

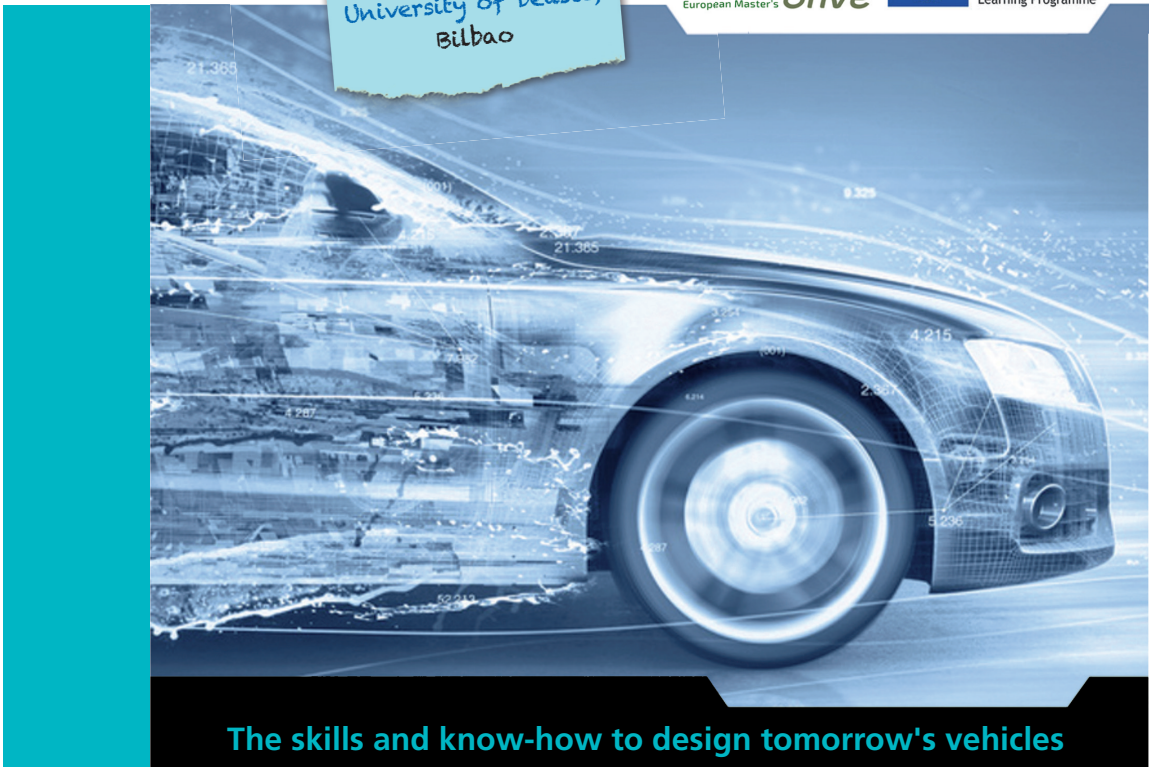


# Advanced Summer Course in Sustainable Automotive Engineering

29/06 - 10/07/2015  
University of Deusto,  
Bilbao



Lifelong Learning Programme



The skills and know-how to design tomorrow's vehicles

Programme developed by a consortium of 4 European partners in Belgium, France, Spain and United Kingdom



# Want to get an insight into some Innovative Automotive Technology?

## Objectives

The aim of this course is to enhance your engineering competences for the automotive industry. You will study some of the innovative technologies in the areas of energy consumption and driving safety and which will be the key components of future vehicles.

## Learning outcomes

The course will help you:

to improve your knowledge of advanced driver assistance systems and to identify the sensors and actuators needed to implement them.

to facilitate the integration of electromobility in a sustainable urban mobility plan and to develop appropriate strategies.

to model electrical and hybrid powertrains and to evaluate optimal technologies for electrical motorization.

to select functionally adequate materials for automotive industry applications according to design specifications and requirements.



# Topics on Advanced Innovative Automotive Technologies



Four interlinked topics will be examined during this summer course:

- 1 Driving assistance influences energy consumption and offers greater control over internal and external safety.
- 2 Materials represent an opportunity to reduce energy consumption and contribute to the vehicle's internal and external safety.
- 3 Electro mobility appears today as one of the most environmentally friendly urban transport modes. Recent technological advances indicate that traditional barriers will be overcome quite soon.
- 4 The design of HEV and EV powertrains is key for the optimisation of the battery life cycle as well as the global behaviour of these systems.

[master-greendrive.eu](http://master-greendrive.eu)

- ✓ The course will be held at the **University of Deusto campus in Bilbao.**
- ✓ Participants will **develop a project** each week.
- ✓ Classes given by experienced researchers and project managers working in these topics.
- ✓ Appropriate balance between lectures, case studies and visits to technological centers and company sites will give you a comprehensive overview of the expected engineering skills for the future.



# Entrance Requirements

Final year bachelor students or students who meet the entry requirements for master level engineering studies in their home university:

- ✓Automotive Engineering
- ✓Mechanical Engineering
- ✓Electromechanical Engineering
- ✓Electronics/ICT
- ✓Electronics and Automation
- ✓Industrial Technology
- ✓Industrial Engineering
- ✓Industrial Electrical Engineering

drive electro green mobility safety vehicles environmental energy materials

## How to apply

**Dates:** from February 1, 2015 till May 1, 2015

**Places:** 20 students

**ECTS credits:** 3

**Application form and documents required in**  
[http://ingenieria.deusto.es/summer\\_course/greendrive](http://ingenieria.deusto.es/summer_course/greendrive)

**Contact:** [greendrive@deusto.es](mailto:greendrive@deusto.es)

**Fees:** 700 € (including social activities, food and accomodation).

Tuition is free.

Other expenses are the student's own responsibility.

