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>Aircraft stability and control</td>
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- **Code**: 4B1
- **Term**: L(1)
- **Form of assessment**: Exam
- **Prerequisites**: 3B1
- **On-line resources**: Moodle
- **Leader**: Dr P A Robertson

### Module: Renewable electrical power
- **Code**: 4B1
- **Term**: M(2)
- **Form of assessment**: Exam
- **Prerequisites**: 3B3, 3B4, 3B6
- **On-line resources**: Moodle
- **Leader**: Dr T. Flack

### Module: Analogue integrated circuits
- **Code**: 4B2
- **Term**: M(3)
- **Form of assessment**: Exam
- **Prerequisites**: 3B1, 3B2, 3B5
- **On-line resources**: Moodle
- **Leader**: Dr S Sambandan

### Module: Optical Fibre Communication
- **Code**: 4B2
- **Term**: L(2)
- **Form of assessment**: Exam and coursework
- **Prerequisites**: 3B6, 3F4
- **On-line resources**: Moodle
- **Leader**: Prof S J Savory

### Module: Radio frequency systems
- **Code**: 4B2
- **Term**: L(4)
- **Form of assessment**: Exam and coursework
- **Prerequisites**: 3B1
- **On-line resources**: Moodle
- **Leader**: Dr M J Crisp

### Module: Embedded systems for the internet of things
- **Code**: 4B2
- **Term**: M(7)
- **Form of assessment**: Coursework
- **Prerequisites**: 3B2
- **On-line resources**: Moodle
- **Leader**: Dr P Stanley-Marbell

### Group C: Mechanics, Materials and Design

#### Module: Designing with composites
- **Code**: 4C2
- **Term**: M(3)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 3B5
- **On-line resources**: Moodle
- **Leader**: Prof M.P.F. Sutcliffe

#### Module: Advanced Functional Materials and Devices
- **Code**: 4C3
- **Term**: M(8)
- **Form of assessment**: Exam
- **Prerequisites**: 3B5
- **On-line resources**: Moodle
- **Leader**: Dr J H Durrell

#### Module: Design methods
- **Code**: 4C4
- **Term**: M(2)
- **Form of assessment**: Exam
- **Prerequisites**: 3B5
- **On-line resources**: Moodle
- **Leader**: Dr JM Cullen

#### Module: Design case studies
- **Code**: 4C5
- **Term**: L(4)
- **Form of assessment**: Coursework
- **Prerequisites**: 3B5, 4C4
- **On-line resources**: Moodle
- **Leader**: Prof P Kristensson

#### Module: Advanced linear vibrations
- **Code**: 4C6
- **Term**: M(4)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 3C6
- **On-line resources**: Moodle
- **Leader**: Dr JP Talbot

#### Module: Vehicle Dynamics
- **Code**: 4C7
- **Term**: L(8)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 3C5, 3C6
- **On-line resources**: Moodle
- **Leader**: Prof D Cebon

#### Module: Continuum mechanics
- **Code**: 4C9
- **Term**: L(7)
- **Form of assessment**: Exam
- **Prerequisites**: 3C7, 3D7
- **On-line resources**: Moodle
- **Leader**: Dr G McShane

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

#### Module: Construction engineering
- **Code**: 4D4
- **Term**: L(11)
- **Form of assessment**: Coursework
- **Prerequisites**: 3D1, 3D2, 4D16
- **On-line resources**: Moodle
- **Leader**: Prof G Viggiani

#### Module: Foundation engineering
- **Code**: 4D5
- **Term**: M(8)
- **Form of assessment**: Exam
- **Prerequisites**: 3D2
- **On-line resources**: Moodle
- **Leader**: Dr S Stanier

#### Module: Dynamics in civil engineering
- **Code**: 4D6
- **Term**: L(2)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 3D2, 3D4, 3D7
- **On-line resources**: Moodle
- **Leader**: Prof. F A McRobie

#### Module: Concrete and Prestressed concrete
- **Code**: 4D7
- **Term**: M(4)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 2P8, 3D3, Eurocode 0
- **On-line resources**: Moodle
- **Leader**: Prof. J Orr

#### Module: Offshore Geotechnical Engineering
- **Code**: 4D9
- **Term**: L(5)
- **Form of assessment**: Exam
- **Prerequisites**: 3D2
- **On-line resources**: Moodle
- **Leader**: Prof. C.N. Abadie

#### Module: Structural steelwork
- **Code**: 4D1
- **Term**: M(3)
- **Form of assessment**: Exam and Coursework
- **Prerequisites**: 3D4, 3D3
- **On-line resources**: Moodle
- **Leader**: Prof. F A McRobie
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<td>4D14</td>
<td>Contaminated land and waste containment</td>
<td>M(7)</td>
<td>Exam and Coursework</td>
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<td>Robust and nonlinear systems and control</td>
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<td>4F3</td>
<td>An optimisation based approach to control</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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