

## Teaching plan - PhD programme in Mathematics

36°Cycle a.y. 2020/2021

Course	SSD	hrs	credits	Educational form*	Type of activity**	Mandatory/ Chosen activity
Geometric Group Theory	MAT/02	30	7	lectures	curricular	Chosen activity
Introduction to Lie Algebras	MAT/02	30	7	lectures	curricular	Chosen activity
Algebraic Geometry	MAT/03	30	7	lectures	curricular	Chosen activity
Symmetric spaces	MAT/03	30	7	lectures	curricular	Chosen activity
Evolution equations	MAT/05	30	7	lectures	curricular	Chosen activity
Variational methods for semilinear elliptic equations	MAT/05	30	7	lectures	curricular	Chosen activity
Some problems in the Calculus of Variations	MAT/05	30	7	lectures	curricular	Chosen activity
Quantum Markov processes	MAT/06	30	7	lectures	curricular	Chosen activity
Stochastic Differential Equations	MAT/06	30	7	lectures	curricular	Chosen activity
Non Linear Dispersive Equations	MAT/07	30	7	lectures	curricular	Chosen activity
Hamiltonian models for incompressible Euler fluids	MAT/07	30	7	lectures	curricular	Chosen activity
Finite elements	MAT/08	30	7	lectures	curricular	Chosen activity
Total hrs/credits		360	84			

This is a possible list of PhD courses that will be offered.

For an updated information please see the web page <https://sites.google.com/view/jointphd/courses>

### Educational form\*

lectures  
laboratory training  
seminar

### Type of activity\*\*

curricular  
cross-curricular