
Curriculum Content. Description of the Programme of Study

UPC students (from MEI) studying at ISIMA

Semester	Courses	ECTS credits	Equivalent subject at the UPC	ECTS credits at UPC
1	Foreign-Language Courses (English or French)	3		
1	Fundamentals of Optimization	3		
1	Algorithm and Complexity	3		
1	Machine Learning and Data Mining	3		
1	Seminar Series	3		
1	Specialization Courses ((Five courses need to be taken from the two specialization areas: decision science and data science . The area from which the most courses are taken determines the specialization of the student.)			
1	Decision Science: Combinatorial Optimization at Work	3		
1	Decision Science: Approximation Algorithms	3		
1	Decision Science: Decision and Learning Under Uncertainty	3		
1	Decision Science: Graph and Algorithms	3		
1	Decision Science: Advanced Topics in Optimization	3		
1	Data Science: High Performance Computing, Parallel Programming Models, Hybrid Computing, Numerical Reproducibility	3		
1	Data Science: Advanced Topics in Machine Learning and Data Mining	3		
1	Data Science: Knowledge Representation and Reasoning	3		
1	Data Science: Mobile Networks and Mobile Data Collection	3		
1	Data Science: Information System Security	3		
2	Research Project at CNRS Research Unit LIMOS	9		
2	Internship starting March 1st	21		

UPC MEI has a Final Master Thesis of 30 ECTS, which amounts to Research Project at CNRS Research Unit LIMOS (9 ECTS)+ Internship (21 ECTS).