



Course Presentation

Energy Management	
Engineering School of Gafsa	Electromechanical & Energy Engineering and Environmental Technology
FOCAL AREA	Renewable Energy
Level	2 ^d year
Semester	S3
Semester hourly volume	Integrated course: (21,5h=15h lecture + 7,5h tutorials)
Teacher	Mr Maher RADDAOUI

Objectives

This program aims to meet the needs of companies to integrate the skills of high-level professionals, experts on energy issues and in particular on the integration of new energy technologies and energy efficiency services.

The main objectives of this module are:

- Teach students how to identify the issues related to improving energy efficiency
- Prepare students to analyze and develop a business model for an innovative company or project in the energy sector
- Teach students how to apply a systemic and continuous improvement approach to energy management for implementation in a complex professional context
- Learn how to look for an innovative solution and strategy in the energy sector

- Take advantage of technological progress to To implement new and renewable energies that are cleaner and more economical.
- Teach students how to acquire all the knowledge and techniques necessary for good energy management to ensure savings and a reduction in the cost of energy.

INTENDED LEARNING OUTCOMES

To develop the capacity of students, future engineers to integrate new technologies and the spirit of innovation to meet the various objectives of energy management

Discover and understand the principles and challenges of energy management and acquire the theoretical bases and appropriate the concepts and tools of energy management approach.

PREREQUISITES/ASSUMED KNOWLEDGE

- The different energy sources in Tunisia and in the world
- Know the approach applied for the energy management in Tunisia and in the world
- Know the energy consumption of the different sectors in Tunisia and in the world

Outline of the lecture (15h)

Chapter 1 (2h): Basics of the field of energy

Chapter 2 (2h): Energy and climate legislation

Chapter 3 (3h): The principles of energy management

Chapter 4 (3h): Driving the digital transformation of energy

Chapter 5 (3h): Energy management project in relation to an industrialist and / or a local authority

Chapter 6 (2h): Additional and transversal skills

References

- Les énergies renouvelables, Collection Que sais-je (2017), Jacques Vernier
- Quelle empreinte environnementale pour notre avenir énergétique (2021), Romain Besseau
- Démarche d'efficacité énergétique (2016), Lionel Munch
- La gestion de l'énergie dans l'entreprise (2008), Gérald Senden
- Intelligence artificielle et gestion intelligente de l'énergie (2020), Technique de l'Ingénieur