

Aircraft Design Project Urban Air Mobility (UAM)

Week 6
06/12 – 10/12

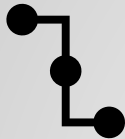


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Engine selection

Introduction/objectives

- You have information of thrust/power requirements for vertical and forward flight segments.
- Here are the tasks you will need to be concerned about:



Architecture of powerplant

Define the required components and how they are connected.



Iterate over MTOW and Design Point
Substitute the mass of the propulsion system by the components' masses and recalculate MTOW and redefine a new design point.



Component search

From the power/thrust requirements, search for existing options in the market (electric motors, turbofans, turbojets, turboprops, turboshafts)