SECOND SEMESTER BOOK LIST 2012

ELEC1601 – Foundations of Computer Systems
Unit Co-ordinator: A/PROF PHILIP LEONG
Lecturer: to be advised
The Essentials of Computer Organization and Architecture
Null and Lobur
(Jones and Bartlett), ISBN – 13: 978-1449600068
3rd edition, December 17, 2010

ELEC1601 – Foundations of Computer Systems
Unit Co-ordinator: A/PROF PHILIP LEONG
Lecturer: to be advised
The Essentials of Computer Organization and Architecture
Null and Lobur
(Jones and Bartlett), ISBN – 13: 978-1449600068
3rd edition, December 17, 2010

ELEC2103 – Simulation & Numerical Solutions in Engineering
Unit Co-ordinator: A/PROF PHILIP LEONG
Lecturer: A/PROF STEPHEN SIMPSON
Introduction to MATLAB for Engineers
William Palm III
(McGraw-Hill), 2011, 3rd Edition

ELEC2104/5720 – Electronic Devices and Circuits
Unit Co-ordinator: A/PROF CRAIG JIN

ELEC2104/5720 – Electronic Devices and Circuits
Unit Co-ordinator: A/PROF CRAIG JIN

ELEC2302/5721 – Signals and Systems
Unit Co-ordinator: DR XIAOKE YI
Linear Systems and Signals
BP Lathi

ELEC2302/5721 – Signals and Systems
Unit Co-ordinator: DR XIAOKE YI
Linear Systems and Signals
BP Lathi

ELEC3206/5734 – Electrical Energy Conversion Systems
Unit Co-ordinator: DR DYLAN LU
Lecturer: KEITH MITCHELL
Electric Machinery Fundamentals
SJ Chapman

ELEC3206/5734 – Electrical Energy Conversion Systems
Unit Co-ordinator: DR DYLAN LU
Lecturer: KEITH MITCHELL
Electric Machinery Fundamentals
SJ Chapman

ELEC3304/5735 – Control
Unit Co-ordinator: DR YASH SHRIVASTAVA
Control Systems Engineering
NS Nise
(Wiley), 6th Edition, B209999 9780470917695

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Control Systems Engineering
NS Nise
(Wiley), 6th Edition, B209999 9780470917695

School of Electrical and Information Engineering

ELEC3405/5738 – Communications Electronics and Photonics
Unit Co-ordinator: PROF ROBERT MINASIAN
Lecture notes supplied.
Microelectronic Circuits RECOMMENDED
S Sedra, Kenneth C Smith

ELEC3405/5738 – Communications Electronics and Photonics
Unit Co-ordinator: PROF ROBERT MINASIAN
Lecture notes supplied.
Microelectronic Circuits RECOMMENDED
S Sedra, Kenneth C Smith

ELEC3506/5740 – Data Communications and the Internet
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: DR KUMUDU MUNASINGHE
Data Communications and Networking TEXT
Behrouz A Forouzan

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Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: DR KUMUDU MUNASINGHE
Data Communications and Networking TEXT
Behrouz A Forouzan

ELEC3608 – Computer Architecture TEXT
Unit Co-ordinator: A/PROF PHILIP LEONG
ISBN: 0123744937

ELEC3608 – Computer Architecture TEXT
Unit Co-ordinator: A/PROF PHILIP LEONG
ISBN: 0123744937

ELEC3609/5742 – Internet Software Platforms
Unit Co-ordinator: A/PROF RAFAEL CALVO
Lecturer: FRANK MOISIADIS
No TEXT
An Introduction to XML and Web Technologies
Anders Moller and Michael Schwartzbach
(Addison-Wesley), 2003, ISBN 032112247X

ELEC3609/5742 – Internet Software Platforms
Unit Co-ordinator: A/PROF RAFAEL CALVO
Lecturer: FRANK MOISIADIS
No TEXT
An Introduction to XML and Web Technologies
Anders Moller and Michael Schwartzbach
(Addison-Wesley), 2003, ISBN 032112247X

ELEC3702 – Management for Engineers
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: AREK YAPODJIAN
C.M. Chang, Engineering Management, Challenges in the New Millennium, . Pearson, 2005

ELEC3702 – Management for Engineers
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: AREK YAPODJIAN
C.M. Chang, Engineering Management, Challenges in the New Millennium, . Pearson, 2005

D. Sampson, Management for Engineers, (3rd ed.).
Pearson, 2001

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ELEC3803 – Bioelectronics
Unit Co-ordinator: DR ALISTAIR MCEWAN
Ultra Low Power Bioelectronics Fundamentals, Biomedical Applications, and Bio-inspired Systems
Author/s: Rahul Sarapeshkar RECOMMENDED
ISBN: 9780521857277
Publisher: Cambridge; Publish Year: 2010
http://opac.library.usyd.edu.au/record=b3759189~S4

Advanced Biomedical Engineering RECOMMENDED
Author/s: Gaetano Gargiulo and Alistair McEwan
Publisher: Intech; Publish Year: 2011
http://www.intechopen.com/books/advanced-biomedical-engineering
http://opac.library.usyd.edu.au/record=b3876340~S4
http://opac.library.usyd.edu.au/record=b3875887~S4

