Materials Science and Engineering

8717 Master of Materials Technology

Never Stand Still | Faculty of Science | Materials Science and Engineering

Program Structure

The program consists of 2 years of full-time (or equivalent) study that requires students to complete 96 Units of Credit (UOC) of courses. This comprises 72 UOC of formal coursework plus 24 UOC of research project work. The courses are primarily offered on a full-time, face-to-face basis. However, it is possible for students to progress on a part-time basis at their discretion, provided they satisfy appropriate course prerequisites.

Upper level courses are also provided within the program focusing on different areas of materials engineering: materials engineering, ceramic engineering, process metallurgy and physical metallurgy. Students interested in a particular area can select appropriate courses and complete a thesis relating to the plan.

The courses are designed to ensure depth and breadth, and course content consists of a balanced program of materials engineering lectures and laboratories including mechanical behaviour, metal, ceramic and polymer processing and their properties. Generic and technical skills are developed through coverage of relevant aspects of presentation, communication, organisational, and further management skills.

Course Selection

1. Core courses (required):

MATS6001	Fundamentals of Materials Processing (6 UoC)	MATS6002	Fundamentals of Materials Design (6 UoC)
MATS6003	Presentation Skills (6 UoC)	MATS6004	Materials Industry Management (6 UoC)

2. Research Project (required):

MATS6113	Research Project (12 UoC)

Note: UoC are per session. MATS6113 is a full-year subject and therefore 24 UoC must be completed.

3. Elective courses (choose 48 UoC from the following):

MATS6101	Phase Equilibria (6 UoC)	MATS6102	Kinetics and Phase Trans (6 UoC)
MATS6104	Physical Properties of Mats (6 UoC)	MATS6105	Chemical Properties of Mats (6 UoC)
MATS6106	Mechanical Properties of Materials (6 UoC)	MATS6107	Thermal Properties of Material (6 UoC)
MATS6108	Functional Materials (6 UoC)	MATS6110	Computational Materials (6 UoC)
MATS6111	Processes in Mats Engineering (6 UoC)	MATS6112	Characterisation of Materials (6 UoC)

As part of the 48 UoC of electives, students may take up to two courses (12 UoC) from the following list:

MATS3003	Engineering in Process Metallurgy (6 UoC)	MATS3005	Phase Transformations (6 UoC)
MATS4003	Process Metallurgy Advanced (6 UoC)	MATS4004	Fracture Mechanics & Failure (6 UoC)
MATS4006	Polymer Science and Engineering 2 (6 UoC)		

Process

- Student receives a formal offer from the University.
- Student to contact A/Prof Runyu Yang at r.yang@unsw.edu.au to book an appointment.
- A Course Enrolment form (see page 2) will be completed and approved by A/Prof Runyu Yang at this appointment.
- Student to email signed and completed Course Enrolment form to enquiries@materials.unsw.edu.au for processing.
- Student will be advised by email once enrolment has been processed.

Contacts

A/Prof. Runyu Yang
Postgraduate Coursework Program Authority
r.yang@unsw.edu.au
Level 3, Room 349

Laura McNally
Administrative Officer - Student Support
enquiries@materials.unsw.edu.au
School Office, Level 1, Room 137

UNSW AUSTRALIA

Materials Science and Engineering

8717 Master of Materials Technology

Never Stand Still | Faculty of Science | Materials Science and Engineering

Course Enrolment Form

Section One [*student to complete*]

Student Number: _____

Family Name: _____ Given Name: _____

Email Address: _____

Address: _____

Phone Number: _____ Program: _____

Semester: _____ Year: _____

Section Two [*Program Authority, A/Prof Runyu Yang to complete with student*]

Supervisor: _____

Section Three [*Program Authority, A/Prof Runyu Yang to complete with student*]

Course Code	Semester	Year	Course Name

Enrolment Approval: _____

A/Prof Runyu Yang

Section Four [*student to complete*]

I have read and understood the guidelines and advice on this application form. I certify that all information, including supporting documentation and certificates, is correct. I hereby authorise the University to contact the professional authority concerned for the purpose of verifying any information he or she supplied. I acknowledge that the University will, where appropriate, advise the relevant Commonwealth government authority of the outcome of this application. In signing this form I understand that the details are protected by the Privacy and Personal Information Protection Act 1998 (NSW).

Student Signature: _____ Date:_____