

COURSE DETAIL

CERAMICS AND GLASSES

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

116

UCEAP Course Suffix**UCEAP Official Title**

CERAMICS AND GLASSES

UCEAP Transcript Title

CERAMICS & GLASSES

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course introduces students to the main methods and fundamental principles used for the processing of the engineering ceramics (and, to a lesser degree, the glass and glass ceramics), and provides an understanding of the factors that influence their mechanical and functional properties. The course is split into three main topics. The first is processing of bulk and thin film ceramics where students learn various methods, compounds, and particles of ceramic powders. The second part examines mechanical properties of ceramics and glasses, including study of cracking, stress, and strengths on solids. The final part focuses on electrodynamic properties and high frequency applications of ceramics.

Language(s) of Instruction

English

Host Institution Course Number

MATE60008

Host Institution Course Title

CERAMICS AND GLASSES

Host Institution Campus

Imperial

Host Institution Faculty

Host Institution Degree

Host Institution Department

Material Science and Engineering

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