Lectures proposed by the Board of the Faculty of Engineering

For particulars of the University Composition Fee and of the fees payable at separate courses of lectures, see p. 2.

ENGINEERING TRIPOS

MICHAELMAS 2002	LENT 2003	EASTER 2003

PART IA

First year: for students intending to take Part IA in 2003

The lecture rooms are indicated as follows: LT0 Lecture theatre 0; LT1 Lecture theatre 1; LT2 Lecture theatre 2; LR3 Lecture room 3; LR4 Lecture room 4; LR6 Lecture room 6; LR10 Lecture room 10.

(A detailed timetable will be displayed in the Department. Further details are also available on the Web at http://www.eng.cam.ac.uk/teaching/courses/syllabuses.html.)

Paper 1 (Mechanical Engineering)

DR H. E. M. HUNT *LT0*
Mechanics (Sixteen lectures)

DR D. CEBON *LT0*
Mechanical Vibrations (Four lectures)
PROF. H. P. HODSON AND DR H. BABINKSY *LT0*
Thermofluid Mechanics (Sixteen lectures)

The same continued. (Eight lectures)

The same continued. (Eight lectures)

Paper 2 (Structural Mechanics and Materials)

DR C. R. MIDDLETON *LT0*
Structural Mechanics (Twelve lectures)

PROF. S. PELLEGRINO *LT0*
Structural Mechanics (Twelve lectures)
DR D. A. CARDWELL *LT0*
Materials (Ten lectures)

DR D. R. H. JONES *LT0*
The same continued. (Ten lectures)

Paper 3 (Electrical and Information Engineering)

DR D. M. HOLBURN
Linear Circuits and Devices (Sixteen lectures)

The same continued. (Two lectures)
DR F. UDREA *LT0*
The same continued. (Four lectures)

DR D. F. MOORE *LT0*
Electromagnetics (Twelve lectures)

DR R. W. PRAGER *LT1*
Digital Circuits (Sixteen lectures) } in parallel
DR R. V. PENTY *LT2*
Digital Circuits (Sixteen lectures)

Paper 4 (Mathematics)

DR W. R. GRAHAM (Twelve lectures)
DR A. WHITE (Twelve lectures) *LT2*
DR P. WOLFE (Sixteen lectures) *LT1*
} Sixteen lectures in parallel

PROF. J. WOODHOUSE *LT0* (Nine lectures)

DR M. C. SMITH *LT0* (Seven lectures)

PROF. K. M. WALLACE AND DR P. LONG *LT1*
Drawing and Design (Eight lectures)
DR G. T. PARKS *LT0*
Dimensional Analysis (Three lectures)

DR P. J. CLARKSON AND OTHERS
Design of Products *LT0* (Eight lectures)
PROF. M. J. GREGORY AND OTHERS *LT0*
Engineer in Society (Eight lectures)

LT0
Computing (Four lectures)

The same continued. (Four lectures)

DR J. A. WILLIAMS AND OTHERS
Laboratory

The same continued.
Laboratory Signing (to be arranged)
Structural Design Tests (to be arranged)

The same continued.

DR P. J. LONG AND OTHERS
Engineering Applications (Five lectures)
Examples Classes (Eight classes)

The same continued. (Three lectures)
The same continued. (Eight classes)

The same continued. (To be arranged)

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Faculty of Engineering (continued)

ENGINEERING TRIPOS, PART IB

MICHAELMAS 2002	LENT 2003	EASTER 2003

Second year: for students intending to take Part IB in 2003

(A detailed timetable will be displayed in the Department. Further details are also available on the Web at http://www.eng.cam.ac.uk/teaching/courses/syllabuses.html.)

Paper 1 (Mechanics)

MR A. L. JOHNSON *LT0*
Dynamics (Sixteen lectures)

Paper 2 (Structures)
DR K. SEFFEN *LT0*
Structures (Eight lectures)

The same continued. (Four lectures)
DR C. BURGOYNE (Twelve lectures) *LT0*

Paper 3 (Materials)
DR H. R. SHERCLIFF AND PROF. I HUTCHINGS *LT0*
Materials (Sixteen lectures)

Paper 4 (Thermofluid Mechanics)
DR R. S. CANT *LT0*
DR T. P. HYNES (Two lectures)
Thermofluid Mechanics (Fourteen lectures)

DR T. P. HYNES
The same continued. (Ten lectures)

Paper 5 (Electrical Engineering)
PROF. J. ROBERTSON *LT0*
Linear Circuits and Devices (Eight lectures)

The same continued. (Two lectures)
DR T. FLACK *LT0*
Electrical Power (Ten lectures)
DR T. COOMBS *LT0*
E. M. Fields and Waves (Six lectures)

