

Recommended Reading List

This document is a guide only –for more detailed and up to date information please check the Module Directory

The reading list below is a guide only and should not be considered exhaustive. These texts are available from the Albert Sloman Library and can also be viewed online.

CE651-7-FY PROGRAMMING WITH C#

- LIBERTY, J., Programming C#, O'Reilly, 2001, ISBN 0596001177
- DEITEL, P.J. and DEITEL, H.H., C# 2008 for Programmers, 3rd Edition, Prentice Hall, 2009, ISBN 0137144156
- ALBAHARI, J and ALBAHARI, B., C#3.0 in a Nutshell, O'Reilly, 2007, ISBN 978-0-596-52757-0
- SHARP J., Visual C# 2005 Step by Step, Microsoft 2005, ISBN: 0735621292
- WATSON K. et al, Beginning Visual C# 2005, Wiley 2005, ISBN: 0764578472
- SHARPE, J., Visual C# 2005 Step by Step, published by Microsoft 2005
- ALBAHARI, J and ALBAHARI, B., C#3.0 Pocket Reference Book, O'Reilly, 2007, ISBN 978-0-596-51922-3
- There are also many books on C# 2005, almost all of which would be suitable.

CE652-7-FY INTERACTIVE WEB APPLICATIONS

- References will be provided during lectures

CE653-7-AU HUMAN-COMPUTER INTERFACE DESIGN

- DIX, A., FNILAY, J., ABOWD, G.D., and BEALE, R., "Human Computer Interaction", 3rd Edition, Prentice Hall, 2003, ISBN 978-0130461094.
- OLSEN, D.R., "Building Interactive Systems: Principles for Human-Computer Interaction", Course Technology - Cengage Learning 2009, ISBN 978-1423902485.

CE654-7-FY OBJECT ORIENTED SOFTWARE ENGINEERING

- B. BRUEGGE, A.H. DUTOIT, Object-Oriented Software Engineering (Prentice Hall, 2004, 2nd edition)
- BENNETT, S., McROBB, S., FARMER, R., Object-Oriented Systems Analysis and Design using UML (McGraw-Hill, 2005, 3rd edition)
- LEHMAN, M., Laws of Software Evolution Revisited. Lecture Notes in Computer Science 1149 (Proc. 5th European Workshop on Software Process Technology), pp. 108124 (Berlin: Springer-Verlag, 1996)

CE701-7-AU THEORY OF SIGNALS AND SYSTEMS

- CARLSON, A.B., et al, Communication Systems, McGraw-Hill Education - Europe; 4th Ed; ISBN: 0071121757
- COUCH, L.W., Digital and Analog Communication. Systems US Imports & PHIPes; 6th Ed; ISBN: 0130812234
- GLOVER, I.A. and GRANT, P.M., Digital Communications, Prentice Hall; ISBN: 0135653916
- PROAKIS, J., Digital Communications, McGraw-Hill Education; ISBN: 0071181830
- SKLAR, B., Digital Communications US Imports & PHIPes; ISBN: 0132119390

CE702-7-SP TRANSMISSION SYSTEMS

- CARLSON, A.B., et al, Communication Systems, McGraw-Hill Education - Europe; 5th Ed; ISBN: 978-007-126332-0
- PROAKIS, J., Digital Communications, McGraw-Hill Education; 5th Ed; ISBN: 0071181830
- FLOOD, J., and COCHRANE, P., Transmission Systems, Peter Peregrinus; ISBN: 0863411487
- GLOVER, I., and GRANT, P., Digital Communications, Prentice Hall; ISBN: 0135653916
- JONES, E.V., Digital Transmission, McGraw-Hill Education; ISBN: 0077078101 MAZDA, F., Telecommunications Engineer's Reference Book, Focal Press; ISBN: 0240514912
- CROFT, A., DAVISON, R., HARGREAVES, M., Engineering Mathematics Prentice-Hall; ISBN: 0130268585
- LEEMIS, L.M., and PARK, S.K., Discrete Event Simulation: A First Course Prentice-Hall; ISBN: 0131429175
- BALANIS, C.A (ed), Modern Antenna Handbook, John Wiley and Sons; ISBN: 978-0-470-03634-1. Past, present and future antennas explained.
- GHANBARI, M., Standard Codecs, IET London, 3rd ed; 2011; ISBN: 0-85296-762-4. All the latest video compression coding schemes detailed.

