COURSE DETAIL

MECHANICS OF FLUIDS
Country Ireland
Host Institution University College Dublin
Program(s) Irish Universities,University College Dublin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 102
UCEAP Course Suffix
UCEAP Official Title MECHANICS OF FLUIDS
UCEAP Transcript Title MECHANICS OF FLUIDS
UCEAP Quarter Units 4.00
UCEAP Semester Units 2.70

Course Description
This is a course in fluid mechanics for engineers of all disciplines. The course covers a range of topics including, but not limited to: gases, liquids, and solids; continuum hypothesis; Lagrangian and Eulerian descriptions; fluid properties control volume analysis; Reynolds transport theorem; conservation laws of mass; linear momentum; angular momentum and energy; flow through conduits, nozzles, diffusers, and conduit bends; propulsion; Bernoulli's equation; static, dynamic, and total pressure; pitot tube similarity and dimensional analysis; repeating variable method; Buckingham's PI theorem; similitude; basis of model development internal flow; Newton's law of viscosity; Poiseuille flow; friction factor; non-circular conduits; and Pelton wheel water turbines.

Language(s) of Instruction
English

Host Institution Course Number
MEEN20010

Host Institution Course Title
MECHANICS OF FLUIDS

Host Institution Course Details

Host Institution Campus
UC Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mechanical Engineering

Course Last Reviewed

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