

School of Electrical, Electronic and Computer Engineering

Indicative Booklist/Textlist* for Semester 1 2007

GENG1002 Introduction to Electrical & Electronic Engineering - Dr J Henry

Recommended Textbook

Rizzoni, G **Principles and Applications of Electrical Engineering** The Ohio State University ISBN: 0072463473

Recommended Reading

Schwarz, S.E. and Oldham, W.G. (1993) **Electrical Engineering: An Introduction**, Oxford Uni Press

Cogdell, J.R. **Foundations of Electric Circuits**

Smith, R.J. and Dorf, R.C. **Circuits, Devices and Systems**, J. Wiley

ELEC2300 Circuits & Electronic Systems 2 - Dr H lu

Textbook

Tse, C K (1998) **Linear Circuit Analysis**, Addison Wesley ISBN: 9780201342963

Nilsson J W, Riedel, S **Electrical Circuits**, Prentice-Hall ISBN: 9780131292604

ELEC2303 Embedded Systems – A/Prof G Bundell

Textbook

Bräunl, T (2003) **Embedded Robotics**, Springer ISBN: 9783540034360

Recommended Reading

Harman, T (1991) **The Motorola MC68332 Microcontroller**, Prentice-Hall

Harman, T (1996) **The Motorola MC68000 Microprocessor Family**, Prentice-Hall

Wirth, N (1995) **Digital Circuit Design**, Springer

Jones, J., Flynn, A (1999) **Mobile Robots**, 2nd ed., AK Peters

Kernighan, R **The C Programming Language**

ELEC2304 Physical Electronics 2 - A/Prof J Dell

Recommended Reading

Neamen D.A. (1997) **Semiconductor Physics and Devices**, 2nd ed., Irwin Publishing ISBN: 0-256-08405-x

Sze, S. M. **Semiconductor Devices: Physics and Technology**, 2nd ed.: J Wiley & Sons

ELEC33001 Circuits & Electronic Systems 3 – Dr F Boussaid/Prof T Cantoni

Textbook

Sedra, A S & Smith, K C **Microelectronic Circuits**, 5th ed., Oxford Uni Press ISBN: 9780195142525

ELEC3302 Communications Systems - Dr D Huang/Dr R Togneri

Textbook

Haykin, S (2000) **Communication Systems**, 4th ed., J. Wiley ISBN: 9780471178699

Recommended Reading

Carlson, A.B., Crilly, P.B, and Rutledge J.C. (2002) **Communication Systems**, 4th ed., McGraw-Hill ISBN: 0-07-011127-8

Lathi, B.P. (1998) **Modern Digital and Analog Communication Systems** 3rd

Wells, R (1999) **Applied coding and information theory for engineers**, Prentice-Hall ISBN: 139613277

Togneri, R. & deSilva, C.J.S. (2003) **Fundamentals of Information Theory and Coding Design**, Chapman & Hall/CRC

Proakis J.G. and Salehi, M (2000) **Contemporary communication systems using MATLAB**, Brooks/Cole

Lubbe, J.C.A. van der (1997) **Information Theory**, Cambridge Uni Press ISBN: 13:9780521461986

ELEC3320 Process Instrumentation and Control - Dr T Fernando

Recommended Reading

Anderson N. A. (1998) **Instrumentation for Process Measurement and Control**, 3rd ed.: CRC Press

Liptak B. G. (1999) **Instrument Engineers' Handbook Process Control**, 3rd ed.: CRC Press

Liptak B. G. (2003) **Instrument Engineers' Handbook Process Measurement and Analysis**, 4th ed.: CRC Press

Morris A. S. (2001) **Measurement and Instrumentation Principles**: Butterworth-Heinemann

Ogunnaiké B. A. and Ray W. H. (1994) **Process Dynamics Modeling and Control**: Oxford University Press

ELEC4300 Control Engineering - A/Prof V Sreeram

Textbook

Stefani, R.T., Shahian, B., Savant, CJ and Hostetter, G (2001) **Design of Feedback Control Systems**, 4th ed., Oxford Uni Press ISBN: 9780195142495

Recommended Reading

Kailath, T (1980) **Linear Systems**, Prentice-Hall

Ogata, K (1997) **Modern Control Engineering** 3rd ed., Prentice-Hall

DeCarlo, R (1989) **Linear Systems**, Prentice-Hall

Dorf and Bishop (1998) **Modern Control Systems**, 8th ed., Addison Wesley

Chen, C.T. (1984) **Linear Systems Theory and Design**, Harcourt Brace College

Masten, M.K. (1995) **Modern Control Systems, An IEEE/EAB Self-Study Course**

Anton, H (1984) **Elementary Linear Algebra**, 4th ed., J. Wiley & Sons, Canada

ELEC4301 Digital Communications & Networking - Dr R Togneri

Textbook

Haykin, S (2001) **Communication Systems**, 4th ed., J. Wiley

ISBN: 9780471178699

Stallings, W (2003) **Data & Computer Communications**, 7th ed., Prentice-Hall

ISBN:9780923835002

Recommended Reading

Proakis, J.G (2001) **Digital Communications**, 4th Ed., McGraw-Hill,

Ziener, R.E, Peterson, R.L (2001) **Introduction to Digital Communication**, 2nd Ed., Prentice-Hall ISBN: 0-113-896481-5

