Overview

This entry lists professional electives for a major in Ceramic Engineering within the Bachelor of Engineering (Honours) in Materials Science and Engineering program.

Ceramic Engineering is a Science and Technology course that teaches the science and technology involved in the production of ceramic products. Ceramic Engineering is concerned with the use of ceramic raw materials, which include clays as well as high-purity chemicals, to manufacture products that can show useful properties such as thermal stability (refractories), wear resistance (abrasives and cutting tools), chemical durability (glass), and structural stability (bricks and tiles).
Faculty
Faculty of Science

School
School of Materials Science & Engineering

Study Level
Undergraduate

Minimum Units of Credit
36

Specialisation Type
Major
Available in Program(s)

Program(s) in which this major is available

Bachelor of Engineering (Honours) - BE(Hons)
**3131 Materials Science and Engineering (Honours)**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years

Bachelor of Engineering (Honours) - BE (Hons)
Master of Biomedical Engineering - MBiomedE
**3133 Materials Science and Engineering (Honours) / Biomedical Engineering**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 240
Typical Duration: 5 Years
Specialisation Structure

Students must complete 36 UOC.

Compulsory Professional Courses

Students must take 12 UOC of the following courses.

MATS4002  6 UOC
Design and Advanced Ceramics

MATS4004  6 UOC
Fracture Mechanics and Failure Analysis

Level 4 Project

Students must take 6 UOC per term of MATS4100 Materials Engineering Project. Students must repeat enrol in MATS4100 Materials Engineering Project for Term 2 and Term 3 for a total of 18 UOC.

MATS4100  6 UOC
Materials Engineering Project

Professional Electives

Students can take up to a maximum of 6 UOC of the following courses.

MATS3003  6 UOC
Engineering in Process Metallurgy

MATS3005  6 UOC
Phase Transformations

MATS4001  6 UOC
Secondary Processing of Metals

MATS4003  6 UOC
Process Metallurgy Advanced
MATS4005 | 6 UOC
Composites and Functional Materials

MATS4006 | 6 UOC
Polymer Science and Engineering 2

MATS4007 | 6 UOC
Engineered Surfaces to Resist Corrosion and Wear

**Enrolment Disclaimer**

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Pre-2019 Handbook Editions

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