COURSE DETAIL

FLUID MECHANICS 2
Country United Kingdom - England
Host Institution Imperial College London
Program(s) Imperial College London
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Engineering Chemical Engineering
UCEAP Course Number 137
UCEAP Course Suffix
UCEAP Official Title FLUID MECHANICS 2
UCEAP Transcript Title FLUID MECHANICS 2
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

The topics covered on this course include dimensional analysis, the mass-conservation and momentum-balance principles applied to a fluid particle, the differential form of the governing equations (Navier-Stokes), compressible flows (speed of sound, Mach cone, isentropic-flow relations and converging-diverging nozzles), as well as incompressible flows with exact (Couette-Poiseuille flows) and approximate (boundary layers, Blasius solution, lubrication) solutions, and an introduction to turbulence.

Language(s) of Instruction
English

Host Institution Course Number
MECH50010

Host Institution Course Title
FLUID MECHANICS 2

Host Institution Course Details
https://www.imperial.ac.uk/mechanical-engineering/study/undergraduate/detailed-...

Host Institution Campus
Imperial College London

Host Institution Faculty
Faculty of Engineering

Host Institution Degree

Host Institution Department
Department of Mechanical Engineering

Course Last Reviewed
2023-2024

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