Part IIB syllabuses; links to online resources

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Part IIB syllabuses; links to online resources

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Note that all modules are assessed by 100% Coursework, or 100% Examination, or 75% Examination and 25% Coursework. In all cases, the definitive form of assessment is given in the Faculty Board's Modules & Sets document. The Faculty Board also publish an outline of the coursework requirements for Part IIB 100% coursework modules but you should see the module syllabus pages for further details.

Interactive booklists for Part IIB are available on Moodle.

Course material on Moodle

Group A: Energy, Fluid Mechanics and Turbomachinery

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<td>4A2</td>
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<td>4A3</td>
<td>Turbomachinery</td>
<td>M(4)</td>
<td>Exam and coursework</td>
<td>3A1, 3A3</td>
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<td>4A4</td>
<td>Aircraft stability and control</td>
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<td>Aircraft Aerodynamics and Design</td>
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<td>Molecular thermodynamics</td>
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<td>4A12</td>
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<td>Combustion and engines</td>
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Group B: Electrical Engineering

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<td>Prof C. Durkan</td>
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<td>Prof T. Wilkinson</td>
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### Module Code: Electronic sensors and instrumentation

**Term (set):** L(1)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3B1
- Useful: Moodle
**On-line resources:** Dr P A Robertson

### Module Code: Renewable electrical power

**Term (set):** M(2)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3B3, 3B4, 3B6
**On-line resources:** Moodle
**Leader:** Dr T. Flack

### Module Code: Optical Fibre Communication

**Term (set):** L(2)
**Form of assessment:** Exam and coursework
**Prerequisites:**
- Assumed: 3F4, 3B6
**On-line resources:** Moodle
**Leader:** Prof S J Savory

### Module Code: Radio frequency systems

**Term (set):** L(4)
**Form of assessment:** Exam and coursework
**Prerequisites:**
- Assumed: 3B1
**On-line resources:** Moodle
**Leader:** Dr M J Crisp

### Module Code: Embedded systems for the internet of things

**Term (set):** M(7)
**Form of assessment:** Coursework
**Prerequisites:**
- Assumed: 3B2
**On-line resources:** Moodle
**Leader:** Dr P Stanley-Marbell

### Group C: Mechanics, Materials and Design

### Module Code: Designing with composites

**Term (set):** M(3)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: Moodle
**On-line resources:** Prof M.P.F. Sutcliffe

### Module Code: Advanced Functional Materials and Devices

**Term (set):** M(8)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3B5
**On-line resources:** Moodle
**Leader:** Dr J H Durrell

### Module Code: Design methods

**Term (set):** M(2)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: Moodle
**On-line resources:** Dr JM Cullen

### Module Code: Design case studies

**Term (set):** L(4)
**Form of assessment:** Coursework
**Prerequisites:**
- Assumed: 4C5
**On-line resources:** Moodle
**Leader:** Dr N. Crilly

### Module Code: Advanced linear vibrations

**Term (set):** M(4)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 3C6
**On-line resources:** Moodle
**Leader:** Dr JP Talbot

### Module Code: Random and non-linear vibrations

**Term (set):** M(5)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 3C6
**On-line resources:** Moodle
**Leader:** Prof. AA Seshia

### Module Code: Vehicle Dynamics

**Term (set):** L(8)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 3C5, 3C6
**On-line resources:** Moodle
**Leader:** Prof D Cebon

### Module Code: Continuum mechanics

**Term (set):** L(7)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3C7, 3D7
**On-line resources:** Moodle
**Leader:** Dr G McShane

### Module Code: MEMS: design

**Term (set):** L(3)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: Moodle
**On-line resources:** Prof A. Seshia

### Group D: Civil, Structural and Environmental Engineering

### Module Code: Construction engineering

**Term (set):** L(11)
**Form of assessment:** Coursework
**Prerequisites:**
- Assumed: 3D1, 3D2, 3D3, 3D4, 3D5, 4D16
**On-line resources:** Moodle
**Leader:** Prof G Viggiani

### Module Code: Foundation engineering

**Term (set):** M(8)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3D2
**On-line resources:** Moodle
**Leader:** Dr S Stanier

### Module Code: Dynamics in civil engineering

**Term (set):** L(2)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 3D2, 3D3, 3D4, 3D7
**On-line resources:** Moodle
**Leader:** Prof. F A McRobie

### Module Code: Concrete and Prestressed concrete

**Term (set):** M(4)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 2P8, 3D3
**On-line resources:** Moodle
**Leader:** Dr J Orr

### Module Code: Offshore Geotechnical Engineering

**Term (set):** L(5)
**Form of assessment:** Exam
**Prerequisites:**
- Assumed: 3D2
**On-line resources:** Moodle
**Leader:** Dr C.N. Abadie

### Module Code: Structural steelwork

**Term (set):** M(3)
**Form of assessment:** Exam and Coursework
**Prerequisites:**
- Assumed: 3D4
**On-line resources:** Moodle
**Leader:** Dr J Becque

### Module Code: Architectural engineering

**Term (set):** M(12)
**Form of assessment:** Coursework
**Prerequisites:**
- Assumed: 3D3, 3D4, 3D8
**On-line resources:** Moodle
**Leader:** Dr R Foster
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<td>Contaminated land and waste containment</td>
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<td>4D1 5</td>
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<td>4E4</td>
<td>Management of technology</td>
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<td>L(9)</td>
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<td>4F2</td>
<td>Robust and nonlinear control</td>
<td>L(7)</td>
<td>Coursework</td>
<td>3F2</td>
<td>Moodle</td>
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<td>4F5</td>
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<td>Coursework</td>
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<td>Moodle</td>
<td>Dr G. Csanyi</td>
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## Group I: Imported Modules

Note that these modules are all imported from other courses, and hence might be timetabled at unusual times and in unusual places, and have a different course structure to other IIB modules. Also, many of them have a cap on numbers. However, they do provide a tremendous opportunity to learn about a wider range of technology than the Engineering Tripos would otherwise provide.

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<td>Exam</td>
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