CE703-7-AU NETWORKING PRINCIPLES

- CLARK, M. P., Networks and Telecommunications: Design and Operation (Second Edition), John Wiley and Sons Ltd; ISBN: 0471973467
- SCOTT HINTON, H., An Introduction to Photonic Switching Fabrics, Kluwer Academic/Plenum Publishers; ISBN: 0306443791
- AGRAWAL, G.P. Fiber Optic Communication Systems, Wiley; ISBN: 0471542865 Out of print. Copies available in Library
- BELLAMY, J., Digital Telephony, John Wiley & Sons Inc; ISBN: 0471345717
- McDONALD, J.C., Fundamentals of Digital Switching, Kluwer Academic/Plenum Publishers; ISBN: 0306433478
- FLOOD, J.E., Telecommunications Switching, Traffic and Networks, Prentice-Hall; ISBN: 0130333093
- DE PRYCKER, M., Asynchronous Transfer Mode, Prentice Hall; ISBN: 0133421716 Out of print. Copies available in Library
- WATERS, G., (ed) Computer Communication Networks, McGraw-Hill Education - Europe; ISBN: 0077073258 Out of print. Copies available in Library
- TANENBAUM, A.S., Computer Networks, Prentice-Hall; ISBN: 0130384887

CE705-7-AU PROGRAMMING IN JAVA

- LIANG, Y. D., Introduction to Java Comprehensive Version, 7th edition, Prentice-Hall, 2008
- DEITEL, H.M. and DEITEL, P.J., Java: How to Program, 6th ed., Prentice-Hall, 2005

CE707-7-AU IP NETWORKING AND APPLICATIONS

- HALSAL, F., Computer Networking and the Internet, 5th edition, Addison Wesley; ISBN:0321263588
- TANENBAUM, A.S., David J Wetherall, Computer Networks, 5th edition, Pearson Education; ISBN: 013255317
- HUITEMA, C., Routing in the Internet, Prentice-Hall; ISBN: 0130226475 ISBN: 0131272578
- LOSHIN, P., IPv6: Theory, Protocol, and Practice, 2nd edition, Morgan Kaufmann ISBN: 9781558608108
- SOLLIMAN, H., Mobile IPv6, Addison Wesley ISBN: 0201788977
- PETERSON, L.L. and DAVIE B.S., Computer Networks: A System Approach, 4th edition, Morgan Kaufmann; ISBN: 0123740134

CE708-7-AU COMPUTER SECURITY

- PFLEEGER, C., and PFLEEGER, S., Security in computing, Prentice Hall 2002
- BISHOP, M., Computer Security Art and Science, Pearson Education, 2003
- GOLLMAN, D., Computer Security, Wiley 2006, 2nd ed.
- TOXEN, B., Real World Linux Security, Prentice Hall PTR; ISBN: 0130281875

CE709-7-SP CONVERGED NETWORKS AND SERVICES

- EVANS J. and FILSFILS C. "Deploying IP and MPLS QoS for Multiservice networks", ISBN: 0123705495, Academic Press
- ARMITAGE, G., "Quality of Service in IP Networks", ISBN: 1578701899, Macmillan Technical Publishing
- WANG, Z., "Internet QoS: Architectures and Mechanisms for Quality of Service", ISBN: 1558606084 Morgan Kaufmann
- SOLOMON, J.D., "Mobile IP: The Internet Unplugged", ISBN: 0138562466, Prentice Hall
- HUSTON, G. and FERGUSON, P., Internet Performance Survival Guide. ISBN: 0471378089, John Wiley and Sons
- DAVIE, B., and REKHTER, Y., MPLS: Technology and Applications, ISBN: 1558606564 Morgan Kaufmann

CE711-7-SP ADVANCED TRANSPORT NETWORKS

- DAVIE, B., REKHTER, Y., MPLS Technology & Applications Morgan Kaufmann; ISBN:1-55860-656-4
- BERNSTEIN, G., et al Optical Network Control, Addison Wesley; ISBN 0201753014
- MANNIE, E., (ed) Generalized Multi-Protocol Label Switching (GMPLS) Architecture, RFC 3945 Text from www.ietf.org
- GHANI, N., Advances in Photonic Packet Switching an Overview, IEEE Communications Magazine (February 2000)
- GHANI, N., DIXIT, S and WANG, T.S. On IP-Over-WDM integration, IEEE Communications Magazine Vol. 38, No. 3 (March 2000) pp 72-84
- BONENFANT, et al., Optical Data Networking, IEEE Communications Magazine, (March 2000)
- SENIOR, J.M., Optical Fibre Communications, Principles and Practice, Prentice Hall International (2nd Edition); ISBN: 0136354262
- FAULKNER, D.W. and HARMER, A.L., (eds), Broadband Access, WDM Metro and Network Management, Vol 2 IOS Press; ISBN: 1586030671

