

Semestre 9 - Advanced Electromechanics (EMA)



ECTS
30 credits



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications

In brief

- › **Amety's Code:** M8FRAQ2Y
- › **Open to exchange students:** Yes

List of courses

	Nature	CM	TD	TP	Crédits
PHYSICS FOR MECHATRONICS	UE				5 credits
Advanced phenomena in electromechanical conversion	Matière				
Introduction to Magnetohydrodynamics	Matière				
Modeling of coupled phenomena	Matière				
NUMERICAL METHODS AND OPTIMISATION	UE				5 credits
Finite element numerical modelling	Matière				
Optimal control	Matière				
Optimised sizing of electrical machines	Matière				
Numerical modelling of machines	Matière				
DESIGN OF ELECTROMECHANICAL SYSTEMS	UE				5 credits
Design elements of static converters	Matière				
Mechanical design of actuators and generators	Matière				
Introduction to CAD	Matière				
Electric Generators	Matière				
ARCHITECTURES OF MECHATRONIC SYSTEMS	UE				5 credits
Multidimensional Systems	Matière				
Electric actuator control strategy	Matière				
TER Electric Actuator Control	Matière				
Electromagnetic compatibility	Matière				
Filtering estimation	Matière				
APPLIED MECHATRONICS	UE				5 credits
TER Advanced Control (EMA)	Matière				
Elastic metamaterials and actuators for space (Universeh)	Matière				
Winding techniques for electrical machines	Matière				
System Monitoring and Diagnostics	Matière				
SOFT AND HUMAN SKILLS 3EA S9	UE				5 credits
Professional English-LV1-Semestre 9	Bloc				
Anglais Scientifique	Matière				
Choix 2 Anglais Professionnel - 3A	Choix				
Anglais Clinique	Matière				
Anglais de Cambridge ou Projet	Matière				
CV Entretiens(3EA)	Matière				
Recherche doc.(3EA)	Matière				
CHOIX Careers and Management 3EA S9	Choix				
Entrepreneurship Project	Matière				
Corporate Project and Social Responsibility	Matière				