



ELEC1103/9703 – Fundamentals of Electrical & Electronic Engineering

Unit Co-ordinator: A/PROF CRAIG JIN
Electric Circuits, 9th Edition TEXT
by James W Nilson, Susan Riedel
(Prentice Hall) 9th Edition, 2010
Package ISBN-13: 9780131392151
Introduction to MultiSim for Electric Circuits
By Nilsson and Riedel
<http://www.mypearsonstore.com/bookstore/product.asp?isbn=0136114997&xid=PSSED#sf>

ENGG1800 – Introduction to Engineering Disciplines

Unit Co-ordinators: DR SWAMIDOSS SATHIAKUMAR
(shared by AMME/CIVIL/CHEM/EIE)

ELEC2602/9602– Digital Logic

Unit Co-ordinator: DR DAVID BOLAND
Fundamentals of Digital Logic with VHDL Design TEXT
Stephen Brown and Zvonko Vranesic
(McGraw Hill), 3rd Edition, ISBN 71287655

ELEC3104/9104 – Engineering Electromagnetics

Unit Co-ordinator: A/PROF JAVID ATAI
Fundamentals of Applied Electromagnetics TEXT
Fawwaz T. Ulaby, Eric Michielssen & Umberto Ravaioli
(Prentice Hall), 6th Edition, 2010, ISBN 978-0132139311

ELEC3203/9203 – Electricity Networks

Unit Co-ordinator: DR GREGOR VERBIC
Power System Analysis & Design TEXT
J Duncan Glover, Mulukutla S Sarma, Thomas Overbye
(CENGAGE Learning), ISBN 9781111425791

Modern Power System Analysis RECOMMENDED

D P Kothari, L J Nagrath
(McGraw-Hill), ISBN 978-0073404554

Power System Analysis RECOMMENDED

Saadat Hadi
(McGraw-Hill), ISBN 978-0-471-28060-6

Electrical Power System Essentials RECOMMENDED

Pieter Schavemaker, Lou van der Sluis
(Wiley), 2008, ISBN: 978-0-470-51027-8

ELEC3204/9204– Power Electronics and Applications

Unit Co-ordinator: A/PROF WEIDONG XIAO
Power Electronics 1st Edition TEXT

by [Daniel Hart](#)
(McGraw-Hill Education), 1st edition, 22 January 2010
ISBN-10: 0073380679 ISBN-13: 978-0073380674

Fundamentals of Power Electronics

Robert W Erickson and Dragan Maksimovic
(Springer), 2nd edition , January 2001 RECOMMENDED
ISBN-10: 0792372700 ISBN-13: 978-0792372707

ELEC3305/9305 – Digital Signal Processing

Unit Co-ordinator: DR YASH SHRIVASTAVA
Fundamentals of Digital Signal Processing TEXT
Joyce Van de Vegte
(Prentice Hall), 1st Edition, B982532 9780130160775

ELEC3404/9404 – Electronic Circuit Design

Unit Co-ordinator: A/PROF ALISTAIR MCEWAN
Microelectronic Circuits TEXT
Sedra/Smith
(Oxford Uni Press) 5th Edition

ELEC3505/9505 – Communications

Unit Co-ordinator: PROF ABBAS JAMALIPOUR
Communication Systems TEXT
Simon Haykin & Michael Moher
(Wiley) 5th Edition, ISBN 978-0-471-69790-9

Communication Systems RECOMMENDED

A Bruce Carlson
(McGraw-Hill), 4th Edition, ISBN 0-07-100560-9

Digital Communications RECOMMENDED

Bernard Sklar,
(Prentice-Hall), 2nd Edition, ISBN 0-13-084788-7

ELEC3607/9607 – Embedded Systems

Unit Co-ordinator: PROF PHILIP LEONG
No textbook.

The Definitive Guide to the ARM

Cortex-M3 RECOMMENDED
J Yiu, 2nd Edition, ISBN: 750685344

ELEC3610/9610 – E-Business Analysis and Design

Unit Co-ordinator: DR PHEE YEOH
Electronic Commerce by Schneider 11th Edition,
ISBN: 10:0538469242 RECOMMENDED

ELEC3802 – Fundamentals of Biomedical Engineering

Unit Co-ordinator: A/PROF ALISTAIR MCEWAN
Lecturer: DR TRANG NGUYEN
No text required. Notes will be on the web.

ELEC4505/9515 – Digital Communication Systems

Unit Co-ordinator: DR ZIHUAI LIN
Lecturer: DR MAHYAR SHIRVANIMOGHADDAM
Communications Systems Engineering TEXT
Proakis & Salehi
(Prentice-Hall), 2nd Edition, 2001, ISBN 0 13 095007 6

ELEC5204 – Power Systems Analysis and Protection

Unit Co-ordinator: DR SWAMIDOSS SATHIAKUMAR
No text required. Notes will be on the web.
Power Systems Analysis & Design RECOMMENDED
J Glover and M Sarma.

