

# COURSE DETAIL

## ENGINEERING ALLOYS

**Country**

United Kingdom - England

**Host Institution**

Imperial College London

**Program(s)**

Imperial College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Materials Science

**UCEAP Course Number**

142

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

ENGINEERING ALLOYS

**UCEAP Transcript Title**

ENGINEERING ALLOYS

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

## Course Description

This course teaches students to appraise engineering with alloys, and evaluate multi-objective engineering design problems (cost, temperature, performance – e.g. creep, fatigue, strength, processability, light weighting, material costs & lifecycle). Students discuss approaches to engineering design and lifing, where failure and optimisation of alloys dominate function (drawing in ideas of process-microstructure properties) in solid stage metal components and consider the science of alloys as a microstructure system with an engineering goal.

### Language(s) of Instruction

English

### Host Institution Course Number

MATE60007

### Host Institution Course Title

ENGINEERING ALLOYS

### Host Institution Campus

Kensington

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Mechanical Engineering

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