Paper 6 (Information Engineering)
DR J. M. MACIEJOWSKI *LT0*
Linear Systems (Fourteen lectures)

TBA *LT0*
Communications (Eight lectures)

Paper 7 (Mathematical Methods)
DR P. A. DAVIDSON *LT0*
Vector Calculus (Fourteen lectures)
PROF. S. PELLEGRINO *LT0*
Linear Algebra (Eight lectures)

DR S. J. GODSILL *LT0*
Signal and Data Analysis (Six lectures)
DR J. P. LONGLEY *LT0*
Signal and Data Analysis (Six lectures)

Paper 8 (Selected topics)

(All fourteen lectures and two examples classes)
All lectures in LT1/LT2
PROF. R. MAIR AND DR C. R. MIDDLETON
Civil and Structural Engineering
DR V. DESHPANDE
Mechanical Engineering, Manufacture and Management
PROF. A. HOPPER AND DR F. STAJANO
Information Engineering
PROF. J. ROBERTSON AND PROF. W. I. MILNE
Electrical Engineering
DR J. P. LONGLEY
Aerothermal Engineering

DR C. PITELIS
Corporate Strategy (Eight lectures)
DR R. W. PRAGER AND OTHERS
Computing Practical Classes
Example Classes (Eight classes)
The same continued.
DR P. W. R. BEAUMONT AND OTHERS
Laboratory (to be arranged)
The same continued.
DR P. J. LONG AND OTHERS
Engineering Applications (Four lectures)
The same continued. (Four lectures)
DR P. A. SMITH
Matlab practical classes

Faculty of Engineering (continued)

ENGINEERING TRIPOS, PART IIA/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART I

All lectures will be held in the ENGINEERING DEPARTMENT unless otherwise stated. A detailed timetable will be displayed in the department.

MICHAELMAS 2002	LENT 2003	EASTER 2003
3A1: Fluid mechanics I Leader Dr T. B. Nickels	The same continued.	
3A3: Fluid mechanics II Leader Prof. J. D. Denton	The same continued.	
3A5: Energy and power generation Leader Prof. J. B. Young	The same continued.	
3B1: Radio frequency electronics Leader Dr T. D. Wilkinson	**3B2: Integrated digital electronics** Leader Dr F. Udrea	
3B3: Switch-mode electronics Leader Dr P. R. Palmer	**3B4: Electric drive systems** Leader Dr T. A. Coombs	
3B5: Semiconductor engineering Leader Prof. W. I. Milne	**3B6: Photonic technology** Leader Dr R. V. Penty	
3C1: Materials processing and design Leader Dr H. R. Shercliff	**3C2: Materials process modelling and failure analysis** Leader Dr H. R. Shercliff	
3C3: Machine design - tribology Leader Dr J. A. Williams	**3C4: Machine design - transmissions** Leader Dr D. J. Cole	
3C5: Dynamics Leader Dr H. E. M. Hunt	**3C6: Vibration** Leader Dr D. Cebon	
3C7: Solid mechanics Leader Dr T. J. Lu	**3D7: Continuum mechanics numerical methods** Leader Dr J. M. Allwood	
3D1: Soil mechanics Leader Prof. M. D. Bolton	**3D2: Geotechnical engineering** Leader Dr J. R. Standing	
3D3: Structural materials and design Leader Dr J. M. Lees	**3D4: Structural analysis and stability** Leader Dr C. J. Burgoyne	
3D5: Environmental engineering I Leader Dr J. F. A. Sleath	**3D6: Environmental engineering II** Leader Dr A. Al-Tabbaa	
	3E2: Marketing Leader Prof. N. Phillips	
3E3: Modelling choice Leader Dr D. Ralph	**3E4: Modelling risk** TBA	
3E5: Human resource management Leader Mr C. G. Gill	**3E6: Organisational behavior and change** Leader Dr C. Grey	
3E7: Microeconomics Leader Dr P. Kattuman		
3F1: Signals and systems Leader Dr M. C. Smith	**3F2: Systems and control** Leader Dr J. M. Maciejowski	
3F3: Signal and pattern processing Leader Dr S. J. Godsill	**3F4: Data transmission** Leader Dr N. G. Kingsbury	
3F5: Computer and network systems Leader Dr F. M. Stajano	**3F6: Software engineering and design** Leader Dr T. W. Drummond	
3I1: Data structures and algorithms Leader Prof. A. Hopper		
	4A1: Nuclear power engineering Leader Dr G. T. Parks	
4C4: Design methods Leader Dr P. J. Clarkson	**4C1: Deformation and fracture** Leader Dr T. J. Lu	
4D16: Construction and management Leader Dr C. T. Morley	**4D11: Building physics** Leader Dr C. T. Morley	

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Faculty of Engineering (continued)

