

**Lectures proposed by the Board of the Faculty of Engineering**

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

**ENGINEERING TRIPOS, PART IA**

MICHAELMAS 1999

LENT 2000

EASTER 2000

**First year: for students intending to take Part IA in 2000**

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)

**Paper 1 (Mechanical Engineering)**

DR K. M. WALLACE *LT0*  
Mechanics (Sixteen lectures)

DR D. CEBON *LT0*  
Liner Systems and Vibrations (Four lectures)  
DR 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)

DR S. PELLEGRINO *LT0*  
Structural Mechanics (Twelve lectures)  
DR A. M. CAMPBELL *LT0*  
Materials (Ten lectures)

DR M. P. SUTCLIFFE *LT0*  
The same continued (Ten lectures)

**Paper 3 (Electrical and Information Engineering)**

DR F. P. PAYNE  
Linear Circuits and Devices (Sixteen lectures)

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

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

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

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

**Paper 4 (Mathematics)**

DR N. PEAKE (Twenty-four lectures) *LT2* } Sixteen lectures in parallel  
DR A. R. L. TRAVIS (Sixteen lectures) *LT1* }

DR N. COLLINGS AND A. N. OTHER *LT1*  
Drawing and Design (Four lectures)  
DR J. P. LONGLEY *LT0*  
Dimensional Analysis (Three lectures)

DR J. WOODHOUSE *LT0* (Nine 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)

DR A. H. GEE *LT0*  
Computing (Four lectures)  
DR J. A. WILLIAMS AND OTHERS  
Laboratory

The same continued (Four lectures)

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)  
A. N. OTHER  
Examples Classes (Seven classes)

The same continued (Three lectures)

The same continued (Eight classes)

The same continued (to be arranged)

**Faculty of Engineering (continued)**  
**ENGINEERING TRIPOS, PART IB**

MICHAELMAS 1999

LENT 2000

EASTER 2000

**Second year: for students intending to take Part IB in 2000**

(A detailed timetable will be displayed in the Department)

**Paper 1 (Mechanics)****Paper 2 (Structures)**

DR S. D. GUEST *LTO*  
Structures (Eight lectures)

**Paper 3 (Materials)**

DR P. W. R. BEAUMONT AND DR H. R. SHERCLIFF *LTO*  
Materials (Sixteen lectures)

**Paper 4 (Fluid Mechanics and Heat Transfer)**

DR P. A. DAVIDSON *LTO*  
Fluid Mechanics (Sixteen lectures)

**Paper 5 (Electrical Engineering)**

DR R. A. McMAHON *LTO*  
Linear Circuits and Devices (Eight lectures)

**Paper 6 (Information Engineering)**

DR G. VINNICOMBE *LTO*  
Linear Systems (Fourteen lectures)

**Paper 7 (Mathematical Methods)**

PROF. J. B. YOUNG *LTO*  
Vector Calculus (Fourteen lectures)  
DR W. J. FITZGERALD *LTO*  
Numerical Analysis (Eight lectures)

**Paper 8 (Selected topics) (All fourteen lectures and two examples classes)**

DR N. O'SHAUGHNESSY  
Corporate Strategy (Eight lectures)  
DR N. G. KINGSBURY AND OTHERS  
Example Classes (Eight classes)  
DR P. W. R. BEAUMONT AND OTHERS  
Laboratory (to be arranged)  
DR P. J. LONG AND OTHERS  
Engineering Applications (Four lectures)

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

Structures (Twelve lectures) *LTO*

DR R. S. CANT  
Heat Transfer (Ten lectures)

DR T. FLACK *LTO*  
Electrical Power (Twelve lectures)  
DR A. R. L. TRAVIS *LTO*  
E. M. Fields and Waves (Six lectures)

DR M. D. MACLEOD *LTO*  
Communications (Eight lectures)

DR J. LASENBY *LTO*  
Signal and Data Analysis (Six lectures)  
DR J. P. LONGLEY *LTO*  
Signal and Data Analysis (Six lectures)

DR T. P. HYNES AND OTHERS  
Computing Practical Classes (to be arranged)

