Academic Year 11/12	SEL026	MECHANICAL ENGINEERING & ENERGY CONVERSION
Department:	712 Mechanical Engineering	
Coordinator:	Carles Riba	

Typology:	Block 1. Engineering Courses	Language: English
ECTS: 3	Offered in other degrees: no	Year 1. Semester 2 Spring Semester

OBJECTIVES

The course aims to analyze the general concepts of energy conversion, so that students are able to do in-depth critical analysis of the conversion systems, especially those of transport systems (concept from the well to wheels). It also aims to give students the basis for understanding the mechanical aspects of some renewable energy systems, and the maintenance of PV systems' structures

COURSE DESCRIPTION

The course is developed through 10 sessions as follows:

1. Energy Concepts
2. World energy consumption and reserves
3. Secondary energy (electricity and fuels)
4. Alternative energy sources
5. Energy consumption in vehicles
6. Materials and energy
7. Wind turbines
8. Solar tracker systems
9. Presentation of student works
10. Presentation of student works

METHODOLOGY

The course is developed through theoretical learning sessions and group discussions.

Students do group work, that they present at the end of the course in sessions 9 and 10.

COURSE EVALUATION

Students will be evaluated through the group work and an exam.

FACULTY

Carles Riba
http://directori.upc.edu/directori/dadesPersona.jsp?id=1000810