Bioelectromagnetism Principles and Applications of Bioelectric and Biomagnetic Fields RECOMMENDED
Author/s: Jaakko Malmivuo and Robert Plonsey
ISBN: 9780195058239
Publisher: Oxford University Press; Publish Year: 1995
http://www.bem.fi/book/
http://opac.library.usyd.edu.au/record=b2072551~S4

ELEC5101 – Antennas and Propagation
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: PROF GODFREY LUCAS
Antennas and Wave Propagation TEXT
AR Harish and M Sachidananda

Antenna Theory and Design RECOMMENDED
Warren L Stutzman and Gary A Thiele

The Services Textbook of Radio - Transmission and Propagation RECOMMENDED
Glatzier and Lamont (a very old book and very hard to obtain)

Advanced Engineering Electromagnetics RECOMMENDED
CA Balanis
Electromagnetics RECOMMENDED
John D Kraus

Radio Astronomy RECOMMENDED
John D Kraus

Microwave Antenna Theory and Design RECOMMENDED
Samuel Silver
(McGraw-Hill)

Modern Methods of Reflector Antenna Analysis and Design
Craig Scott
(Arttech House)

ELEC5203 – Topics in Power Engineering
Unit Co-ordinator: DR SWAMIDOSS SATHIAKUMAR
No text required. Notes will be on the web

Power Electronics: Converters, Applications & Design
N Mohan, TM Undeland, and WP Robbins
(J Wiley & Sons), Inc., 2003

Power Electronics Control in Electrical Systems
E Acha, VG Agelidis, O Anaya-Lara and TJ Miller
(Newnes) 2002

Understanding FACTS: Concepts & Technology of Flexible AC Transmission Systems
NG Hingorani & L Gyugyi
(IEEE Press), 2000

Understanding Power Quality Problems: Voltage Sags & Interruptions
Author/s: MHJ Bollen
IEEE Press, 2001

Power Quality in Power Systems & Electrical Machines
EF Fuchs & MAS Masoum
(Academic Press) 2008

Electric Power Distribution System Engineering
T Gonen
(CRC Press), 2008

ELEC5205 – High Voltage Engineering
Unit Co-ordinator: DR SWAMIDOSS SATHIAKUMAR
Lecturer: PROFESSOR MARK MACALPINE
MR KEITH MITCHELL

Power System Analysis & Design RECOMMENDED
J Glover, M Sarma, T Overbye; Cengage Learning

High Voltage Engineering Fundamentals RECOMMENDED
E Kuffel, WS Zaengl and J Kuffel, 2000

High Voltage Engineering MS Naidu and V Kamaraju, 1986

High Voltage Engineering and Testing RECOMMENDED
HM Ryan, 1994

High Voltage: measurement, testing and design RECOMMENDED
TJ Gallagher and AJ Pearmain, 1983

Electric Power Generation, Transmission & Distribution RECOMMENDED
LL Grigsby
Transmission & Distribution Electrical Engineering
C Bayliss & B Hardy, 4th Edition  RECOMMENDED

ELEC5206 – Sustainable Energy Systems
Unit Co-ordinator: DR GREGOR VERBIC
Renewable Efficient Electric Power Systems  TEXT
GM Masters

ELEC5207 – Advanced Power Conversion Technologies
Unit Co-ordinator: DR DYLAN LU
No TEXT

Fundamentals of Power Electronics  RECOMMENDED
R. Erickson * D Maksimovic

Power-switching converters  RECOMMENDED
S. Ang and A. Oliva

ELEC5508 – Wireless Engineering
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturers: DR ZHOU CHEN
Mobile Communications  TEXT
Schiller
(Addison Wesley), 1998, B958744 9780321123817

Wireless Communications  TEXT
Rappaport
(Prentice-Hall), B867910 9780130422323

ELEC5510 – Satellite Communications Systems
Unit Co-ordinator: PROF BRANKA VUCETIC
Lecturer: DR ZHENDONG ZHOU
Lecture Notes – no text.

Satellite Communications: Mobile and Fixed Services
Miller, MJ, Vucetic, B, Berry, L
(Kluwer Academic Publishers), 1993
ISBN 0-7923-9333-3

Satellite Communications  RECOMMENDED
Dennis Roddy

Introduction to Satellite Communication
Elbert, BR
(Artech House), 1999.

ELEC5512 – Optical Networks
Unit Co-ordinator: A/PROF JAVID ATAI
Optical Networks: A practical perspective  TEXT
Ramaswami and Sivarajan

ELEC5514 – Network Embedded Systems
Unit Co-ordinator: DR GUOQIANG MAO

Principles of Embedded Networked Systems Design
Pottie and Kaiser
(Cambridge University Press), October 2005

ELEC5619 – Object Oriented Application Frameworks
Unit Co-ordinator: A/PROF RAFAEL CALVO
No text.

Spring in Action  RECOMMENDED
C Walls and R Breidenbach
(Manning Publications)

ELEC5620 – Model Based Software Engineering
Unit Co-ordinator: A/PROF RAFAEL CALVO
Lecturer: EUGENE DOMA
Software Factories: Assembling Applications with Patterns, Models, Frameworks, and Tools
J Greenfield et al  RECOMMENDED

Model-Driven Development with Executable UML
D Milicev

Documenting Software Architectures: RECOMMENDED Views and Beyond (2nd ed.)
P, Clements et al.

ELEC5701 – Technology Venture Creation
Unit Co-ordinator: A/PROF CRAIG JIN
Lecturer: DR MATT BARRIE
No TEXTBOOK