

## Quick facts — PGCertEng in Plastics

**Admission to the PGCertEng in Plastics:** completed BE or BE (Hons) or equivalent qualification.

**Time to complete:** 4 semesters part-time. Full-time study not available, but where permitted courses can be taken as a part of other programmes.

**Points required:** 60

**Courses required:**

CHEMMAT 740, 741, 742, 743

**Fees:** Go to [www.auckland.ac.nz/fees](http://www.auckland.ac.nz/fees)

**Taught at:** Plastics Centre of Excellence, Tamaki Campus

**Taught within:** Faculty of Engineering

**How to apply:**

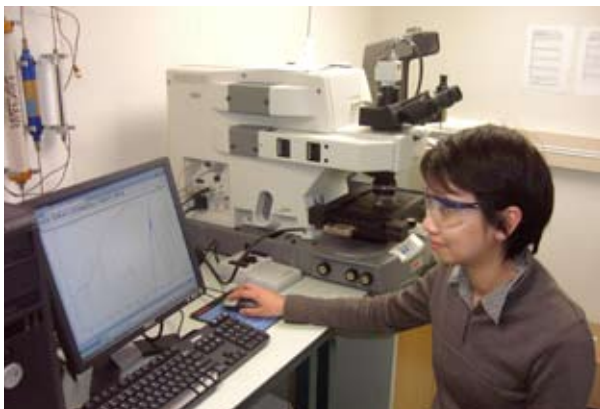
Go to [www.auckland.ac.nz/applynow](http://www.auckland.ac.nz/applynow)

**Course Dates in 2010**

Semester 1 (CHEMMAT 740): 8-12 March 2010

Semester 2 (CHEMMAT 741): 26-30 July 2010

**Note:** Class sizes are restricted. Applications will be processed in the order received.



# Postgraduate Certificate in Engineering (Plastics)

For Further Information

Neil Edmonds, Programme Coordinator

Phone: +64 9 373 7599 Ext. 88321

Email: [nr.edmonds@auckland.ac.nz](mailto:nr.edmonds@auckland.ac.nz)

Web: [www.pcoe.org.nz](http://www.pcoe.org.nz)



## About the Plastics Centre of Excellence

The Plastics Centre of Excellence is a partnership between The University of Auckland and Plastics New Zealand and was established in 2008. The Centre aims at expanding and enhancing the knowledge base of the plastics industry through the benefits of research and leading edge technology. A key role of the Centre is to provide education and training programmes to up-skill the industry at all levels, including the Postgraduate Certificate in Engineering - Plastics.



## Highlights of the Postgraduate Certificate in Engineering (Plastics) (PGCertEng in Plastics)

- Industry relevant courses
- Lectures presented by industry experts
- Programme designed to be completed through part-time study
- Intensive practical content at Plastics Centre of Excellence, Tamaki Campus
- Focus on processing, problem solving and product development
- Credits can be reassigned to Master of Engineering Studies

## Programme description – PGCertEng in Plastics

The programme is designed to assist students who are in fulltime industry employment. Each course will be delivered as a one-week (36 hour) block that includes both theory and practical exercises, accompanied by self-directed learning and assignments.

Students will be expected to complete approximately two hours of self-directed learning for each hour of block course time.

Assessment will include assignments, tests and examinations, but will have a focus on independent project/assignment studies that ensure students can successfully translate fundamental knowledge of plastics materials and processing to a commercial environment.

Students must complete an end of semester exam and satisfy all test/assignment requirements in order to pass courses.

### Programme requirements:

60 points: CHEMMAT 740, 741, 742, 743



## The Courses - learning outcomes

- **CHEMMAT 740 Advanced Polymer Materials:** To understand the structure, properties, and processing inter-relationships of materials used in the plastics industry and how these impinge on material selection and processing.
- **CHEMMAT 741 Processing of Plastics:** To understand how materials used in plastics behave under processing conditions. This includes the effects of additives on processing and degradation of plastics and the major mixing and forming techniques.
- **CHEMMAT 742 Plastics Materials Design:** To understand how commercial software is used to design products and tools, and be aware of fabrication techniques and environmental/life-cycle considerations.
- **CHEMMAT 743 Selected Topics in Plastics Processing:** To provide students with knowledge of specialised topics and applications, such as biopolymers, silicones, film blowing, thermoforming and product design.

Details of course content can be viewed at [www.pcoe.org.nz](http://www.pcoe.org.nz)

