



**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 SATHIAKUMAR*  
*Lecturer: DR ARCHIE CHAPMAN*

**Matlab for Engineers** TEXT

Holly Moore, ISBN: 978129206053  
Global Edition (4e), Pearson Higher Ed USA, 2015

RECOMMENDED:

**1. Electrical Engineering: Principles and Applications**

Allan R Hambley, ISBN: 978027379325  
International Edition (6e), Pearson, 2013

**2. Electric Circuits**

James Nilsson and Susan Riede, ISBN:13:9780137050512  
Global Edition(10e), Pearson, 2014

**ELEC2104/9704 – Electronic Devices and Circuits**

*Unit Co-ordinator: A/PROF CRAIG JIN*

**Fundamentals of Microelectronics** TEXT

by Behzad Razavi, (2<sup>nd</sup> Edition), Publisher: John Wiley  
ISBN: 9781118156322

RECOMMENDED:

**Microelectronic Circuit Design**

by Richard Jaeger and Travis Blalock, 4th edition,  
ISBN: 9780073380452, McGraw-Hill

**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 TEXT

Oxford University Press, 2<sup>nd</sup> Edition, ISBN 0195158334

**ELEC3206/9206 – Electrical Energy Conversion Systems**

*Unit Co-ordinator: DR SWAMIDOSS SATHIAKUMAR*

*Lecturer: DR PETER STEPIEN*

**Electric Machinery Fundamentals** TEXT

SJ Chapman, 5<sup>th</sup> Edition, ISBN: 978007352954-7

**ELEC3304/9304 – Control**

*Unit Co-ordinator: DR YASH SHRIVASTAVA*

**Control Systems Engineering** TEXT

NS Nise  
(Wiley), 6<sup>th</sup> Edition, B209999 ISBN: 9780470917695

**ELEC3405/9405 – Communications Electronics and Photonics**

*Unit Co-ordinator: PROF XIAOKE YI*

*Lecturer: DR LIWEI LI*

**Microelectronic Circuits** RECOMMENDED  
S Sedra, Kenneth C Smith  
(Oxford Press) 6<sup>th</sup> Edition

**Fiber-Optic Communication Systems** RECOMMENDED  
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** TEXT

Behrouz A Forouzan  
(McGraw Hill) 5<sup>th</sup> Edition, 2013 ISBN: 9780073376226

**Computer Networking a Top Down Approach Featuring The Internet** RECOMMENDED

James F Kurose & Keith W Ross  
(Addison Wesley), 6<sup>th</sup> Edition 2012, ISBN: 9780321497703

**TCP/IP Protocol Suite** RECOMMENDED

Behrouz A Forouzan  
(McGraw Hill) 4<sup>th</sup> Edition, ISBN: 9780073376042

**ELEC3608 – Computer Architecture** TEXT

*Unit Co-ordinator: PROF PHILIP LEONG*

**Computer Organization and Design, The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design)** by David A. Patterson and John L.Hennessy; 5<sup>th</sup> Ed, ISBN:0124077269

**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** RECOMMENDED

Anders Moller and Michael Schwartzbach  
(Addison-Wesley), 2003, ISBN: 032112247X

**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 TEXT

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

**ELEC3803 – Bioelectronics**

*Unit Co-ordinator: PROF ALISTAIR MCEWAN*

**Medical Instrumentation Application and Design**

John G Webster, (4<sup>th</sup> Edition) TEXT

<http://au.wiley.com/WileyCDA/WileyTitle/productCd-EHEP000554.html>

**Ultra Low Power Optimal Fundamentals, Biomedical Applications, and Bio-inspired Systems**

Author/s: Rahul Sarpeshkar 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  
Intech, 2011, ISBN: 978-953-307-555-6

<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 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 YONGHUI LI*