ENGINEERING TRIPOS, PART IIA/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART I (continued)

MICHAELMAS 2002	LENT 2003	EASTER 2003
4E6: Accounting and finance Leader Dr R. Chatterjee **4E13: Macroeconomics** Leader Dr M. Kitson *For all students:* Laboratory/coursework W. F. 11–1, 2.15–4.15	The same continued.	Projects to be arranged

ENGINEERING TRIPOS, PART IIB/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART II

Module 4D2 (Lightweight structures)
PROF. S. PELLEGRINO (Leader)

Module 4D5 (Foundation engineering)
DR A. AL-TABBAA (Leader)

Module 4D8 (Prestressed concrete)
DR C. J. BURGOYNE (Leader)

Module 4D12 (Coastal and off-shore engineering)
DR J. F. A. SLEATH (Leader)

Module 4C2 (Designing with composites)
DR P. W. R. BEAUMONT (Leader)

Module 4C3 (Electrical materials)
DR D. A. CARDWELL (Leader)

Module 4C4 (Design methods)
DR P. J. CLARKSON (Leader)

Module 4C6 (Advanced linear vibration)
PROF. J. WOODHOUSE (Leader)

Module 4C7 (Random and non-linear vibrations)
PROF. R. S. LANGLEY (Leader)

Module 4C9 (Continuum Mechanics)
DR W. J. STRONGE (Leader)

Module 4A2 (Computational fluid mechanics)
DR R. S. CANT (Leader)

Module 4A3 (Turbomachinery I)
PROF. J. D. DENTON (Leader)

Module 4A4 (Aircraft stability and control)
DR W. R. GRAHAM (Leader)

Module 4A8 (Environmental fluid mechanics)
PROF. R. E. BRITTER (Leader)

Module 4A10 (Flow instability)
PROF. A. P. DOWLING (Leader)

Module 4B4 (Computational electromagnetics)
DR T. J. FLACK (Leader)

Module 4B5 (Nanotechnology)
DR C. DURKAN (Leader)

Module 4B7 (VLSI design, technology and CAD)
DR D. F. MOORE AND DR D. M. HOLBURN (Leader)

Module 4B8 (Electronic system design)
DR D. DUKIC (Leader)

Module 4B11 (Photonic systems)
PROF. W. A. CROSSLAND (Leader)

Module 4D4 (Ground engineering)
PROF. R. MAIR (Leader)

Module 4D6 (Dynamics in civil engineering)
MR F. A. MCROBIE (Leader)

Module 4D7 (Concrete and masonry structures)
DR C. R. MIDDLETON (Leader)

Module 4D10 (Structural steel)
DR K A SEFFEN (Leader)

Module 4D11 (Building physics)
DR C. T. MORLEY (Leader)

Module 4D14 (Contaminated land and waste containment)
DR K. SOGA (Leader)

Module 4C1 (Deformation and fracture)
DR T. J. LU (Leader)

Module 4C5 (Design case studies)
DR K. SHEA (Leader)

Module 4C8 (Applications of Dynamics)
DR D. CEBON (Leader)

Module 4C10 (Finite elements)
DR W. J. STRONGE (Leader)

Module 4C12 (Wave propagation)
DR W. J. STRONGE (Leader)

Module 4C13 (MEMS)
DR J. A. WILLIAMS (Leader)

Module 4A1 (Nuclear power engineering)
DR G. T. PARKS (Leader)

Module 4A6 (Flow induced sound and vibration)
PROF. A. P. DOWLING (Leader)

Module 4A7 (Aerodynamics)
DR H. BABINKSY (Leader)

Module 4A9 (Molecular Thermodynamics)
PROF. J. B. YOUNG (Leader)

Module 4A11 (Turbomachinery II)
DR I. HUNTSMAN (Leader)

Module 4A12 (Turbulence)
DR T. ALBOUSSIERE (Leader)

Module 4B2 (Power electronics and applications)
DR P. R. PALMER (Leader)

Module 4B6 (Solid state devices)
DR D. F. MOORE (Leader)

Faculty of Engineering (continued)

ENGINEERING TRIPOS, PART IIB/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART II (continued)