The same continued

The same continued

The same continued (Four lectures)

*All lectures in LT1/LT2*

PROF. R. MAIR AND DR C. J. BURGOYNE  
Civil and Structural Engineering  
DR K. SHEA  
Mechanical Engineering, Manufacture and  
Management  
PROF. A. HOPPER AND DR J. BATES  
Information Engineering  
DR J. ROBERTSON AND PROF. W. I. MILNE  
Electrical Engineering  
PROF. N. A. CUMPSTY  
Aerothermal Engineering

**Faculty of Engineering (continued)****ENGINEERING TRIPOS, PART IIA/ELECTRICAL AND INFORMATION SCIENCES TRIPOS,  
PART I**

MICHAELMAS 1999

LENT 2000

EASTER 2000

**Third year: for students intending to take Engineering Tripos, Part IIA/EIST Part I in 2000**

(A detailed timetable will be displayed in the Department)

**Paper G1 (Soil Mechanics)**

Leader: Dr M. D. Bolton *LR3*  
 DR M. D. BOLTON  
 Soil tests, cam-clay, soil elements (Sixteen lectures)

DR K. SOGA AND PROF. R. J. MAIR  
 Consolidation, symmetry, plastic yielding  
 (Sixteen lectures)

**Paper G2 (Structures)**

Leader: Mr F. A. McRobie *LR3*  
 DR C. T. MORLEY AND DR C. J. BURGOYNE  
 Elastic theory (Fourteen lectures)  
 DR C. J. BURGOYNE  
 Plastic theory (Two lectures)

The same continued (Eight lectures)  
 MR F. A. McROBIE  
 Stability theory (Eight lectures)

**Paper G3 (Environmental Engineering)**

Leader: Dr A. Al-Tabbaa  
 DR J. F. A. SLEATH  
 Free surface and sediment transfer (Twelve lectures)  
 DR R. E. BRITTER  
 Water quality and pollution (Four lectures)

The same continued (Four lectures)  
 DR A. AL-TABBAA  
 Groundwater (Twelve lectures)

**Paper G4 (Mechanics of Solids)**

Leader: Dr T. J. Lu  
 DR T. J. LU AND DR J. A. WILLIAMS  
 Continuum mechanics (Sixteen lectures)

DR J. A. WILLIAMS  
 Continuum mechanics (Four lectures)  
 DR J. LEES  
 Computational methods (Twelve lectures)

**Paper G5 (Materials)**

Leader: Dr H. R. Shercliff *LR3*  
 DR C. Y. BARLOW AND DR H. R. SHERCLIFF  
 Materials (Sixteen lectures)

The same continued (Sixteen lectures)

**Paper G6 (Mechanics of Machines)**

Leaders: Dr J. A. Williams and Dr J. D. Smith *LR4*  
 DR J. A. WILLIAMS  
 Mechanics of contacts (Four lectures)  
 DR J. D. SMITH  
 Mechanics of cams and gears (Twelve lectures)

DR J. A. WILLIAMS  
 Hydrodynamic lubrication (Eight lectures)  
 DR M. P. F. SUTCLIFFE  
 Power transmission systems (Eight lectures)

**Paper G7 (Dynamics and Vibrations)**

Leader: Dr H. E. M. Hunt *LR3*  
 DR H. E. M. HUNT  
 Dynamics (Ten lectures)  
 PROF. R. S. LANGLEY  
 Lagrange's equations (Six lectures)

DR H. E. M. HUNT  
 Vibrations (Eight lectures)  
 DR D. CEBON  
 The same continued (Eight lectures)

**Paper G8 (Thermodynamics and Fluid Mechanics)**

Leader: Prof. J. D. Denton *LR3*  
 PROF. J. D. DENTON  
 Real flows (Four lectures)  
 DR T. NICKELS  
 In compressible flow (Twelve lectures)

DR T. ALBOUSIERE  
 Boundary layer flows (Eight lectures)  
 DR H. BABINSKY  
 Applications to external flows (Eight lectures)

