

Recommended Book List 2008/09

School of Engineering

15 December 2008

In the lists below, the annotation C indicates a compulsory purchase, while R indicates a recommended purchase.

1 EG1006 Engineering Mathematics I

- Stroud, K.A. *Engineering Mathematics* Macmillan ISBN 0333620224 R

2 EG1007 Engineering Science

- Young and Freedman *University Physics* 11th Edition, Addison Wesley R

3 EG1527 Applied Mechanics and Structures

- Lee, S *An Introduction to Mathematics for Engineers: Mechanics* Hodder Education, 2008, ISBN: 9780340965528

4 EG1567 Electronic and Electrical Engineering

- Rizzoni, G *Principles and Applications of Electrical Engineering* McGraw Hill R
- Nilsson, JW and Reidal, SA *Introductory Circuits* Prentice Hall (2002) A
- Hughes, E *Electrical and Electronic Technology* Prentice Hall (2002) A

5 EG2010 Engineering Mathematics 2

- Croft A, Davison R and Hargreaves M *Engineering Mathematics* 2nd Edition Addison-Wesley R
- Stroud, K *Further Engineering Mathematics* Vol. 1 3rd Ed. MacMillan ISBN 0333657411 R

6 EG2029 Materials and Structures

- Ashby, M.F. and Jones, D.R.H. *Engineering Materials* Butterworth ISBN 0750627662 R
- Meriam, J.L. *Statics (SI Version)* 4th Ed. Wiley ISBN 0471241679 R
- Cain, J.A. and Hulse, R. *Structural Mechanics* MacMillan ISBN 0333480783 R
- Gere, J.M. and Timoshenko, S.P. *Mechanics of Materials* 4th Ed Chapman and Hall ISBN 0412368803 R

7 EG2060 Electronics and Programmable Systems

- C S Parker and D Morley *Understanding Computers Today and Tomorrow* 2002 Edition, Course Technology (Thomson Learning) R
- S J Chapman Matlab *Programming for Engineers* Brooks/Cole (Thomson Learning) R

8 EG2510 Engineering Mathematics 3

- Croft, Davison and Hargreaves *Engineering Mathematics* 2nd Ed Addison-Wesley

9 EG2539 Fluid Mechanics and Thermodynamics

- Massey, BS *Mechanics of Fluids* Taylor and Francis R Thermodynamics
- Eastop TD and McConkey A *Applied Thermodynamics for Engineering Technologists* Longman R
- Rogers, GFC and Mayhew YR *Engineering Thermodynamics Work and Heat Transfer* 4th Ed. Longman R and
- Rogers GFC and Mayhew YR *Thermodynamics and Transport Properties of Fluids* SI Units, Blackwells C

10 EG2559 Electrical and Mechanical Systems

- Smith, RJ and Dorf, RC *Circuits, Devices and Systems* Wiley R
- Wildi, T *Electrical Machines, Drives and Power Systems* Prentice Hall R

11 EG3006 Engineering Analysis and Methods 1

- E Kreysig *Advanced Engineering Mathematics* 8th Edition Wiley ISBN 047133328X R A Student Solutions Manual is also available for this volume, which you are advised to purchase.

12 EG3013 Fluid Mechanics A/ ES3013 Fluid Mechanics B

- Massey B and Ward-Smith J Mechanics of Fluids 7th Ed. Nelson Thornes 1998 ISBN 0-7487-4043-0 R

13 EG3015 Stress Analysis A/ ES3015 Stress Analysis B

- Benham, Crawford and Armstrong Mechanics of Engineering Materials Longman R
- Ugural and Fenster Advanced Strength and Applied Elasticity Prentice Hall R

14 EG3027 Geotechnics 1A/ES3027 Geotechnics 1B

- Waltham, AC Foundations of Engineering Geology E and FM Spon. R
- Barnes, GE Soil Mechanics: Principles and Practice MacMillan R

15 EG3034 Engineering Materials A/ES3034 Engineering Materials B

- Rollason, EC Metallurgy for Engineers 4th Ed. Arnold ISBN 0713132825 R
- Higgins, RA Engineering Metallurgy 6th Ed. Arnold ISBN 0340568305 R
- Lancaster, JF Metallurgy of Welding George Allen and Unwin R
- Broek, D Elementary Engineering Fracture Mechanics Martinus Nijhoff ISBN 9024726565 R
- Hertzberg, RW Deformation and Fracture Mechanics of Engineering Materials 4th Ed. John Wiley ISBN 047101214999 R
- Fontana, MG Corrosion Engineering McGraw-Hill ISBN 0070214638 R
- Dieter, GE Mechanical Metallurgy McGraw-Hill ISBN 0070168938 R

16 EG3043 Control Systems A/ES3043 Control Systems B

- Dorf and Bishop Modern Control Systems - 9th Ed. Pearson Higher Education, ISBN 0130306606 R
- Franklin, Powell and Workman Digital Control of Dynamic Systems Pearson Higher Education ISBN 0201331535 R
- Nise, NS Control Systems Engineering 3rd Ed. John Wiley and Sons Ltd. ISBN 0471250910 R

17 EG3052 Signals and Systems A/ES3052 Signals and Systems B

- Sinha, NK Linear Systems John Wiley ISBN 0-471-54451-5 R
- Carlson, GE Signal and Linear System Analysis Houghton-Mifflin R
- Strum and Dirk Comtemporary Linear Systems (using MATLAB) PWS Publishing Company R
- Taylor, FJ Principles of Signals and Systems McGraw Hill R
- Ambardar, A Analog and Digital Signal Processing PWS Publishing Company R

