

First Spanish university to earn 5 stars according to international quality accreditation system **-QS Stars University Ratings-** (International Accreditation).

The UAH is Spain's second best public university for teaching quality **-CYD Ranking-**.

Top Spanish University in Employability. The degree in Electronics and Industrial Automation Engineering, top degree in Madrid Region for employability **-MECD Report on University Student's Labour Insertion-**.

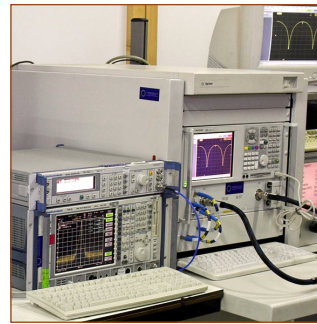
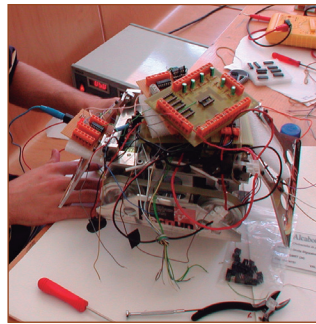
Among the World's Top Universities for employability **-QS Graduate Employability Ranking-**.

Campus of International Excellence in Smart Energy **-BIOENERGY & SMART CITIES-**.

## PROFESSIONAL OPPORTUNITIES

- Industrial automation.
- Electronic design: hardware and software.
- Control engineering.
- Electricity generation.
- Electrical installations.
- Power electronics.
- High technology.
- Security Systems.
- Robotics.
- Home automation.

This degree enables the course programme to be completed with the Masters in Industrial Engineering, qualifying students to work as industrial engineers.



Universidad  
de Alcalá

### POLYTECHNIC SCHOOL

### SCIENCE AND TECHNOLOGY CAMPUS EDIFICIO POLITÉCNICO

Ctra. Madrid-Barcelona, km 33,600  
28805 Alcalá de Henares (Madrid)

[escuelapolitecnica.uah.es](http://escuelapolitecnica.uah.es)



#### INFORMATION CENTRE

900 900 411

[www.uah.es](http://www.uah.es)

[ciu@uah.es](mailto:ciu@uah.es)

  /UniversidadDeAlcala

  @UAHes

Undergraduate degree with optional teaching in English in

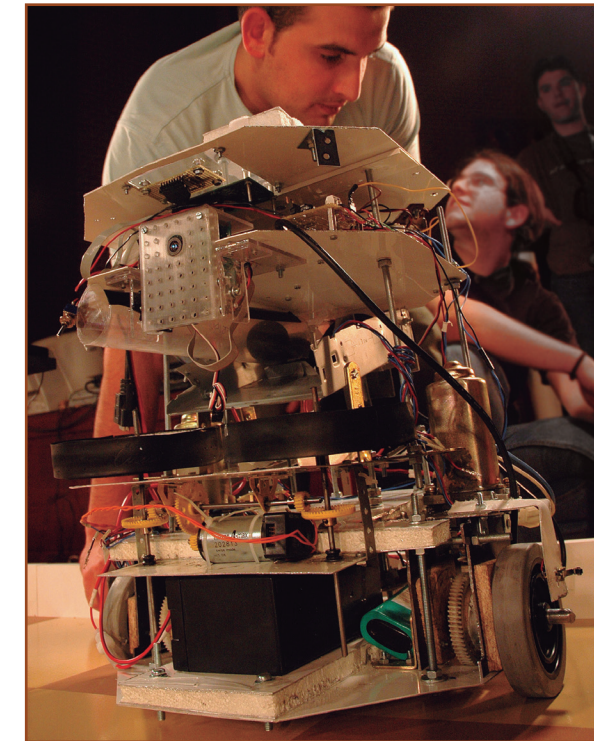
# ELECTRONICS AND INDUSTRIAL AUTOMATION ENGINEERING

Master in

# SCIENCE IN INDUSTRIAL ENGINEERING

Field of Knowledge: Architecture and Engineering

WORLD HERITAGE



Universidad  
de Alcalá



Sello de excelencia internacional EUR-ACE a las titulaciones GIEAI, GIEC, GIST, GIT

## GLOBAL CREDIT DISTRIBUTION (DEGREE)

TYPE OF SUBJECT	ECTS
Basic training (Basic)	60,0
Compulsory (Com)	144,0
Optional (OP)	24,0
Cross-curricular	12,0
<b>TOTAL ECTS</b>	<b>240,0</b>

The updated offer of optional matters is available on the website of the Centre

Students wishing to study part time may complete the course programme in 8 years.

Basic: Basic training;  
COM: Compulsory; OP: Optional

## COURSE PROGRAMME

FIRST YEAR	FIRST TERM	Type	ECTS	SECOND TERM	Type	ECTS
	Calculus I	Basic	6,0	Calculus II	Basic	6,0
	Linear Algebra and Differential Equations	Basic	6,0	Circuit Analysis	COM	6,0
	Physics I	Basic	6,0	Chemistry	Basic	6,0
	Graphic Design	Basic	6,0	Mechanical Systems *	COM	6,0
	Computer Science *	Basic	6,0	Physics II	Basic	6,0
<b>TOTAL ECTS</b>			<b>60,0</b>			

SECOND YEAR	FIRST TERM	Type	ECTS	SECOND TERM	Type	ECTS
	Statistics	Basic	6,0	Fluid Mechanics	COM	6,0
	Thermal Engineering	COM	6,0	Control Engineering I *	COM	6,0
	Analogue Electronics *	COM	6,0	Electronic Technology *	COM	6,0
	Digital Electronics *	COM	6,0	Industrial Computing *	COM	6,0
	Materials Sciences	COM	6,0	Business Economics	Basic	6,0
<b>TOTAL ECTS</b>			<b>60,0</b>			

THIRD YEAR	FIRST TERM	Type	ECTS	SECOND TERM	Type	ECTS
	Digital Electronic Systems *	COM	6,0	Electronic Instrumentation	COM	9,0
	Automation	COM	6,0	Power Electronics *	COM	9,0
	Electrical Machines	COM	6,0	Electrical Materials Resistance	COM	6,0
	Control Engineering II	COM	6,0	Electronic Control Engineering *	COM	6,0
	Cross-curricular I		6,0			
<b>TOTAL ECTS</b>			<b>60,0</b>			

FOURTH YEAR	FIRST TERM	Type	ECTS	SECOND TERM	Type	ECTS
	Projects	COM	6,0	Final Year Project	COM	12,0
	Robotised Systems	COM	6,0	Cross-curricular II		6,0
	Industrial Production Systems	COM	6,0	External Placement / Optional 3 and 4	OP	12,0
	Optional 1	OP	6,0			
	External Practices / Optional 2	OP	6,0			
<b>TOTAL ECTS</b>			<b>60,0</b>			

\* Courses also taught in English