



2018/19

# MASTER (2<sup>nd</sup> cycle) **IN ELECTRICAL AND ELECTRONICS ENGINEERING**

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## Goals

The master aims to provide its students a solid cultural and technical formation of higher level in electrical engineering. It intends to develop in their students capacities of innovation and critical analysis of problems for the pursuit of a professional activity of higher education or for the pursuit of a scientific career. The master provides its students with advanced training in two areas of knowledge: the Information Technology and Telecommunications and the Power and Control Systems. These two areas are organized in compulsory and optional courses, facilitating to set the profile that best suits students' ambitions.

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## Professional outputs

The graduates are qualified to exercise their profession as engineers, and / or to work in research and development of new technologies in the areas of: telecommunications; electronics; information technology; computation; electrical power systems; automatic control; automation; instrumentation; internet of things; human computer interaction; machine learning; renewable energy; among others.

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**UAlg ISE**

UNIVERSIDADE DO ALGARVE  
INSTITUTO SUPERIOR DE ENGENHARIA

# COURSE PLAN

## SPECIALIZATION IN INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS

### 1° YEAR – 1° SEMESTER

CURRICULAR UNIT	ECTS
SYSTEMS AND TELECOMMUNICATIONS NETWORKS	10
SIGNAL PROCESSING	10
OPTION I	10

### 1° YEAR – 2° SEMESTER

CURRICULAR UNIT	ECTS
BROADBAND NETWORKS	10
OPTION II & III	10 + 10

### 2° YEAR – 1° SEMESTER

CURRICULAR UNIT	ECTS
OPTION IV	10

### 2° YEAR – 1° AND 2° SEMESTER

CURRICULAR UNIT	ECTS
THESIS OR PROJECT OR INTERNSHIP	50

## SPECIALISATION IN ENERGY SYSTEMS AND CONTROL

### 1° YEAR – 1° SEMESTER

CURRICULAR UNIT	ECTS
ELECTRIC ENERGY SYSTEMS	10
LINEAR SYSTEMS	10
OPTION I	10

### 1° YEAR – 2° SEMESTER

CURRICULAR UNIT	ECTS
PROTECTION AND CONTROL OF ELECTRICAL ENERGY	10
OPTION II & III	10 + 10

### 2° YEAR – 1° SEMESTER

CURRICULAR UNIT	ECTS
OPTION IV	10

### 2° YEAR – 1° AND 2° SEMESTER

CURRICULAR UNIT	ECTS
THESIS OR PROJECT OR INTERNSHIP	50

### OPTIONS:

Industrial Interfaces; Smart Grids; Industrial Instrumentation; Renewable Energy and Sustainable Mobility; Automation and Domotics; Computer Vision; Microelectronics; Information Systems; Data Handling and Machine Learning; Mobile Communications; Other.

Applications and more information in: [www.ualg.pt/pt/curso/1477](http://www.ualg.pt/pt/curso/1477)