School of Electrical and Information Engineering
Book List - Semester 2, 2017

ELEC1601/9601 – Foundations of Computer Systems
Unit Co-ordinator: A/PROF ABELARDO PARDO
No TEXT

ELEC2103/9103 – Simulation & Numerical Solutions in Engineering
Unit Co-ordinator: DR SWAMIDOSS SATHIKUMAR
Lecturer: DR ARCHIE CHAPMAN
Matlab for Engineers
Holly Moore, ISBN: 978129206053
RECOMMENDED:
1. Electrical Engineering: Principles and Applications
   Allan R Hambley, ISBN: 978027379325

2. Electric Circuits
   Global Edition(10e), Pearson, 2014

ELEC2104/9704 – Electronic Devices and Circuits
Fundamentals of Microelectronics
by Behzad Razavi, (2nd Edition), Publisher: John Wiley
ISBN: 978118156322
RECOMMENDED:
1. Microelectronics Circuit Design

2. Microelectronic Circuits
   Adel Sedra & Kenneth Smith, 6th edition
   Oxford University Press

ELEC2302/9302 – Signals and Systems
Unit Co-ordinator: DR LIWEI LI
Linear Systems and Signals, BP Lathi

ELEC3206/9206 – Electrical Energy Conversion Systems
Unit Co-ordinator: DR SWAMIDOSS SATHIKUMAR
Lecturer: DR PETER STEPIEN
Electric Machinery Fundamentals

ELEC3304/9304 – Control Systems Engineering
Unit Co-ordinator: DR YASHI SHRIVASTAVA
Control Systems Engineering
NS Nise

ELEC3405/9405 – Communications Electronics and Photonics
Unit Co-ordinator: PROF XIAOKE YI
Lecturer: DR LIWEI LI

Microelectronic Circuits
S Sedra, Kenneth C Smith

Fiber-Optic Communication Systems
Govind P Agrawal, (Wiley)

ELEC3506/9506 – Data Communications and the Internet
Unit Co-ordinator: PROF DONG XU
Lecturer: DR SURANGA SENEVIRATNE
Data Communications and Networking
Behrouz A Forouzan

Computer Networking a Top Down Approach Featuring The Internet
James F Kurose & Keith W Ross

TCP/IP Protocol Suite
Behrouz A Forouzan

ELEC3608 – Computer Architecture
Unit Co-ordinator: PROF PHILIP LEONG

ELEC3609/9609 – Internet Software Platforms
Unit Co-ordinator: A/PROF ABELARDO PARDO
Lecturer: DR PETER PHILLIPS
No TEXT

An Introduction to XML and Web Technologies
Anders Moller and Michael Schwartzbach

ELEC3702 – Management for Engineers
Unit Co-ordinator: A/PROF JIN MA
Lecturer: DR BARRY FLOWER
C.M. Chang, Engineering Management, Challenges in the New Millennium. , Pearson, 2005

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

ELEC3803 – Bioelectronics
Unit Co-ordinator: PROF ALISTAIR MCEWAN
Medical Instrumentation Application and Design

Ultra Low Power Optimal Fundamentals, Biomedical Applications, and Bio-inspired Systems
Author/s: Rahul Sarpeshkar
ISBN: 9780521857277
Advanced Biomedical Engineering  RECOMMENDED
Author/s: Gaetano Gargiulo and Alistair McEwan
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

Applied Biomedical Engineering  RECOMMENDED
Author/s: Gaetano Gargiulo and Alistair McEwan
ISBN: 9789533072562
Publisher: Intech; Publish Year:2011
http://www.intechopen.com/books/applied-biomedical-engineering
http://opac.library.usyd.edu.au/record=b3876360~S4
http://opac.library.usyd.edu.au/record=b3875886~S4

Bioelectromagnetism Principles and Applications of Bioelectric and Biomagnetic Fields  RECOMMENDED
Author/s: Jaakko Malimvuo 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 YONGHUI LI
Lecturer: DR GEOFF JAMES
Antennas and Wave Propagation
by AR Harish and M Sachidananda
(Oxford University Press), 2007,
ISBN: 9780195686661

RECOMMENDED:
1. Fundamentals of Aperture Antennas and Arrays: From Theory to Design, Fabrication and Testing
   Wiley, January 2016

2. Antenna Theory and Design
   by Warren L Stutzman and Gary A Thiele

3. The Services Textbook of Radio - Transmission and Propagation,
   by Glazier and Lamont
   (a very old book and very hard to obtain)

