# **Preparation for IIA**

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## Part II engineering options

In Easter term, all second year students will be required to indicate their third year course preference (eg IIA, MET IIA, CSP, NUS) and to make a provisional choice of Part IIA modules by the end of Easter Full Term (Friday 14 June 2019). Those students continuing to IIA will be able to change their module selection at the start of Michaelmas 2019 and Lent 2020. **Note:** Students planning to take MET or go on an exchange also need to choose a set of IIA modules as their 'back-up' option.

Full details can be found in the Part IIA Options document.

A timetable of talks about Part II options is available on-line.

Introduction to the Part II Options information presentation 2020 by Dr Claire Barlow.

Recordings of the Options talks are viewable at: Options talks 2020

### Introduction to the Manufacturing Engineering Tripos (MET)

#### Overview

MET is an option for the final two years of the Cambridge Engineering degree that develops and applies engineering knowledge in a business context. MET aims to prepare students to operate professionally as broadly-based leaders for business and technology, by giving them a thorough grounding in management and manufacturing technology, together with an understanding of the full range of activities from market analysis through product design and production, to sales and distribution.

#### **MET IIA**

In MET IIA, students take ten modules covering the following areas:

- · Materials processing technology
- · Production machines and systems
- Design
- Operations management
- Industrial engineering
- · Organisational behaviour
- Managing people and business
- Financial and management accounting
- Industrial economics, strategy and governance
- Contemporary issues in manufacturing

The modules are complemented by a structured set of industrial visits and a business skills development programme. In addition, students undertake three pieces of integrated coursework, which are a CAD/CAM exercise, a Production Game and the <u>Major Project</u>. Students work on the Major Project in small groups. They

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research the market for a product, prepare a design and manufacturing plan, and finally a business plan, for a company or division based on that product. The Major Project involves external consultants, and each group is advised on its business plan by a local bank manager.

#### **MET IIB**

The MET IIA programme provides the foundations for MET IIB, where the core topics of manufacturing and management are expanded and applied. MET IIB represents a substantial departure from the standard university timetable and approach. Modules and practical activities run in sequence, with a module typically lasting one week. Teaching in the modules is seminar based, to encourage interaction and participation. Industrial speakers supplement the theory, with examples from practice. Throughout the year, students get to apply the principles through company-based project work. MET IIB concludes with an Overseas Research Project, organised by the students.

#### How to find out more

The <u>MET website</u> contains full information about the course. There will also be an opportunity as part of the Lent term options talk program to 'Meet the METs' over lunch. Current MET students will act as hosts and will be around to answer any questions you may have regarding MET.

**Advance notification:** The MET group will hold an open afternoon in May at the Institute for Manufacturing to explain the course to interested students (and staff). Refreshments will be served and MET staff and current students will be on hand to answer any questions you may have.

### How to apply

The number of places is limited to 40 p.a., and selection is based on interview and previous academic performance. Students who are interested in taking the Manufacturing Engineering Tripos for their third and fourth years should visit the <u>MET website</u>, download and complete the <u>application form</u> and email it to the MET Office deadlines given on the MET website. Interviews for MET will take place after the IB examinations.

## **Overseas exchanges**

Applications are invited to participate in exchanges with either the CentraleSuperlec or the National University of Singapore. Note that a minimum standard of French will be required for participation in the CentraleSuperlec exchange.

For both exchanges students will need to submit a completed application form, a reference form and a 1-2 page Curriculum Vitae to their College Referee (DoS), for further information see the <a href="Part IIA student exchange">Part IIA student exchange</a> <a href="Overview">overview</a>.

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