



Introduction

The aim of this project is to evaluate the performance of a composite material and process combination. It includes all the stages from the making (bag molding, RTM, etc.) to the final characterization of the material (effect of the process parameters, mechanical property under monotonic or cyclic stress, damage analysis, etc.). Mechanical characterization can be performed with simple geometries of specimen, but also in configurations approaching the final applications of the material. This project is strongly experimental, but numerical analysis can be carried out (finite element analysis, analytical ...) to improve the understanding of the phenomena involved.

Semester

S09

Programme

Learning Outcomes

- know how to deal with a complex problem in which several factors are involved
- knowledge of standard testing methods in the field of composite material

Employment Sectors

Requirements

materials ; mechanics of materials ; composite materials

Assesment

Participation, written report and defense

Option Website

Additional Information



MATÉRIAUX ET STRUCTURES

AERONAUTICS

Lecturers: Olivier DESSOMBZ

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

Objectives

The project will focus on a particular system to carry out an in-depth study based on the functional specifications.

For example :

Aircraft fuselage assembly (Mechanics of Structures + Materials).

Damping of sandwich panels for aircraft floor (Mechanics of Structures + Materials).

Bonding assembly of aerospace composites: non-destructive testing and characterization (Materials).

Keywords :

Programme

Learning outcomes

Independent study

Objectifs :

Méthodes :

Core texts

Assessment

Participation, written report and defense