

# Aircraft propulsion

**Lecturer**

Patrick HENDRICK (Coordinator)

**Course mnemonic**

MECA-H507

**ECTS credits**

5 credits

**Language(s) of instruction**

English

**Course period**

First term

- > In-depth knowledge and understanding of exact sciences with the specificity of their application to engineering
- > In-depth knowledge and understanding of integrated structural design methods in the framework of a global design strategy
- > In-depth knowledge and understanding of the advanced methods and theories to schematize and model complex problems or processes
- > Present and defend results in a scientifically sound way, using contemporary communication tools, for a national as well as for an international professional or lay audience
- > Has a broad scientific knowledge, understanding and skills to be able to design, produce and maintain complex mechanical, electrical and/or energy systems with a focus on products, systems and services.
- > Has an in-depth understanding of safety standards and rules with respect to mechanical, electrical and energy systems.

## Course content

Study of the different gas turbine cycles and their applications followed by the study of their various components (modules)

## Objectives (and/or specific learning outcomes)

Understand why different engine cycles exist, the way they work and the characteristics and sizing of their components

## Pre-requisites and co-requisites

### Pre-requisites courses

MECA-H407 | Computational Fluid Dynamics I | 5 crédits

## Teaching method and learning activities

Theoretical lectures + exercises + video's

## Contribution to the teaching profile

This teaching unit contributes to the following competences:

## Other information

### Contact(s)

Patrick HENDRICK Tél. : 02/650 26 58 Email : Patrick.hendrick@ulb.ac.be

## Evaluation method(s)

Other

## Programmes

Programmes proposing this course at the Brussels School of Engineering

MA-IREM | Master of science in Electromechanical Engineering | finalité Professional/unit 2