Jego		2h 2h	Sum	Written	5
F	Mathematical logic MATH-381	MA	Duparc	2h 2h		Win	Written	5
F	Measure and integration MATH-303	MA	Ott	2h 2h		Win	Written	5
E	Number theory I.a - Algebraic number theory MATH-482	MA	Michel	2h 2h		Win	Written	5
E	Number theory I.b - Analytic number theory MATH-313	MA	Constantinescu	2h 2h		Win	Written	5
E	Number theory I.c - Combinatorial number theory MATH-337	MA	Richter	2h 2h		Win	Written	5
E	Numerical approximation of PDEs MATH-451	MA	Buffa		2h 2h	Sum	Written	5
F	Ordinary differential equations MATH-301	MA		2h 2h		Win	Written	5
E	Principles of microeconomics MGT-454	MTE	Mack	3h 1h		Win	Written	4
E	Probability theory MATH-432	MA	Mountford	2h 2h		Win	Written	5
E	Randomization and causation MATH-336	MA	Stensrud		2h 2h	Sum	Written	5
E	Representation theory MATH-334	MA			2h 2h	Sum	Written	5
E	Representation theory of finite groups MATH-314	MA	Rizzoli		2h 2h	Sum	Written	5
F	Selected chapters of geometry MATH-333	MA		2h 2h		Win	Written	5
E	Stochastic processes MATH-332	MA	Mountford		2h 2h	Sum	Written	5
E	Time series MATH-342	MA	Olhede		2h 2h	Sum	Written	5
E	Topics in complex analysis MATH-327	MA	Ruf	2h 2h		Win	Written	5
E	Topological groups MATH-338	MA	Monod		2h 2h	Sum	Written	5
E	Topology III - Homology MATH-323	MA	Monin		2h 2h	Sum	Written	5

Group "Semester courses"

Courses			Bachelor 3	Bachelor 4	Bachelor 5	Bachelor 6	Exam Session	Exam	Credit	
Language	Code	Section	Teacher	l	e	p	l	e	p	
F	MATH-397	MA	Profs divers			12h		12h	Sum Win	During the semester 12

Transverse block HSS

Courses			Exam Session	Exam	Credit
Language	Code	Section	Teacher		
F	HSS : Bachelor cycle BA3 SHS				2
F	SHS : Bachelor cycle BA6 SHS				2
F	HSS : Bachelor cycle BA5 SHS				2
F	HSS : Bachelor cycle BA4 SHS				2