

# 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 Course Details

## Host Institution Campus

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Mathematics

## Course Last Reviewed

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