SUSTAINABILITY AND CIRCULARITY CHALLENGES IN AEROSPACE ENGINEERING EDUCATION

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PROBLEM DEFINITION



"How could the training of aerospace engineering bachelor students be improved in order to enable the implementation of more sustainable practices in the aerospace industry?"

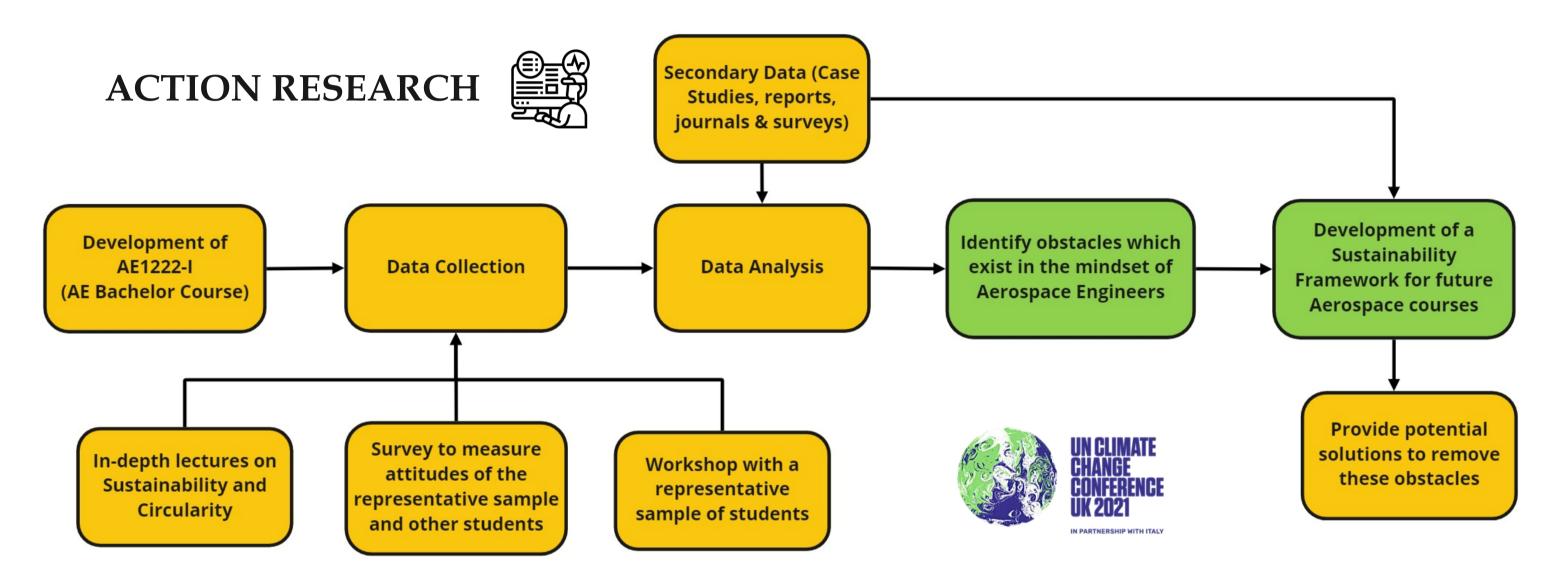
VISION



To employ a bottom-up approach which involves incorporating sustainability in aerospace engineering which can facilitate quantification of impact of design choices and make strides in reducing this impact.



2-3% of global CO₂ emissions5% of anthropogenic climate change12-27% of the carbon budget by 2050





SUSTAINABLE DEVELOPMENT GOALS



STAKEHOLDER'S INVOLVED



Sustainability:

Carbon (and other emissions)
Quantification through
means of manufacturing

Circularity:

Using the 9R Framework to contemplate design choices and incorporate circularity into aviation





OBSTACLES IDENTIFIED



Lack of Interdisciplinary Education



Environmental Responsibility



Conflict with Career Goals



Scepticism & Uncertainty