

## 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)**

Chemical Engineering

**UCEAP Course Number**

121

**UCEAP Course Suffix****UCEAP Official Title**

FLUID MECHANICS 2

**UCEAP Transcript Title**

FLUID MECHANICS 2

**UCEAP Quarter Units**

2.50

**UCEAP Semester Units**

1.70

**Course Description**

This course addresses conservation of mass; concept of stream function; conservation of momentum; derivation of governing equations using vector calculus and concepts of stress tensors; comparison with control volume approach; direct analytical solution of equations for unidirectional flows in (micro-)channels, pipes, and falling films; extension to flows that are not unidirectional; evolving flows; and concept of boundary layers. Example problems include unsteady shear flows, Blasius boundary layer, and jets.

**Language(s) of Instruction**

English

**Host Institution Course Number**

CENG95004

**Host Institution Course Title**

FLUID MECHANICS 2

**Host Institution Course Details****Host Institution Campus**

Imperial College London

**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Chemical Engineering

**Course Last Reviewed**

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