CE721-7-SP ELECTRONIC SYSTEM DESIGN & INTEGRATION

- NAJM, F.N., Circuit Simulation Feb 8th 2010. John Wiley ISBN-13 978-0470538715
- OGRODZKI, J., Circuit Simulation Methods and Algorithms. CRC press, Sept 1994. ISBN-13: 978-0849378942
- MCMAHON, D., Circuit Analysis Demystified. McGraw Hill ISBN-13 978-0071488983

CE722-7-FY GROUP PROJECT WITH INDUSTRIAL PRACTICE

- To be confirmed

CE740-7-SP MOBILE COMMUNICATIONS

- SCHILLER, J., Mobile Communications, Addison Wesley; ISBN: 0321123816, Recommended text for entire course
- PAHLAVAN, K., and KRISHNAMURTHY, P., Principles of Wireless Networks Prentice Hall PTR; ISBN: 0130930032
- STALLINGS, W., Wireless Communications and Networks, Prentice Hall; ISBN: 0131918354
- IETF IETF Drafts www.ietf.org

CE783-7-AU COMMUNICATIONS LABORATORY

- To be advised

CE784-7-AU NETWORKS LABORATORY

- McMILLAN, K. and WEYERS, J., "How to write dissertations and project reports", Prentice Hall, 2009
- McMILLAN, K. and WEYERS, J., "How to write essays and assignments", Prentice Hall, 2009
- JAIN, R., "Introduction to Simulation", Chapter 24 from the Art of Computer Systems Performance Analysis, Wiley, 1991, pp 393-412 (available on CE784 website)
- PAWLIKOWSKI, K., JOSHUA JEONG, H.-D. and LEE, J.-S. Ruth, "On credibility of simulation studies of communication networks", IEEE Communications Magazine, January 2002, pp 132-139 (available on CE784 website)
- STEVENS, R.W., "TCP/IP Illustrated Volume 1: the protocols", Addison-Wesley, 1994
- TANENBAUM, A.S., "Computer Networks", Prentice Hall, 2002
- HUITEMA, C., "Routing in the Internet", Second Edition, Prentice Hall, 2000.

CE801-7-AU INTELLIGENT SYSTEMS AND ROBOTICS

- BEKEY, G., Autonomous Robots, The MIT Press, 2005, ISBN-10: 0262025787, ISBN-13: 978-0262025782
- MURPHY, R., Introduction to AI Robotics, The MIT Press, 2000, ISBN 0-262-13383-0

CE802-7-AU MACHINE LEARNING AND DATA MINING

- TAN, P.-N., STEINBACH, M. and KUMAR, V., Introduction to Data Mining, Addison Wesley, 2006
- HAN, J. & KAMBER, M., Data Mining: Concepts and Techniques (2nd ed), Morgan Kaufmann 2006
- WITTEN, I. H. and FRANK, E., Data Mining: Practical Machine Learning Tools and Techniques with Java Implementations (2nd ed), Morgan Kaufmann 2005
- MITCHELL, T. M., Machine Learning, McGraw-Hill, 1997
- ALPAYDIN, E., Introduction to Machine Learning (2nd Ed), MIT Press 2010

CE804-7-AU DIGITAL SIGNAL PROCESSING

- MITRA, S.K., Digital Signal Processing: A Practical Approach, 3rd edition, McGraw-Hill, 2006.
- IFEACHOR, E., JERVIS, B.W., Digital Signal Processing: A Practical Approach, 2nd Edition, Prentice Hall, ISBN: 0201596199, 2001.

