

Specific courses for aeronautics Option



AÉRONAUTIQUE

AERONAUTICS

Lecturers: Jérôme BOUDET, Olivier DESSOMBZ

| Lecturers : 0.0 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

Keywords :

Programme

Learning outcomes

Independent study

Objectifs :

Méthodes :

Core texts

Assessment



CONFÉRENCES

LESSON AND CONFERENCES

Lecturers: Jérôme BOUDET, Olivier DESSOMBZ

| Lecturers : 20 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

The conference cycle aims to provide a broader view of the different sectors and professions of aeronautics.

Keywords : Aeronautics, energy, sector, professions, challenges.

Programme

Cycle of 10 conferences of 2 hours, delivered by engineers working in different sectors / professions of aeronautics, energy, etc.

Learning outcomes

- To have a broader vision of the aeronautical field.
- Identify the challenges in the field of aeronautics.
- To know the opportunities offered by the aeronautical option.

Independent study

Objectifs :

Méthodes :

Core texts

Assessment

Attendance



PROJET AVION

AERONAUTICS PROJECT

Lecturers: Jérôme BOUDET, Damien CONSTANT, Olivier DESSOMBZ, Olivier

| Lecturers : 2 | TC : 34 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : MI

Objectives

This project concerns the preliminary design of a business jet, with given specifications (number of passengers, range, runway length...). The interactions of the global design choices are investigated with simplified models, using an iterative approach. This project is supported by Dassault Aviation.

Keywords : business jet, preliminary design

Programme

This project consists of two phases:

Phase 1: analyse and complete a pre-design tool, then use it to design an aircraft with given specifications.

Phase 2: deepening. For example: realization of a wing model and evaluation in wind tunnel, improvement of pre-design models, study of sensitivities...

Learning outcomes

- Identify the influence of the aircraft design parameters on the performance.
- Elaborate and implement a multi-disciplinary design process.
- Propose and assess models for preliminary design.

Independent study

Objectifs : Progress in the pre-design of the aircraft.

Méthodes : Each group of four students uses the documents provided, the software provided and the skills of the management team.

Core texts

D.P. Raymer., *AIRCRAFT DESIGN: A CONCEPTUAL APPROACH*, AIAA, 2012
L. Jenkinson, J. Marchman. *AIRCRAFT DESIGN PROJECTS.*, Elsevier, 2003
J.D. Anderson. *AIRCRAFT PERFORMANCE AND DESIGN*, McGraw-Hill, 1999

Assessment

Evaluation of the intermediate and final deliverables, including spreadsheets and oral presentation.



PROJET SPÉCIFIQUE

SPECIFIC PROJECT

Lecturers: Jérôme BOUDET, Olivier DESSOMBZ

| Lecturers : 0.0 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

Keywords :

Programme

Learning outcomes

Independent study

Objectifs :

Méthodes :

Core texts

Assessment