

Master of Science Electrical Energy Systems 2018-2019

Optional Program: ELECTRODYNAMICS AND MECATRONICS Learning Modules - ECTS Credits

3th Theoretical Semester		
Learning Modules	ECTS	Title of courses
NY4E8	3,5	Multivariable Systems
CONTROL AND DIAGNOSIS		Supervision - Diagnosis
OF THE SYSTEMS		Short Project "Supervision - Diagnosis"
NY4E9	3,5	Continuous Optimization
OPTIMAL CONTROL OF THE SYSTEMS		Optimal Control
		Static optimization: design by optimization of electric actuators
		Theme, Study, Research "Optimath"
NY4E10	5	Control Strategy of electrical Actuators
CONTROL AND OBSERVATION		TER Commande des actionneurs électriques
OF ACTUATORS		Estimation and Filtering
		SABER Learning
NY4E11	4	Plasmas
PHYSICS OF ELECTROMAGNETIC		Electrodynamiscs
DEVICES		Modelling of Coupled Phenomena
		Short Project: Modelling of Coupled Phenomena
		Electromechanical Coupling and Fluid Media
		Short Project: Electromechanical Coupling and Fluid Media
NY4E12	7	Design of Machines and Electromechanical Actuators
ELECTROMECHANI CAL CONVERSION		Winding of Electrical Machines
AND MECHATRONIC SYSTEMES		Rotation Speed Sensor Characterisation
		Fundamental Properties of Static Converters
		Mecatronic Actuators
		Electromagnetic Compatibility + Study of applications
		Theme, Study, Research : Numerical Modelling and Sizing of Electrical Machines
NY4E13	7	Project Management
ENGI NEERI NG		CV , job inerview
		Anglais
		Industrial Project
Total 3st Semester ECTS Credits	30	