Modules, Extension Activities & Engineering Areas

Please also see the list of Modules and Sets for details of which modules will run and any restrictions on module combinations.

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Engineering areas

If you wish to qualify in a specific engineering area, at least six modules from your total of ten must fall within one of the engineering areas defined by the Faculty Board.

The title of the engineering area for which you are qualified will appear on each of your Part IIA and IIB transcripts. In some cases, you may be qualified for more than one engineering area, in which case all will appear on your transcript. It is not essential that your engineering area at Part IIB is the same as that at Part IIA.

NB. the module syllabus pages are the definitive source of information about pre-requisites for each module. A summary is also given on the syllabus index page.

Engineering area          Coordinator

Mechanical engineering    Dr H R Shercliff
Energy, sustainability and the environment Professor S Hochgreb
Aerospace and aerothermal engineering Professor WN Dawes
Civil, structural and environmental engineering Professor A McRobie
Electrical and electronic engineering Professor A Flewitt
Information and computer engineering Dr J Sayir
Electrical and information sciences Professor M Smith
Instrumentation and control Professor M Smith
Bioengineering             Dr A J Kabla

General Engineering

If you do not wish to choose six modules from an engineering area you may instead qualify in Engineering (i.e. General Engineering). Students intending to qualify in General Engineering may choose any set of modules subject to the restrictions given in COMET.

In common with the other engineering areas General Engineering is accredited by one or more of the Professional Engineering Institutions. For further information see the Accreditation of the MEng.

Further advice

For advice on engineering areas and module choices go first to your Director of Studies. The staff listed above will be happy to provide expert advice on their Engineering Areas.
Part II A Extension Activities (ExAs)

To register for an Extension Activity, you need to do two things:

1. **Indicate your choice online**, so that we can ensure that everyone has signed up.
2. Sign up as soon as possible for a time slot for your chosen Activity, as described below.

<table>
<thead>
<tr>
<th>Activity &amp; link to summary sheet</th>
<th>Access</th>
<th>Timing</th>
<th>Sign-up sheet location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surveying</strong>*</td>
<td>Open to all and recommended for:</td>
<td>End of Lent term (wk8) [&amp; end of Michaelmas term, if needed]</td>
<td>Online</td>
</tr>
<tr>
<td></td>
<td>4. Civil, Structural &amp; Environmental Engineering</td>
<td>[NB Runs from 2pm on last day of lectures (Wednesday) until Friday afternoon]</td>
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<tr>
<td><strong>Flow visualisation</strong>*</td>
<td>Open to all and recommended for:</td>
<td>End of Michaelmas term (wk8) (including Thursday and Friday after last day of lectures)</td>
<td>Hopkinson Lab ground floor Inglis building</td>
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<tr>
<td></td>
<td>1. Mechanical Engineering</td>
<td></td>
<td>Prof W N Dawes</td>
</tr>
<tr>
<td></td>
<td>2. Energy, Sustainability &amp; the Environment</td>
<td></td>
<td>Prof R J Miller</td>
</tr>
<tr>
<td></td>
<td>3. Aerospace &amp; Aero thermal Engineering</td>
<td></td>
<td>Dr A Wheeler</td>
</tr>
<tr>
<td><strong>IC Engine performance/emissions</strong></td>
<td>Open to all and recommended for:</td>
<td>Lent term</td>
<td>Hopkinson Lab ground floor Inglis building</td>
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<tr>
<td></td>
<td>1. Mechanical Engineering</td>
<td></td>
<td>Dr A M Boies</td>
</tr>
<tr>
<td></td>
<td>2. Energy, Sustainability &amp; the Environment</td>
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<tr>
<td></td>
<td>3. Aerospace &amp; Aero thermal Engineering</td>
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<tr>
<td></td>
<td>8. Instrumentation &amp; Control</td>
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<tr>
<td><strong>Failure analysis</strong></td>
<td>Open to all and recommended for:</td>
<td>Michaelmas term</td>
<td>Online</td>
</tr>
<tr>
<td></td>
<td>1. Mechanical Engineering</td>
<td></td>
<td>Dr A E Markaki</td>
</tr>
<tr>
<td><strong>Design &amp; performance of a portable motor-generator set</strong></td>
<td>Open to all and recommended for:</td>
<td>Lent term</td>
<td>Mechanics Lab centre wing Baker building (via centre roadway)</td>
</tr>
<tr>
<td></td>
<td>1. Mechanical Engineering</td>
<td></td>
<td>Dr D J Cole</td>
</tr>
<tr>
<td></td>
<td>2. Energy, Sustainability &amp; the Environment</td>
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<tr>
<td></td>
<td>3. Aerospace &amp; Aero thermal Engineering</td>
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<tr>
<td></td>
<td>8. Instrumentation &amp; Control</td>
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</tbody>
</table>
Investigations on a CD player and 3D printer

Open to all and recommended for:
1. Mechanical Engineering
2. Electrical & Electronic Engineering
3. Information & Computer Engineering
4. Electrical & Information Sciences
5. Instrumentation & Control

Timing: Michaelmas & Lent terms
Sign-up sheet location: Online
Staff in charge: Dr P A Robertson

Fundamentals of Biotechnology

Open to all and recommended for: Lent term

Access: Contact Dr Bakshi directly
Timing: Lent term
Staff in charge: Dr S Bakshi

STIMULUS: School Teaching Opportunities in STEM

Open to all
Timing: Michaelmas & Lent terms
Sign-up sheet location: Register with STIMULUS by Friday week 1 (Mich), and notify Dr Shercliff by email
Staff in charge: Dr H Shercliff

Language course

Open to all
Timing: Michaelmas & Lent terms
Sign-up sheet location: Contact staff in charge for assessment.
Staff in charge: Mr David Tual

*If this ExA is under-subscribed, the Michaelmas session will be withdrawn and only the Lent session will take place. Students will be contacted if necessary.

**If over-subscribed, additional sessions for this ExA will be available week 2 of Lent term.

General notes

- You should sign up for your ExA as soon as possible at the start of the Michaelmas Term (even for Lent ExAs). Do this before booking your module labs.
- Detailed arrangements for each ExA will be posted near the sign-up sheets.
- If you have any queries about an activity, you can ask the Chief Technician in the lab where the sign-up sheet is posted, or the staff member in charge.
- Each activity should occupy you for about 16 hours and has 20 marks of credit available.

Source URL (modified on 23-08-19): http://teaching.eng.cam.ac.uk/content/modules-extension-activities-engineering-areas