

# Introduction to energy issues and transversal and societal aspects



ECTS credits  
3 credits

## In brief

➤ **Course language:** French

## Presentation

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### Learning objectives

- To become aware of the importance of the sustainable energy issue for society.
- Develop a general culture around the theme of energy.
- To know the economic mechanisms linked to the energy sector.
- Discover, through industrial visits, the reality of energy installations.

### Description of the programme

- Introduction to the concept of energy.
- Classification of energies.
- Energy deposits and resources.
- Geopolitical importance of the different energy resources.
- Economic mechanisms and models specific to the energy sector.
- Industrial visits: CEA Cadarache, hydro-electric plant.

### Generic central skills and knowledge targeted in the discipline

- C1: Central engineers create value through scientific and technical innovation.  
C2: Central engineers master the complexity of the systems and problems they encounter.  
C3: Central engineers manage programs.  
C4: Central campus engineers manage in an ethical and responsible manner.

C5: Central campus engineers have a strategic vision and know how to implement it.

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## How knowledge is tested

Continuous assessment and supervised homework

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## Bibliography

A.V. da Rosa, Fundamentals of Renewable Energy Processes, Academic Press, 2012

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## Teaching team

- Thierry Gaidon
- Pascal Denis
- Nicolas Clootens

### Total des heures

CM	Master class	<b>34h</b>
		34h

## Useful info

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## Name responsible for EU

### Lead Instructor

Thierry Gaidon

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