**Paper G9 (Fluid Mechanics)**

Leader: Prof. W. N. Dawes *LR4*  
 DR M. D. COWLEY  
 1-D compressible flow (Twelve lectures)  
 DR W. R. GRAHAM  
 2-D compressible flow (Four lectures)

DR W. R. GRAHAM  
 2-D compressible flow (Four lectures)  
 PROF. W. N. DAWES  
 Fluid flow (Six lectures)  
 DR J. P. LONGLEY  
 Turbomachinery (Six lectures)

## Faculty of Engineering (continued)

ENGINEERING TRIPOS, PART II<sub>A</sub>/ELECTRICAL AND INFORMATION SCIENCES TRIPOS,  
PART I (continued)

MICHAELMAS 1999

LENT 2000

EASTER 2000

**Paper G10 (Energy and Power generation)**Leader: Prof. J. B. Young *LR10*

PROF. J. B. YOUNG

Power generation (Four lectures)

DR G. T. PARKS

Steam cycles (Eight lecturers)

**Paper G11 (Economics)**Leader: Dr J. Runde *LT2*

DR A. D. COSH

Introduction to microeconomics (Six lectures)

DR M. POLLITT

Industrial economics (Twelve lectures)

**Paper G12 (Management Science)**Leader: Dr C. W. Hope *LT2*

DR S. SCHOLTES

Stochastic models (Twelve lectures)

Project management (Four lectures)

**Paper G13 (Technology, Work and Society)**Leader: Mr C. Gill *LR4 and Judge Institute. LT1*

MR C. GILL

New technology and the workplace (Eight lectures)

DR C. W. HOPE

Technology and environment (Eight lectures)

**Paper E1 (Electric Circuits)**Leader: Dr R. J. Mears *LT2*

DR P. A. ROBERTSON

Analogue circuit techniques (Eight lectures)

DR F. UDREA

Logic circuits (Eight lectures)

**Paper E2 (Power Electronics, Power Systems and Drives)**Leader: Dr R. A. McMahon *LT2/LR4*

DR P. R. PALMER

Electrical drives (Twelve lectures)

DR R. A. McMAHON

Power electronics (Four lectures)

**Paper E3 (Electronic and Optical Devices)**Leader: Dr R. G. S. Plumb *LT2*

DR P. MIG LIORATO AND PROF. W. I. MILNE

Semiconductors (Sixteen lectures)

**Paper E4 (Control and Signal Processing)**Leader: Dr M. C. Smith *LT2/LT0*

PROF. K. GLOVER

Linear algebra (Four lectures)

DR M. C. SMITH

Discrete time systems (Eight lectures)

PROF. K. GLOVER

State-space methods (Four lectures)

**Paper E5 (Communication Systems)**Leader: Prof. A. Hopper *LT2/LT0*

DR N. G. KINGSBURY

Analogue modulation and noise (Eight lectures)

DR J. WILKINSON AND PROF. W. A. CROSSLAND

Communication networks (Eight lectures)

**Paper E6 (Computing Systems)**Leader: Dr R. Cipolla *LT2*

DR A. H. GEE

Computer architecture (Eight lectures)

DR J. BATES

Software engineering and distributed computing (Eight lectures)

DR R. S. CANT

Combustion (Eight lectures)

DR N. COLLINGS

I. C. Engines (Eight lectures)

DR J. RUNDE

Macroeconomic environment  
(Fourteen lectures)

DR I. RUDY

Forecasting and regression (Six lectures)

DR C. W. HOPE AND MR H-M. GUTMANN

Decision analysis and linear programming  
(Ten lectures)

DR E. GARNSEY AND DR M. R. JONES

Industrial sociology (Twelve lectures)

The information society (Four lectures)

DR D. M. HOLBURN

Digital circuits (Eight lectures)

DR R. J. MEARS

Optical circuits (Eight lectures)

The same continued (Eight lectures)

DR A. C. METEXAS

Power systems (Eight lectures)

PROF. W. CROSSLAND

Characteristics of light (Ten lectures)

PROF. R. G. S. PLUMB

Photonic devices (Six lectures)

