

## **Aeronautical structures (MECA0028-1)**

### **Project for Erasmus students: Acrobatic aircraft**

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**Academic year 2023-2024**

## **The project**

The structure of the wing of the semi-aerobatic aircraft studied during the Aircraft Structure class shall be designed. Given the provided information, a taper of 0 is to be considered. The work is individual.

Each student shall deliver a report –and a code—related to the following points.

### **A/ Structural loads:**

Using the maneuver envelope and aerodynamic loads evaluated during the class, the structural loads at wing root shall be computed for the different envelope points.

### **B/ Structural design:**

Using the material of the analytical analysis presented during the class, the structure of the wing shall be designed based on the results of A/.

### **D/ Deadline**

**A printed version of the report with all the details to be handed by 24th of May 2024, 6pm. Electronic version with relevant code to be sent by e-mail.**