CE805-7-SP CLOUD TECHNOLOGIES AND SYSTEMS

- HWANG, DONGARRA and FOX., Distributed and Cloud Computing (From Parallel Processing to the Internet of Things), (Elsevier 2011)
- JACKSON, K., OpenStack Cloud Computing Cookbook, PACKT PUBLISHING)
- MOYER, C., Building Applications in the Cloud (Concepts, Patterns, and Projects), 2011

CE807-7-SP TEXT ANALYTICS

- INGERSOLL, MORTON & FARRIS, Taming Text, (Manning 2013)
- RUSSELL, Mining the Social Web, (O'Reilly)
- WITTEN & FRANK, Data Mining, (Morgan Kaufmann)

CE808-7-AU CREATION AND PRODUCTION OF MULTIMEDIA

- DIEFENBACH, D., Video Production Techniques: Theory and Practice From Concept to Screen, (Routledge, 2007)
- RABIGER, M., Directing: Film Techniques and Aesthetics, (Focal Press, 4th ed. 2007)
- GOODMAN, R., Editing Digital Video: The Complete Creative and Technical Guide (Digital Video and Audio)
- KAUFFMANN, S., Avid Editing: A Guide for Beginning and Intermediate Users, (Focal Press, 2006)

CE816-7-AU HIGH PERFORMANCE COMPUTING

- LEVESQUE, J & WAGENBRETH, G., High Performance Computing: Programming and Applications (Chapman & Hall/CRC Computational Science) (2010)
- HAGER, G. & WELLEIN, G., Introduction to High Performance Computing for Scientists and Engineers (Chapman and Hall CRC Computational Science) (2010).

CE821-7-AU UNDERLYING TECHNOLOGY IN FINANCIAL SYSTEMS

- MOLINA, G., ULLMAN AND WIDOM, "Database Systems"
- PROSISE, J., Programming Microsoft .NET
- SCHMIDT, H., C, Complete Reference.
- SCHMIDT, H., C, Complete Reference.
- HOLDEN,, C.W., Excel Modelling How To Build Financial Models in Excel series Review of C concepts of classes, encapsulation, inheritance, virtual functions, arguments passing by reference, templates.
- FREEDMAN, R., An Introduction to Financial Technology
- MCINTYRE, H., Straight Through Processing for Financial Services Firms, the Summit Group Press, June 2004.

CE823-7-SP NETWORK SECURITY

- KAUFMAN, C., PERLMAN, R. AND SPECINER, M., Network Security: Private Communication in a Public World, Prentice Hall (2nd edn)
- CHESWICK, W.R., BELLOVIN, S.M. AND RUBIN, A.D., Firewall and Internet Security, Addison-Wesley 2003 (2nd edn)
- YUAN, R. AND STRAYER, W.T., Virtual Private Networks: Technologies & Solutions, Addison-Wesley
- STALLINGS, W., Network Security Essentials: Applications and Standards, Prentice Hall
- REHMAN, R.U., Intrusion Detection with SNORT, Prentice Hall 2003

- CONVERY, S., Network Security Architectures, Cisco Press

CE831-7-AU E-COMMERCE PROGRAMMING

Whilst no single book is perfect for the course, the following books will prove useful:

- DORANS, D., "Beginning ASP.NET Security", John Wiley & Sons, 2010
- ESPOSITO, D., "Programming Microsoft" ASP.NET MVC, Microsoft Press, 2010
- KRUG, S., "Don't Make Me Think: A Common Sense Approach to Web Usability", 2nd Edition, New Riders 2006
- MACDONALD, M., "Beginning ASP.NET 4.0 in C# 2010: From Novice to Professional", Apress 2010
- Walther, S., "ASP.NET 4.0 Unleashed", Sams, 2010

CE832-7-SP ADVANCED WEB TECHNOLOGIES

- MOLLER, A. and SCHWARTZBACH, M., An Introduction to XML and Web Technologies, Addison-Wesley, 2006

CE860-7-SP ADVANCED EMBEDDED SYSTEMS DESIGN

- WOLF, W., Computers as Components: Principles of Embedded Computing System Design, Morgan Kaufmann, 2005, ISBN: 0123694590
- WALLS, C., Embedded Software: The Works, Newnes, 2005, ISBN: 0750679549
- NOERGAARD, T., Embedded Systems Architecture: A Comprehensive Guide for Engineers and Programmers, Newnes, 2005, ISBN: 0750677929

CE865-7-AU PROGRAMMING EMBEDDED SYSTEMS

- BURNS, A. and WELLINGS, A., Real-time Systems and Programming Languages, Addison Wesley, ISBN 0-201-72988-1, 2001
- WOLF, W., Computers as Components, Elsevier, ISBN 13: 978-0-12-369459-1

CE866-7-AU COMPUTER VISION

- SONKA, M., et al., Image Processing, Analysis and Machine Vision, Chapman and Hall, 1999
- BALLARD, D.H.B and BROWN, C.M.: Computer Vision, Prentice-Hall, 1982 (available online: <http://homepages.inf.ed.ac.uk/rbf/BOOKS/BANDB/bandb.htm>)
- SZELISKI, R: Computer Vision: Algorithms and Applications Springer, 2010 (available online).
- BRADSKI, G and KAEHLER, A: Learning OpenCV, O'Reilly and associates, 2008.