4. Advanced Engineering Electromagnetics
   by CA Balanis

5. Electromagnetics, by John D Kraus

6. Radio Astronomy, by John D Kraus

7. Microwave Antenna Theory and Design
   by Samuel Silver, (McGraw-Hill)

8. Modern Methods of Reflector Antenna Analysis and Design,
   by Craig Scott, (Artech House)

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

RECOMMENDED:
Power System Stability and Control

Power System Dynamics and Stability
P Sauer and M Pai, (Prentice Hall), 1998

Power Systems Analysis

Electric Machinery and System Fundamentals

Power Electronics: Converters, Applications and Design
N Mohan, T M Undeland and W P Robbins
(J Wiley & Sons, Inc.), 2003

ELEC5205 – High Voltage Engineering
Unit Co-ordinator: DR SWAMIDOSS SATHIAKUMAR
Lecturer: MR TERRY LAMPARD
No TEXT

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

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

High Voltage Engineering
MS Naidu and V Kamaraju, 1986

High Voltage Engineering and Testing
HM Ryan, 1994

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

Electric Power Generation, Transmission & Distribution, LL Grigsby

Transmission & Distribution Electrical Engineering
C Bayliss & B Hardy, 4th Edition

ELEC5206 – Sustainable Energy Systems
Unit Co-ordinator: A/PROF WEIDONG XIAO
Lecturer: DR FENGJI LUO
Renewable Efficient Electric Power Systems
Gilbert M Masters

ELEC5207 – Advanced Power Conversion Technologies
Unit Co-ordinator: A/PROF WEIDONG XIAO

Photovoltaic Power System: Modelling, Design and Control
W. Xiao, Wiley-Blackwell, 2017

Power Electronics
Daniel Hart
ELEC5212 – Power Systems Planning and Markets
Unit Co-ordinator: A/PROF JIN MA
No TEXT

Electricity Economics: Regulation and Deregu
Geoffrey Rothwell and Tomas Gomez  RECOMMENDED

Power System Economics: Designing Markets for Electricity  RECOMMENDED

ELEC5305 – Acoustics, Speech and Signal Processing
Unit Co-ordinator: A/PROF CRAIG JIN
No TEXT

ELEC5508 – Wireless Engineering
Unit Co-ordinator: DR PHEE YEOH
Fundamentals of wireless communication
David Tse and Pramod Viswanath  RECOMMENDED

Mobile Communications  RECOMMENDED
Schiller

Wireless Communications  RECOMMENDED
Rappaport
(Prentice-Hall), B867910 ISBN: 9780130422323

ELEC5510 – Satellite Communications Systems
Unit Co-ordinator: PROF YONGHUI LI
Lecture Notes – No TEXT

Satellite Communications: Mobile and Fixed Services  RECOMMENDED
ISBN 0792393333

Satellite Communications  RECOMMENDED
Dennis Roddy

Introduction to Satellite Communication

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 ZHUHUI LIN
Principles of Embedded Networked Systems Design  TEXT
Pottie and Kaiser
(Cambridge University Press), October 2005
ISBN: 9780521095235

ELEC5517 – Software Defined Networks
Unit Co-ordinator: DR DONG YUAN

ELEC5619 – Object Oriented Application Frameworks
Unit Co-ordinator: DR DONG YUAN
Lecturer: DR SHIPING CHEN
No TEXT

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

Positive Computing  RECOMMENDED
Rafael A. Calvo and Dorian Peters
MIT Press (2014)

ELEC5620 – Model Based Software Engineering
Unit Co-ordinator: DR DONG YUAN
Model Driven Software Development: Technology, Engineering, Management  TEXT
T Stahl, M Voelter

Software Architecture in Practice  TEXT
L Bass, P Clemenns, R Kazman
ISBN: 97803218115736

Model-Driven Development with Executable UML
D Milicev  RECOMMENDED

Documenting Software Architectures: Views and Beyond
P, Clements et al.  RECOMMENDED
(Addison-Wesley Professional), 2nd Edition, 2010
ISBN: 9780321552686

ELEC5622 – Signals, Software and Health
Unit Co-ordinator: DR DONG YAUN
Lecturer: Lecturer: DR DANIEL VERSICK
No TEXT

Positive Computing  RECOMMENDED
Rafael A. Calvo and Dorian Peters
MIT Press (2014)

ELEC5701 – Technology Venture Creation
Unit Co-ordinator: PROF DONG XU
Lecturer: MR JAMES ALEXANDER
No TEXT

RECOMMENDED:
1. Zero to One  by Peter Thiel, Crown Business; 1st edition
ISBN: 0804139296
ISBN: 0307887898
Steve Blank, K & S Ranch, 1st edition
ISBN: 0984999302
4. Why Nations Fail: The Origins of Power, Prosperity, and Poverty  by Daron Acemoglu and James Robinson