

# Engenharia Eletrotécnica - Energia e Automação Industrial



Code M429  
 Department Electrical Engineering Department  
 Degree Master  
 Registry R/A-Cr 77/2010 from 27-07-2010  
 Duration 2 year(s)  
 Regime Evening  
 Course director Daniel Filipe Albuquerque  
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 Secretariat [Paulo Correia](#) +351 232480529

## Curricular structure

### 1st Year - 1st Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
<a href="#">Complements of Electrical Machines</a>	19,5	-	26	-	5
<a href="#">Industrial Electricity</a>	19,5	-	26	-	5
<a href="#">Mathematics Applied to Engineering</a>	19,5	19,5	-	-	5
<a href="#">Protection and Command of Electrical Systems</a>	19,5	-	26	-	5
<a href="#">Automation Systems</a>	19,5	-	26	-	5
<a href="#">Robotic Systems</a>	19,5	-	26	-	5

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

### 1st Year - 2nd Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
<a href="#">Modern Control</a>	19,5	-	26	-	5
<a href="#">Industrial Electronics</a>	19,5	-	26	-	5
<a href="#">Energy Markets, Energetic Optimisation and Micro-generation</a>	19,5	-	26	-	5
<a href="#">Image Processing and Artificial Vision</a>	19,5	-	26	-	5
<a href="#">Renewable Production of Electricity</a>	19,5	-	26	-	5
<a href="#">Flexible Manufacturing Systems</a>	19,5	-	26	-	5

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

### 2nd Year - 1st Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
<a href="#">Industrial Communication Systems</a>	13	-	26	-	4
<a href="#">Business Management and Entrepreneurship</a>	19,5	13	-	-	4
<a href="#">Electric Mobility</a>	13	-	26	-	4

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

### 2nd Year - Anual

Course unit	Contact hours				ECTS
	T	TP	PL	O	
<a href="#">Dissertation/Project Work/Professional Work Placement</a>	-	-	-	78	48

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

## Scientific areas

Areas	ECTS
Automation	77
Energy	82
Management	4
Mathematics	5
Total	168 (*)

(\*) Some course units are assigned to more than one scientific area. The total ECTS of the course is **120**.

