COURSE DETAIL

INTRODUCTION TO FLUID DYNAMICS
Country Hong Kong
Host Institution Hong Kong University of Science and Technology (HKUST)
Program(s) Hong Kong University of Science and Technology
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 126
UCEAP Course Suffix
UCEAP Official Title INTRODUCTION TO FLUID DYNAMICS
UCEAP Transcript Title FLUID DYNAMICS
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description
This is a course examining topics in fluid dynamics. Course topics include: Lagrangian and Eulerian methods for the flow description; derivation of the Euler and Navier-Stokes equations; sound wave and Mach number; 2D irrotational flow; elements of aerofoil theory; water wave dispersion relation; shallow water waves; ship wave pattern; dynamics of real fluid, stokes flow and boundary layer theory.

Language(s) of Instruction
English

Host Institution Course Number
MATH4326

Host Institution Course Title
INTRODUCTION TO FLUID DYNAMICS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

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