

Aircraft Design Project Urban Air Mobility (UAM)

Week 9

17/01 – 21/01



Instituto Superior Técnico
Universidade de Lisboa

Structural design

Objectives



Flight Envelope

Define the Flight Envelope for your aircraft with and without gust.



Loads Estimation

Estimate the shear loads and bending moments applied to the main structural components.



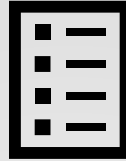
Material Selection

Select the materials to be used for the aircraft structure.

Structural design

Objectives/deliverables

This week's objectives are:



Define the flight envelope, estimate loads and select materials for the aircraft structure

- Define the flight envelope with and without gust; estimate the shear loads and bending moments on the main structural components; and select the materials for the aircraft's structure.

For next week's meeting:



Prepare Powerpoint presentation

Max: 5-10 min