MICHAELMAS 2002	LENT 2003	EASTER 2003
Module 4B16 (Displays) TBA	**Module 4B10** (Optoelectronic technology) PROF. I. WHITE (Leader)	
Module 4F1 (Control system design) DR M. C. SMITH (Leader)	**Module 4B15** (Advanced telecommunication networks) DR T. WILKINSON (Leader)	
Module 4F3 (Nonlinear and hybrid systems) DR J. LYGEROS (Leader)	**Module 4B17** (Photonics of molecular materials) TBA	
Module 4F7 (Digital filters and spectral estimation) DR S. J. GODSILL (Leader)	**Module 4B18** (Advanced electronic devices) PROF. M. KELLY (Leader)	
Module 4F8 (Image processing and image coding) DR N. G. KINGSBURY (Leader)	**Module 4F2** (Robust multivariable control) DR J. LYGEROS (Leader)	
Module 4F12 (Computer vision and robotics) PROF. R. CIPOLLA (Leader)	**Module 4F5** (Digital communication) PROF. A. HOPPER (Leader)	
Module 4E6 (Accounting and finance) DR R. CHATTERJEE (Leader)	**Module 4F6** (Signal detection and estimation) DR W. J. FITZGERALD (Leader)	
Module 4M13 (Linear algebra and optimisation) DR W. FITZGERALD (Leader)	**Module 4F9** (Medical imaging) DR R. W. PRAGER (Leader)	
Module 4M16 (Introduction to biomedical engineering) DR R. SAUMAREZ (Leader)	**Module 4F11** (Speech processing) DR M. J. F. GALES (Leader)	
	Module 4E5 (International business economics) DR C. PITELIS (Leader)	
	Module 4E7 (Enterprise and business development) DR E. GARNSEY (Leader)	
	Module 4E8 (Design and management of manufacturing systems) DR J. ALLWOOD (Leader)	
	Module 4E13 (Macroeconomics) DR M. KITSON (Leader)	
	Module 4M1 (French) MR C. D'ANGELO (Leader)	
	Module 4M2 (German) MR M. BROSCHKOWSKI (Leader)	
	Module 4M12 (Complex analysis and variational methods) PROF. R. LANGLEY (Leader)	

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Faculty of Engineering (continued)

MANAGEMENT STUDIES TRIPOS

MICHAELMAS 2002	LENT 2003	EASTER 2003

(A detailed timetable will be displayed in the Department)

Lectures in LT1, Judge Institute, and in the Engineering Department

Paper MS1 (Organisational behaviour)
Leader: Dr C. Grey
(Sixteen lectures)

Paper MS2 (Quantitative methods)
Leader: Dr I. Rudy
(Sixteen lectures)

Paper MS3 (Economics of firms and markets)
Leader: Dr M. Pollitt
(Sixteen lectures)

Paper MS4 (Finance management accounting)
Leader: Dr R. Chatterjee
(Sixteen lectures)

Paper MS5 (Operations management)
Leader: Dr J. Steinberg
(Sixteen studies)

Paper MS6 (Marketing)
Leader: Dr Yin

Paper MS7 (International HRM)
Leader: Mr C. Gill
(Sixteen lectures)

Paper MS8 (Management Science)
Leader: Dr S. Schottes
(Sixteen lectures)

Paper MS9 (International business economics)
Leader: Dr C. Pitelis

Paper MS10 (Corporate finance)
Dr A. Taylor
(Sixteen lectures)

Paper MS11 (Information systems)
Leader: Dr M. R. Jones
(Sixteen lectures)

Paper MS12 (Strategic management)
Leader: Dr Schoenberg
(Sixteen lectures)

MANUFACTURING ENGINEERING TRIPOS, PART I

Paper P1 (Design and Manufacture)
Leader: Dr K. W. Platts
DR M. J. PLATTS
Engineering Design (Eight lectures)
DR J. MOULTRIE
Industrial Engineering (Eight lectures)

DR D. C. McFARLANE
Design 2 (Eight lectures)
DR K. W. PLATTS
Design of Manufacturing Systems
(Four lectures)

Paper P2 (Organisation and Control of Manufacturing Systems)
Leader: Dr M. R. Jones/Dr J. Allwoods
DR M. R. JONES AND DR J. ALLWOOD
Quality Control (Sixteen lectures) and information systems and inventory control

DR R. STEINBERG
Scheduling (Eight lectures)
Inventory Control (Eight lectures)

Paper P3 (Management Economics and Accounting)
Leader: Mr P. Guest
DR A. D. COSH AND MR P. GUEST
Industrial Economics and Cost Accounting
(Fifteen lectures)

DR A. D. COSH AND MR P. GUEST
Accounting and Finance (Sixteen lectures)

Paper G5 (Engineering Materials and Processing)
Leader: Dr C. Y. Barlow
The same as Engineering Tripos, Part IIA, Modules 3C1 and 3C2

The same continued.

Paper P5
Leader: Mr C. Gill
DR C. GREY
Organisational Behaviour (Sixteen lectures)

MR C. GILL
International HRM (Sixteen lectures)

For all students reading the Manufacturing Engineering Tripos:

PROF. M. J. GREGORY AND OTHERS
Factory Visit. Workshops. Tu. all day
Laboratory/Projects (to be arranged)

The same continued.