# **COURSE DETAIL**

4.00

# **FLUID MECHANICS Country** Sweden **Host Institution Lund University** Program(s) **Lund University UCEAP Course Level Upper Division UCEAP Subject Area(s) Mechanical Engineering UCEAP Course Number** 144 **UCEAP Course Suffix UCEAP Official Title FLUID MECHANICS UCEAP Transcript Title FLUID MCHNCS ENERGY UCEAP Quarter Units** 6.00 **UCEAP Semester Units**

#### **Course Description**

This course studies various flow phenomena of both fundamental and technical importance. Students acquire knowledge about classical and modern techniques for the study and analysis of technical fluid mechanical problems. Part A examines the history and scope of fluid mechanics, integral relations for a control volume, differential relations for a fluid particle, viscous flow in ducts, introduction to turbulence, boundary-layer flows, and flow around slender and bluff bodies. Part B studies incompressible inviscid flow, aerodynamic theory, compressible flow, and open-channel flow.

#### Language(s) of Instruction

English

#### **Host Institution Course Number**

MMVF10

#### **Host Institution Course Title**

FLUID MECHANICS

#### **Host Institution Campus**

Engineering

### **Host Institution Faculty**

**Host Institution Degree** 

## **Host Institution Department**

Engineering - Energy Sciences

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