ELEC4302 Digital Microelectronics System Design - Dr G Parish

Recommended Reading

Sze, S, (2002) **Semiconductor Devices: Physics and Technology**, 2nd ed., New York: J. Wiley ISBN: 0-471-33372-7
Rabaey, J. Chandrakasan, A, and Nikolic, B. (2003) **Digital Integrated Circuits – A Design Perspective**, 2nd ed, Prentice Hall
Singh. J.(2001) **Semiconductor Devices: Basic Principles**, J. Wiley
Muller, R. S. and Kamins, T. I. (2003) **Device electronics for integrated circuits** 3rd ed., J. Wiley ISBN: 0-471-59398-2 (note there is a new version of this but the library one is old version)
Weste, N and Eshraghian, K (1988) **Principles of CMOS VLSI Design, A Systems Perspective** 1993, Addison Wesley ISBN: 2201533766
There is no formal prescribed text for this course, however, the first two are the most helpful in terms of the material covered in the VLSI technology and VLSI design areas, respectively.

ELEC4306 Power Electronics & Drives - Dr L Borle

Textbook

Mohan, N, Undeland, T.M., Robbins, W.P (2003) **Power Electronics; Converters, Applications & Design**, 3rd ed., J. Wiley ISBN: 9780471226932

Recommended Reading

Bose, B.K. (2002) **Modern Power Electronics and AC Drives**, Prentice-Hall ISBN: 130167436
Bose B.K. **Power Electronics and Variable Speed Drives**
Krishnan R (2001) **Electric Motor Drives; Modeling, Analysis and Control**, Prentice-Hall ISBN: 130910147
Mohan N (2003) **Electric Drives: an Integrative Approach**, MNPERE ISBN: 0-9715292-5-6
Rashid M.H (2004) **Power Electronics, Circuits, Devices and Applications**, 3rd ed., Prentice-Hall ISBN: 131011405
Sen P.C (1996) **Principles of Electric Machines and Power Electronics** 2nd ed., J. Wiley ISBN: 0-471-02295-0
Shepherd W, Hulley L.H. & Liang D.T.W. (2000) **Power Electronics and Motor Control** 2nd ed., Cambridge Uni Press ISBN: 521478138
Williams B W (1992) **Power Electronics: Devices, Drivers, Applications and Passive Components**, 2nd ed., McGraw-Hill ISBN: 70704392

ELEC4312 Real-time Distributed Computer Systems - A/Prof G Bundell

Textbook

Gomaa H (2000) **Designing Concurrent, Distributed and Real-Time Applications with UML**, Addison-Wesley ISBN: 201657937

Recommended Reading

Burns, A. and Wellings, A (2001) **Real-Time Systems and Programming Languages** 3rd ed, Addison-Wesley ISBN: 201729881

Douglass, B.P (1998) **Real-Time UML**, Addison-Wesley

Gomaa, H. (1993) **Software Design Methods for Concurrent and Real-Time Systems**, Addison-Wesley ISBN: 0201525771

Gosling, A. (1996) **The Java Programming Language**, Addison-Wesley

Laplante, P.A. (1997) **Real-Time Systems Design and Analysis - An Engineer's Handbook** 2nd ed., IEEE Press ISBN: 0-8186-33107

Levi, S.T. and Agrawala, A.K (1990) **Real-Time System Design**., McGraw-Hill ISBN: 0-07037-491-0

Naiditch, D. J. (1995) **Rendezvous with Ada 95**, J. Wiley

Nielsen, K (1990) **Ada In Distributed Real-Time Systems**., McGraw-Hill

Orfali, R & Harkey, D. (1997) **Client/Server Programming with Java and Corba**, J. Wiley

Shaw, A.C (2001) **Real-Time Systems & Software**, J. Wiley ISBN: 0-471-35490-2

Masters Units

ELEC8343 Numeric Protection, Communications and Transducers - A/Prof T Nguyen

Textbook

Nguyen T.T. and Humpage W.D, (1993) **Distance Protection**, UWA

Nguyen T.T. and Humpage W.D. (1992) **Teleprotection**, UWA

ELEC8341 Energy Management System – A/Prof T Nguyen

Textbook

Nguyen T.T. and Humpage W.D (1991) **Optimal Power Flow**, UWA School of Electrical, Electronic and Computer Engineering

- * This is a advisory list only.
The Unit-Coordinator reserves the right to change the textbook and recommended reading for his/her unit.
Booklist/textlists will be confirmed in the first lecture of the unit.