

<u>Semester 1 Master's Program: Electromechanics</u>			
Teaching Unit	Subjects	Credits	Coefficient
	Title		
TU Fundamental 1 Credits : 10 Coefficients : 5	Modeling and simulation of electrical machines	4	2
	Advanced power electronics	4	2
	Industrial electrical networks	2	1
TU Fundamental 2 Credits : 8 Coefficients : 4	Industrial mechanisms and power transmission	4	2
	Hydraulic and pneumatic machines	4	2
TU Methodological Credits : 9 Coefficients : 5	Practical modeling and simulation of electrical machines	2	1
	Practical advanced power electronics	2	1
	Practical industrial electrical networks	2	1
	Practical industrial mechanisms and power transmission	2	1
	Practical hydraulic and pneumatic machines	1	1
TU Discovery Credits : 2 Coefficients : 2	Sensors and Instrumentation	1	1
	Exploitation of Renewable Energy	1	1
TU Transversal Credits : 1 Coefficients : 1	Technical English and Terminology	1	1
Total semester 1		30	17

<u>Semester 2 Master's Program: Electromechanics</u>			
Teaching Unit	Subjects	Credits	Coefficient
	Title		
TU Fundamental 1 Credits : 8 Coefficients : 4	Control of electrical machines	4	2
	Hydraulic and pneumatic control	4	2
TU Fundamental 2 Credits : 10 Coefficients : 5	Applied Thermodynamics	4	2
	Applied fluid mechanics	4	2
	Diagnostics and monitoring	2	1
TU Methodological Credits : 9 Coefficients : 5	Practical control of electrical machines	2	1
	Practical hydraulic and pneumatic control	2	1
	Practical applied Thermodynamics	2	1
	Applied Numerical Methods	3	2
TU Discovery Credits : 2 Coefficients : 2	Cooling and Air Conditioning	1	1
	Industrial Safety and Certification	1	1
TU Transversal Credits : 1 Coefficients : 1	Ethics, Professional Conduct, and Intellectual Property	1	1
Total semester 2		30	17

<u>Semester 3 Master's Program: Electromechanics</u>			
Teaching Unit	Subjects	Credits	Coefficient
	Title		
TU Fundamental 1 Credits : 10 Coefficients : 5	Modeling and simulation of converter-machine systems	6	3
	Advanced control and regulation techniques	4	2
TU Fundamental 2 Credits : 8 Coefficients : 4	Microprocessors and PLCs	4	2
	Organization and management of industrial maintenance	4	2
TU Methodological Credits : 9 Coefficients : 5	Practical modeling and simulation of converter-machine systems	2	1
	Practical advanced control and regulation techniques	2	1
	Practical microprocessors and PLCs	2	1
	Computer-Aided Design and Manufacturing	3	2
TU Discovery Credits : 2 Coefficients : 2	Industrial Computing	1	1
	Special Electrical Machines	1	1
TU Transversal Credits : 1 Coefficients : 1	Literature Review and Thesis Design	1	1
Total semester 3		30	17

Semester 4 Master's Program: Electromechanics

Internship in a company culminating in a thesis and a defense.

Credits 30

Coefficient 17