PROF. K. GLOVER

State-space methods (Eight lectures)

PROF. S. J. GODSILL

Signal estimation (Four lectures)

Random signal theory (Four lectures)

DR I. WASSELL

Baseband transmission (Eight lectures)

DR T. W. DRUMMOND

Source coding (Eight lectures)

MR P. C. WOODLAND

Pattern processing (Eight lectures)

DR R. CIPOLLA

Artificial intelligence (Eight lectures)

The same continued (weeks 1-4)

Projects (to be arranged)

For all students:

Laboratory/coursework. W. F. 11-1, 2.15-4.15  
(weeks 1-8)

## Faculty of Engineering (continued)

### ENGINEERING TRIPOS, PART II<sub>B</sub>/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART II

MICHAELMAS 1999

LENT 2000

EASTER 2000

**Module A1** (Petroleum engineering)  
PROF. A. C. PALMER (Leader) (Exam+coursework)

**Module A2** (Lightweight structures)  
DR S. PELLEGRINO (Leader) AND DR I. LIDDEL  
(Coursework)

**Module A5** (Foundation engineering)  
DR A. AL-TABBAA (Leader) AND DR K. SOGA  
(Exam+coursework)

**Module A7** (Concrete and masonry structures)  
DR C. T. MORLEY (Leader) (Exam+coursework)

**Module A10** (Structural steel)  
DR R. E. McCONNEL (Leader) (Exam+coursework)

**Module A12** (Coastal and off-shore engineering)  
DR J. F. A. SLEATH (Leader) AND PROF. A. C. PALMER  
(Twelve lectures+two example classes)

**Module A13** (Architectural engineering)  
DR C. R. MIDDLETON (Leader), PROF. P. CAROLIN,  
DR R. J. S. SPENCE AND OTHERS (Coursework)

**Module B3** (Electrical materials)  
DR A. M. CAMPBELL (Leader) AND DR D. F. M. MOORE  
(Exam+coursework)

**Module B4** (Design methods)  
DR P. J. CLARKSON AND MR A. L. JOHNSON (Leader)  
(Exam+coursework)

**Module B6** (Advanced linear vibration)  
PROF. R. LANGLEY (Leader), DR H. HUNT AND  
DR J. WOODHOUSE  
(Exam+coursework)

**Module B7** (Random and non-linear vibrations)  
PROF. R. S. LANGLEY AND DR J. D. SMITH (Leader)  
(Exam+coursework)

**Module B8** (Applications of Dynamics)  
MR A. L. JOHNSON AND DR D. CEBON (Leader)  
(Exam+coursework)

**Module B9** (Continuum mechanics)  
DR W. J. STRONGE (Leader) AND DR T. J. LU (Exam)

**Module C2** (Computational fluid mechanics)  
DR T. NICKELS AND PROF. J. D. DENTON (Leader)  
(Coursework)

**Module C3** (Turbomachinery I)  
PROF. N. A. CUMPTSY (Leader) and DR H. P. HODSON  
(Exam+coursework)

**Module C4** (Aircraft stability and control)  
DR W. R. GRAHAM (Leader) (coursework)

**Module C5** (Internal combustion engines)  
DR N. COLLINGS (Leader) (Exam+coursework)

**Module C10** (Flow instability)  
DR R. E. BRITTER (Leader) AND DR R. LINGWOOD (Exam)

**Module D2** (Power electronics and applications)  
DR P. R. PALMER (Leader) (Exam)

**Module D4** (Computational electromagnetics)  
DR T. J. FLACK (Leader) (Coursework)

**Module D9** (Optical communications)  
DR R. J. MEARS (Leader) AND DR R. G. S. PLUMB  
(Exam+coursework)

**Module A4** (Ground engineering)  
PROF. R. MAIR (Leader), DR A. AL-TABBAA AND  
DR J. STANDING (Coursework)

**Module A6** (Structural dynamics and earthquake  
engineering)  
MR F. A. McROBIE AND DR S. P. G. MADABUSHI  
(Leader) (Exam+coursework)