18 EG3529 Design of Structural Elements A/ES3529 Design of Structural Elements B

- Mosley, Bungey and Hulse Reinforced Concrete Design Fifth Edition, MacMillan Press Ltd R
- Extracts from British Standards for Students of Structural Design Available from the Department of Engineering C
- Nethercot, DA Limit States Design of Steelwork 2nd Ed. Chapman Hall R

19 EG3556 Electrical Power Engineering 1A/ ES3556 Electrical Power Engineering 1B

- Wildi, T Electrical Machines, Drives and Power Systems Prentice Hall, either 3rd edition ISBN 0135713331 or 4th edition ISBN 0130824607 R

20 EG3557 Electrical Power Engineering A/ ES3557 Electrical Power Engineering B

- Theodore Wildi Electrical Machines and Drive Systems ISBN 0-13-082460-7 R

21 EG3560 Digital Electronic Systems A/ ES3560 Digital Electronic Systems B

- M Zwolinski Digital System Design with VHDL Pearson ISBN 013039985-X R
- A Dewey Analysis and Design of Digital Systems with VHDL PWS Publishing Company ISBN 053495410-3 R
- T Floyd Digital Fundamentals with VHDL Pearson Higher Education R

22 EG3567 Communications Engineering 1A/ ES3567 Communications Engineering 1B

- Halsall Data Communications, Computer Networks and Open Systems Addison Wesley, ISBN 0-201-56506-4 R
- Stallings Data Communications Paramount Publishing International ISBN 0130843709 R
- Graham King Understanding and Designing Computer Networks Edward Arnold, ISBN 0-340-61419-6 A
- Alexis Ferrero The Eternal Ethernet Addison Wesley ISBN 0-201-36056-X A
- Richard Stevens TCP/IP Illustrated: Volume 1 Addison Wesley ISBN 0-201-63346-9 A
- Douglas E Comer Internetworking with TCP/IP, Vol 1: Principles, Protocols and Architectures Prentice Hall ISBN 0-201-56506-4 A

23 EG3584 Economics, Resource and Safety Management A and B

There are no recommended books for this course.

24 EG3722 Field Survey and Engineering Geology Field Course A/ ES3722 Field Survey and Engineering Geology Field Course B

- A C Waltham Foundations of Engineering Geology R

25 EG4080 Organisations and People

- Hardy, C Understanding Organisations Penguin R
- Hardy, C Managing Strategic Action Safe R

26 EG4094 Statistics and Probability for Safety, Reliability and Quality

- D.R.Rees Essential Statistics Chapman and Hall R
- L.L.Lapin Probability and Statistics for Modern Engineering Duxbury R

27 EG40CA Geotechnics 2

- Barnes, GE *Soil Mechanics: Principles and Practice* MacMillan R

28 EG40CB Civil Engineering Hydraulics

- Chadwick A and Morfett J *Hydraulics in Civil and Environmental Engineering* 3rd Ed. E and FN SPON 1998 ISBN 0-419-22580-3 R

29 EG40CC Advanced Structural Design

There are no recommended books for this course.

30 EG40CD Advanced Structural Analysis

There are no recommended books for this course.

31 EG40CE Environmental Engineering

There are no recommended books for this course.

32 EG40DA Dynamics 2

- Rao, S *Mechanical Vibrations* SI Ed or 4th Ed, Pearson.

33 EG40DB Fluid Dynamics

- Massey B and Ward-Smith J *Mechanics of Fluids* 7th Edition, Nelson Thornes 1998, ISBN 0-7487-4043-0 R

34 EG40DE Thermodynamics 2

- Jones, JC *The Principles of Thermal sciences and their Application to Engineering* Whittles Publishing, Caithness and CRC Press, Boca Raton (2000) R

35 EG40ED Advanced Control Engineering

- Dorf and Bishop *Modern Control Systems* - 9th Ed. Pearson Higher Education, ISBN 0130306606 37.99 R
- Franklin, Powell and Workman *Digital Control of Dynamic Systems* Pearson Higher Education ISBN 0201331535 R

- Nise, NS Control Systems Engineering 3rd Ed. John Wiley and Sons Ltd. ISBN 0471250910 R

36 EG40GB Signal Processing

- Stephen W Smith The Scientist and Engineer's Guide to Digital Signal Processing Online text.
- Proakis and Manolakis Digital Signal Processing: Principles, Algorithms and Applications Prentice Hall 3rd Edition, ISBN 0133737624
- Oppenheim and Schaffer Discrete-Time Signal Processing Prentice Hall 2nd Edition, ISBN 0137549202
- Sanjit K Mitra Digital Signal Processing: A Computer Based Approach, 2e with DSP Laboratory using MATLAB McGraw-Hill, ISBN 0072513780

37 EG40GC Optical Engineering

- Wilson, J and Hawkes, JFB Optoelectronics: An Introduction Prentice- Hall R
- Wilson, J and Hawkes, JFB Lasers and Applications Prentice-Hall R

38 EG40JA Safety and Reliability Engineering

There are no recommended books for this course.

39 EG4513 Individual Project Abroad (MEng)

There are no recommended books for this course.

40 EG4591 Well Engineering

There are no recommended books for this course.

41 EG5084 VLSI and Digital Architectures

- MJS Smith *Application Specific Integrated Circuits* Pearson Higher Education R

42 EG5088 Engineering Analysis and Methods 2

- Spencer AJM Continuum Mechanics Longman R
- Mase G Continuum Mechanics Schaum's Outline Series R