*Lecturer: DR GEOFF JAMES*

**Antennas and Wave Propagation** TEXT

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**

[Trevor S. Bird](#), ISBN: 978-1-118-92356-6

Wiley, January 2016

**2.Antenna Theory and Design**

by Warren L Stutzman and Gary A Thiele

John Wiley, 1998 in closed reserve, ISBN: 0471025909

**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

McGraw Hill, 4<sup>th</sup> Edition, ISBN: 0070356211

**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**

P Kundur, (McGraw Hill, New York), 1994

**Power System Dynamics and Stability**

P Sauer and M Pai, (Prentice Hall), 1998

**Power Systems Analysis**

A R Bergen and V Vittal, 2<sup>nd</sup> Edition, Prentice Hall, 2000

**Electric Machinery and System Fundamentals**

S J Chapman, McGraw Hill Publishers, 2002

**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

5<sup>th</sup> Edition, 2008, ISBN: 9781111425791

**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, 4<sup>th</sup> Edition

**ELEC5206 – Sustainable Energy Systems**

*Unit Co-ordinator: A/PROF WEIDONG XIAO*

*Lecturer: DR FENGJI LUO*

**Renewable Efficient Electric Power Systems** TEXT

Gilbert M Masters

2<sup>nd</sup> Edition, ISBN 9781118140628, 712 pages, June 2013

**ELEC5207 – Advanced Power Conversion Technologies**

*Unit Co-ordinator: A/PROF WEIDONG XIAO*

**Photovoltaic Power System: Modelling, Design and Control**

W. Xiao, Wiley-Blackwell, 2017

TEXT

<https://www.amazon.com/Photovoltaic-Power-System-Modelling->

[Control/dp/1119280346/ref=sr\\_1\\_1?ie=UTF8&qid=1485387132&sr=8-1&keywords=weidong+xiao](https://www.amazon.com/Photovoltaic-Power-System-Modelling-Control/dp/1119280346/ref=sr_1_1?ie=UTF8&qid=1485387132&sr=8-1&keywords=weidong+xiao)

**Power Electronics**

RECOMMENDED

Daniel Hart

ISBN-10: 0073380679, ISBN-13:978-0073380674

McGraw-Hill Education, 1<sup>st</sup> Edition, 2010

**ELEC5212 – Power Systems Planning and Markets***Unit Co-ordinator: A/PROF JIN MA*

No TEXT

**Electricity Economics: Regulation and Deregulation**

Geoffrey Rothwell and Tomas Gomez RECOMMENDED

Piscataway NJ: IEEE Press; New York: Wiley-Interscience, 2003, ISBN: 0471234370

**Power System Economics: Designing Markets for****Electricity** RECOMMENDED

Steven Stoft, 2002, ISBN: 0471150401

Piscataway, NJ: IEEE Press; New York: Wiley-Interscience

**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

Cambridge University Press, 2005

ISBN: 9780521845274

**Mobile Communications** RECOMMENDED

Schiller

(Addison Wesley), 1998, B958744 ISBN: 9780321123817

**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

Miller, MJ, Vucetic, B, Berry, L

(Kluwer Academic Publishers), 1993

ISBN 0792393333

**Satellite Communications** RECOMMENDED

Dennis Roddy

(McGraw Hill), 2006, ISBN 0071462988

**Introduction to Satellite** RECOMMENDED**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

(Morgan Kaufmann) 3<sup>rd</sup> Edition, ISBN 1558606556**ELEC5514 – Network Embedded Systems***Unit Co-ordinator: DR ZIHUAI LIN***Principles of Embedded Networked** TEXT**Systems Design**

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

(John Wiley &amp; Sons), 2006, ISBN: 9780470025703

**Software Architecture in Practice** TEXT

L Bass, P Clemens, R Kazman

(Addison Wesley Professional), 3<sup>rd</sup> Edition, 2012

ISBN: 9780321815736

**Model-Driven Development with Executable UML** RECOMMENDED

D Milicev

(WROX Publishing), 2009, ISBN: 9780470481639

**Documenting Software Architectures: Views and Beyond**

P. Clements et al.

RECOMMENDED

(Addison-Wesley Professional), 2<sup>nd</sup> 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**2.The Lean Startup** by Eric Ries, Crown Business, 1st  
edition

ISBN: 0307887898

**3.The Startup Owner's Manual: The Step-By-Step Guide  
for Building a Great Company**

Steve Blank, K &amp; S Ranch, 1st edition

ISBN: 0984999302

**4.Why Nations Fail: The Origins of Power, Prosperity,  
and Poverty** by Daron Acemoglu and James Robinson

Crown Business, ISBN: 0307719227