

COURSE DETAIL

AEROSPACE PROPULSION I

Country

Spain

Host Institution

Carlos III University of Madrid

Program(s)

Carlos III University of Madrid

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Engineering

UCEAP Course Number

112

UCEAP Course Suffix**UCEAP Official Title**

AEROSPACE PROPULSION I

UCEAP Transcript Title

AEROSPACE PROPLSN I

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course offers an introduction to aerospace propulsion. Topics include: aircraft engine modeling-- the turbojet; component matching and off-design operation; turbofan engines; inlets and nozzles; principles of compressors and fans; compressor blading, design, and multi-staging; turbines, stage characteristics, and degree of reaction; turbine solidity, mass flow limits, and internal cooling; film cooling, thermal stresses, and impingement; combustion-- combustors and pollutants; engine noise and aeroacoustics; engine rotating structures; rotordynamics.

Language(s) of Instruction

English

Host Institution Course Number

14171

Host Institution Course Title

AEROSPACE PROPULSION I

Host Institution Campus

Leganés

Host Institution Faculty

Escuela Politécnica Superior.

Host Institution Degree

Grado en Ingeniería Aeroespacial

Host Institution Department

Ingeniería Aeroespacial

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