

1st year

TU			ECTS
SEMESTER 1	Common program	Electrical Machines Design and Synthesis of Power Converters Electrical Grids Control of Linear Systems Soft and Human Skills	30
SEMESTER 2	Common program	Nonlinear Control of the Systems Architecture and Control of Electrical Systems Real Time Control Soft and Human Skills	30
	A choice of two programs	Program 1 Mechatronic Systems : -Materials for Actuation -Analytical Tools and Physics of Mechatronics	
		Program 2 Electrical Systems of the Future : -Design of Static Converters -Renewable Energies and FACTS	

2nd year

TU			ECTS
SEMESTER 3	A choice of three Programs		
	Advanced Power Electronics	Systems and Power Grids	30
		Design of Static Converters	
		Advanced Systems and Static Converters	
		Actuators and Generators	
		Smart Grids and Micro Grids	
		Soft & Human Skills	

SEMESTER	Electrodynamics and Mechatronics	Physics for Mechatronics	30
		Numerical Methods and Optimization	
		Design of Electromechanical Systems	
		Architecture of Mechatronic Systems	
		Applied Mechatronics	
		Soft & Human Skills	
	New Energy Technologies	Systemic Design	30
		Storage and Hydrogen Vector	
Renewable Energies			
SEMESTER 4	Practical semester	Diploma Internship, i.e. "End-of-study Project": 6 months in Academic Research Laboratories or in Industry Research & Development Centers – legally paid internship.	30