**Module A8** (Prestressed concrete)  
DR C. J. BURGOYNE (Leader)  
(Exam+coursework)

**Module A11** (Building Physics)  
DR C. T. MORLEY (Leader), MR P. J. KIRBY AND  
OTHERS  
(Exam+coursework)

**Module A14** (Contaminated land and waste  
containment)  
DR K. SOGA (Leader) AND DR S. P. G.  
MADABHUSHI (Exam+coursework)

**Module B1** (Deformation and fracture)  
PROF. N. A. FLECK (Leader) AND  
DR T. J. LU (Exam)

**Module B2** (Designing with composites)  
DR M. P. F. SUTCLIFFE (Leader) AND  
DR P. W. R. BEAUMONT (Exam+coursework)

**Module B5** (Design case studies)  
MR K. M. WALLACE, DR P. J. CLARKSON,  
DR P. J. LONG AND DR K. SHEA  
(Coursework)

**Module B10** (Finite elements)  
DR W. J. STRONGE (Leader), DR T. J. LU AND  
DR D. CEBON (Exam+coursework)

**Module B12** (Wave propagation)  
DR W. J. STRONGE (Leader) AND  
DR J. WOODHOUSE (Exam+coursework)

**Module C1** (Nuclear power engineering)  
DR G. T. PARKS (Leader) AND MR R. SKELTON  
(Exam+coursework)

**Module C6** (Flow induced sound and vibration)  
PROF. J. E. FFOWCS WILLIAMS (Leader) AND  
DR N. PEAKE (Coursework)

**Module C7** (Aerodynamics)  
PROF. W. N. DAWES (Leader), DR H. BABINKSY,  
PROF. I. YATES AND OTHERS  
(Exam+coursework)

**Module C8** (Environmental fluid mechanics)  
DR R. E. BRITTER (Leader) (Exam)

**Module C9** (Molecular Thermodynamics)  
PROF. J. B. YOUNG (Leader) AND DR R. S. CANT  
(Exam)

**Module C11** (Turbomachinery II)  
DR J. P. LONGLEY (Leader) AND DR L. XU  
(Exam+coursework)

**Module C12** (Turbulence)  
DR T. ALBOUSSIÈRE (Leader) AND  
DR M. D. COWLEY (Exam+coursework)

**Module D1** (Electrical machines)  
DR R. A. McMAHON (Leader) AND DR D. CARTER  
(Exam)

## Faculty of Engineering (continued)

### ENGINEERING TRIPOS, PART II<sub>B</sub>/ELECTRICAL AND INFORMATION SCIENCES TRIPOS, PART II (continued)

MICHAELMAS 1999

LENT 2000

EASTER 2000

**Module D10** (Optoelectronic technology)  
DR R. G. S. PLUMB (Leader) (Exam+coursework)

**Module D14** (Solar electronic power generation and distribution)  
PROF. G. A. J. AMARATUNGA AND PROF. W. I. MILNE  
(Exam+coursework)

**Module I1** (Control system design)  
DR J. M. MACIEJOWSKI AND DR M. C. SMITH (Leader)  
(Exam+coursework)

**Module I3** (Nonlinear and adaptive control)  
DR J. M. MACIEJOWSKI (Leader) (Exam+coursework)

**Module I7** (Digital filters and spectral estimation)  
PROF. P. J. W. RAYNER (Leader) AND DR M. D. MACLEOD  
(Exam)

**Module I8** (Image processing and image coding)  
PROF. P. J. W. RAYNER AND DR N. G. KINGSBURY (Leader)  
(Exam)

**Module I11** (Speech processing)  
MR P. WOODLAND (Leader) AND DR A. J. ROBINSON (Exam)

**Module I12** (Computer vision and robotics)  
DR A. H. GEE AND DR R. CIPOLLA (Leader) (Exam)

**Module F3** (Production and operations management)  
DR S. SCHOLTES (Leader) (Coursework)

**Module F6** (Accounting and finance)  
A. N. OTHER (Leader) (Exam)

**Module F13** (Linear algebra and optimisation)  
DR S. D. GUEST (Leader) AND DR G. T. PARKS  
(Exam+coursework)

**Module D3** (Power utilisation)  
DR A. C. METAXAS (Leader) (Exam+coursework)

**Module D5** (Quantum phenomena and solid state electronics)  
DR M. E. WELLAND (Leader) AND  
DR J. ROBERTSON (Exam+coursework)