ELEC5208 – Intelligent Electricity Networks

Unit Co-ordinator: DR KE MENG
Lecturer: DR FENGJI LUO

ELEC5211 – Power Systems Dynamics and Control

Unit Co-ordinator: DR JIN MA
 Lecturer: PROF JOE DONG
Power System Stability and Control TEXT
 P Kundur, New York, (McGraw-Hill), Inc., 1994
 ISBN 978-0070359581

Power System Control and Stability RECOMMENDED
 P M Anderson, A A Fouad, (IEEE Press), 2003
 ISBN 0-471-23862-7

ELEC5304 - Multidimensional Signal Processing

Unit Co-ordinator: PROF DONG XU
Digital Image Processing TEXT
 by R C Gonzalez and R E Woods
 (Prentice Hall), 3rd Edition, 2008

Pattern Classification RECOMMENDED
 by R Duda, P Hart and D Stork
 (Wiley), 2nd Edition, 2000

ELEC5403 – Radio Frequency Engineering

Unit Co-ordinator: DR ZIHUAI LIN
 Lecturer: DR GEOFF JAMES
Microwave Engineering TEXT
 by Pozar, David M
 (John Wiley), 4th Edition, B012242

ELEC5507 – Error Control Coding

Unit Co-ordinator: PROF YONGHUI LI
 Lecturer: DR MAHYAR SHIRVANIMOGHADDAM
No textbook. Lecture notes supplied.

Error Control Coding RECOMMENDED
 S Lin and D Costello
 (Pearson Prentice Hall), 2004

ELEC5509 – Mobile Networks

Unit Co-ordinator: PROF ABBAS JAMALIPOUR
The Wireless Mobile Internet RECOMMENDED
 Abbas Jamalipour
 (John Wiley), ISBN 0-470-84468-X

Principles of Wireless Access and Localization
 K Pahlavan & P Krishnamurthy RECOMMENDED
 (Wiley), ISBN: 978-0-4706-9708-5

Introduction to Wireless Systems RECOMMENDED
 Bruce A Black et al
 (Prentice-Hall), 1st Edition, ISB N 978-0-13-244789-8

ELEC5511 – Optical Communication Systems

Unit Co-ordinator: PROF ROBERT MINASIAN
Fibre-optic Communication Systems TEXT
 G Agrawal
 (Wiley), 4th Edition, 2010

Optical Fibre Communications: Principles and Practice RECOMMENDED
 J Senior
 (Pearson/Prentice Hall), 3rd Edition, 2009

Optical Fiber Communications RECOMMENDED
 G Keiser
 (McGraw-Hill), 4th Edition, 2008

ELEC5516 – Electrical and Optical Sensor Design

Unit Co-ordinator: DR LIWEI LI
 Lecturer: DR YAN XU
[Electronic Instrumentation 2nd Edition By P.P.L. Regtien](#) TEXT

Fiber Optic sensors TEXT
 Edited by Shizhuo Yin, Paul B. Ruffin and Francis T.S. Yu
 (CRC Press)

Fibre-optic Communication Systems TEXT
 G P Agrawal (Wiley), 4th Edition, 2010

[Understanding Optical Communications - IBM Redbooks](#)
 RECOMMENDED

ELEC5518 – IoT for Critical Infrastructures

Unit Co-ordinator:
 DR MAHYAR SHIRVANIMOGHADDAM
From Machine-to-Machine to the Internet of Things: Introduction to a New Age of Intelligence TEXT
 Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stefan Avesand, Stamatis Karnouskos and David Boyle
 (Academic Press) 10 Apr 2014
 ISBN_ISSN: 978-0-12-407684-6

M2M Communications: A Systems Approach TEXT
 David Boswarthick (Editor), Omar Eloumi (Editor), Olivier Hersent (Editor) ISBN: 978-1-119-99475-6

ELEC5616 – Computer and Network Security

Unit Co-ordinator: PROF PHILIP LEONG
 Lecturer: MR LUKE ANDERSON
Cryptography and Network Security: Principles and Practice RECOMMENDED
 William Stallings
 (Prentice Hall), 4th Edition, ISBN 0132023229

ELEC5618 – Software Quality Engineering

Unit Co-ordinator: A/PROF ABELARDO PARDO
 Lecturer: DR PETER STEPIEN
No text required. Notes will be on the web.

Software Quality Assurance RECOMMENDED
 Galin (Addison Wesley)
 B021273 9780201709452

Mythical Man-Month, essay on Software Engineering RECOMMENDED
 Brooks; (Addison Wesley), edn 02E95

ENGG5102 – Entrepreneurship for Engineers

Unit Co-ordinator: DR MAHYAR SHIRVANIMOGHADDAM
 Lecturer: MR AREK YAPOUDJIAN
New Venture Creation: Entrepreneurship for the 21st Century - A Pacific Rim Perspective
 Jeffrey Timmons, L. Gillin, Sam Burshtein, Stephen Spinelli
 ISBN13: 9780070277663 ISBN10: 0070277664
 Edition: 1 RECOMMENDED

Technology Ventures: From Idea to Enterprise
 Thomas Byers, Richard Dorf, Andrew Nelson
 ISBN13: 9780073380186 ISBN10: 0073380180
 Edition: 3 RECOMMENDED