**Module D6** (Solid state devices)  
DR P. MIGLIORATO (Leader) AND  
PROF. W. I. MILNE (Exam+coursework)

**Module D7** (VLSI design, technology and CAD)  
DR D. F. MOORE AND DR D. M. HOLBURN (Leader)  
(Exam+coursework)

**Module D8** (Analogue circuit techniques)  
DR P. A. ROBERTSON (Leader) AND OTHERS  
(Exam+coursework)

**Module D11** (Photonic systems)  
PROF. W. A. CROSSLAND (Leader) AND  
DR T. WILKINSON (Exam+coursework)

**Module I2** (Robust multivariable control)  
PROF. K. GLOVER (Leader) AND  
DR G. VINNICOMBE (Exam+coursework)

**Module I5** (Digital communication)  
PROF. F. A. HOPPER (Leader), DR N. G. KINGSBURY  
AND DR J. BATES (Exam)

**Module I6** (Signal detection and estimation)  
PROF. P. J. W. RAYNER AND DR W. J. FITZGERALD  
(Leader) (Exam)

**Module I9** (Medical imaging)  
DR A. GEE (Leader) AND DR R. W. PRAGER  
(Exam)

**Module I10** (Advanced pattern processing)  
DR T. R. NIESLER (Leader) AND DR P. WEBSTER

**Module F4** (Marketing)  
DR N. O'SHAUGHNESSY (Leader) (Coursework)

**Module F5** (International business economics)  
DR C. PITELIS, DR M. POLLITT (Leader) AND  
DR P. NOLAN (Coursework)

**Module F7** (Enterprise and business development)  
DR E. W. GARNSEY (Leader) (Coursework)

**Module F8** (Design and management of manufacturing systems)  
A. N. OTHER (Leader) (Coursework)

**Module F10** (French)  
MR C. D'ANGELO (Leader)

**Module F11** (German)  
A. N. OTHER (Coursework)

**Module F12** (Complex analysis and variational methods)  
PROF. N. A. FLECK AND PROF. R. LANGLEY  
(Leader) (Exam)

**Faculty of Engineering (continued)**  
**MANAGEMENT STUDIES TRIPOS**

MICHAELMAS 1999

LENT 2000

EASTER 2000

(A detailed timetable will be displayed in the Department)

*Lectures in LT1, Judge Institute***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 lectures)**Paper MS6 (Marketing)**

Leader: Dr J. C. Prabhu

**Paper MS7 (International HRM)**Leader: Mr C. Gill  
(Sixteen lectures)**Paper MS8 (Management Science)**Details to be announced  
(Sixteen lectures)**Paper MS9 (International business economics)**

Details to be announced

**Paper MS10 (Corporate finance)**DR B. LAMBRECHT  
(Sixteen lectures)**Paper MS11 (Information systems)**Leader: Dr M. R. Jones  
(Sixteen lectures)**Paper MS12 (Strategic management)**Leader: Dr M. Mullen  
(Sixteen lectures)

**MANUFACTURING ENGINEERING TRIPOS, PART I**

**Paper P1 (Design and Manufacture)**

Leader: Dr T. P. Bligh

DR T. P. BLIGH  
Engineering Design (Seven lectures)DR K. W. PLATTS  
Industrial engineering (Eight lectures)DR D. C. McFARLANE  
Machine and factory automation (Six lectures)**Paper P2 (Organisation and Control of Manufacturing Systems)**

Leader: A. D. Neely

DR A. D. NEELY  
Quality Control (Sixteen lectures) and information systems and inventory control**Paper P3 (Management Economics and Accounting)**

Leader: Dr A. D. Cosh

DR A. D. COSH  
Introduction to Microeconomics (Nine lectures)DR A. D. COSH  
Industrial Economics and Cost Accounting  
(Thirteen lectures)**Paper G5 (Engineering Materials and Processing)**

Leader: Dr C. Y. Barlow

The same as Engineering Tripos, Part IIA, Paper 4

**Paper P5**

Leader: Mr C. Gill

DR C. GREY  
Organisational behaviour (Sixteen lectures)MR M. J. PLATTS  
Design 2 (Eight lectures)MR M. J. PLATTS  
Design of Manufacturing Systems  
(Four lectures)DR R. STEINBERG  
Scheduling (Eight lectures)  
Inventory Control (Eight lectures)DR A. D. COSH  
Accounting and Finance (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

## Faculty of Engineering (continued)

### M.PHIL. (one-year course) IN COMPUTER SPEECH AND LANGUAGE PROCESSING

MICHAELMAS 1999

LENT 2000

EASTER 2000

PROF. S. J. YOUNG  
Introduction to Speech Processing. Th. 9 (week 1, 2)

DR T. R. NIESLER  
Algorithms for Speech Analysis. M. Tu. F 10  
(weeks 1-3)

DR J. P. BLEVINS  
Linguistics. Th. 10 (weeks 1-3)

MR P. GOSLING  
Introduction to Computing - Unix. Tu. 12, Th. 11  
(week 1)  
Computing, C Programming. M. W. Th. F. 12  
(weeks 1-2)

DR K. SPARCK JONES  
Introduction to Language Processing. W. F. 11  
(weeks 1-2)

DR G. TITMUS  
Introduction to Computing. Tu. 12 (week 2)  
*Computing Laboratory*

DR E. J. BRISCOE  
Automated Syntactic and Semantic Analysis.  
M. Tu. Th. 11 (weeks 1-5)

DR S. G. PULMAN  
Computing, Prolog. Tu. W. Th. F. 12 (weeks 3-4)  
Pragmatics, Representation and Reasoning.  
M. Tu. Th. 11 (weeks 6-8)

A. N. OTHER  
Phonetics. M. 12, W. 11 (weeks 3, 5, 7)  
Phonology. M. 12, W. 11 (weeks 4, 6, 8)

DR A. J. ROBINSON  
Pattern Processing. M. W. F. 10 (weeks 3-6)

MR P. C. WOODLAND  
Speech Recognition. M. W. F. 10 (weeks 6-8)  
Computing Practicals. M. Tu. Th. 2-5 (weeks 1-8);  
F. 2-5 (weeks 3-8) *Computer Laboratory only*

DR A. J. ROBINSON  
Acoustic Modelling. Tu. Th. 10 (weeks 1-4)

MR P. C. WOODLAND  
Search and Language Modelling. W. F. 10  
(weeks 5-8)

DR T. R. NIESLER  
Speech Analysis. W. F. 10 (weeks 1-4)

DR E. BRISCOE  
Syntax and Parsing. Tu. Th. 11 (weeks 1-4)

DR S. G. PULMAN  
Semantics and Inference. W. F. 11  
(weeks 1-4)  
Discourse Processing. W. F. 11 (weeks 5-8)

DR G. GASKELL  
Psycholinguistics/Speech Perception.  
Tu. F. 12 (weeks 1-4)

VISITING SPEAKERS  
Speech and Language Applications. Th. 12  
(weeks 1-8)

DR K. SPARCK JONES  
Language Systems. Tu. Th. 11 (weeks 5-8)

DR A. J. ROBINSON  
Speech Output. W. F. 10 (weeks 5-8)  
Speech and Language Practicals (weeks 1-8)  
*Engineering* - M. Tu. Th. 2-5  
*Computer Laboratory* - M. Tu. Th. F. 2-5

### M.PHIL. (one-year course) MICROELECTRONIC ENGINEERING AND SEMICONDUCTOR PHYSICS

Details of the lectures for this course may be found on page 198

A more detailed teaching programme, with information about the laboratory courses, may be obtained from Dr J. R. A. Cleaver at the *Department of Physics*.