CE869-7-SP HIGH LEVEL LOGIC DESIGN

- PEDRONI, V.A., Design and Simulation with VHDL, Publisher: The MIT Press ISBN: 978-0262014335

- HWANG, E.O., Digital Logic and Microprocessor Design with VHDL, Publisher: CL Engineering ISBN: 978-0534465933

CE881-7-SP MOBILE & SOCIAL APPLICATION PROGRAMMING

- MEDNIEKS, Z., DORNIN, L., MEIKE, G.B., NAKAMURA, M., Programming Android: Java Programming for the New Generation of Mobile Devices, Publisher: O'Reilly Media, July 2011

CE884-7-SP CONSTRAINT SATISFACTION FOR DECISION MAKING

- TSANG, E.P.K., Foundations of Constraint Satisfaction, Academic Press, 1993
- ROSSI, F., van BEEK P. & WALSH T. (editors), Handbook of Constraint Programming, Elsevier, 2006

CE885-7-AU MATHEMATICAL RESEARCH TECHNIQUES USING MATLAB

- CHAPRA, S.C., Applied Numerical methods with MATLAB for Engineers and Scientists, 2ND Edition, McGraw- Hill, 2008
- ETTER, D.M., Introduction to Matlab 6, Prentice Hall, ISBN 2012 139780130131
- MOLER, C., Numerical Computing with MATLAB, 2004. SIAM
- KHARAB, A. and GUENTHER, R., Introduction to Numerical Methods: A MATLAB Approach, Chapman & Hall, 2005
- GILAT, A and SUBRAMANIAM, V., Numerical Methods, An Introduction with Applications using MATLAB, John Wiley and Sons 2011.
- RUBINSTEIN, R.Y. and MELAMED B., Modern Simulation and Modelling, Wiley, 1997
- BRANDIMARTE, P., Numerical Methods in Finance, Wiley Series, 2002

CE886-7-AU EVOLUTIONARY COMPUTATION AND GENETIC PROGRAMMING

- POLI, R., LANGDON, W. B., and MCPHEE, N. F. A Field Guide to Genetic Programming, 2008. This book is freely available in electronic form at www.gp-field-guide.org.uk. Printed copies can be purchased for a very modest price from www.lulu.com and Amazon.
- LUKE, S., Essentials of Metaheuristics, Lulu, 2009. This book is freely available in electronic form at <http://cs.gmu.edu/~sean/book/metaheuristics/>
- LANGDON, W.B. and POLI, R., Foundations of Genetic Programming, Springer-Verlag, 2002

CE887-7-AU NATURAL LANGUAGE ENGINEERING

- JURAFSKY, D. and MARTIN, J., Speech and Language Processing. An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition, Prentice Hall, 2nd edition, 2008
- NUGUES, P., An Introduction to Language Processing with Perl and Prolog. An Outline of Theories, Implementation, and Application with Special Consideration of English, French and German. Cognitive Technologies Series, 2006. Springer.

- VAN RIJSBERGEN, C.J., Information Retrieval, Butterworths, 1979. Available online: www.dcs.gla.ac.uk/Keith/Preface.html
- ALLEN, J., Natural Language Understanding, Benjamin/Cummings, 1987

CE889-7-AU ARTIFICIAL NEURAL NETWORKS

- HAYKIN, S., Networks: A Comprehensive Foundation, 2nd edition, Upper Saddle River, NJ: Prentice Hall. ISBN 0-13-273350-1, 1999
- BISHOP, C.M., Neural Networks for Pattern Recognition, Oxford: Oxford University Press, ISBN 0-19-853849-9 (hardback) or 0-19-853864-2 (paperback), 1995
- CALLAN, R., The Essence of Neural Networks, Pearson Education (Academic), ISBN: 013908732X, 1998

CE902-7-FY PROFESSIONAL PRACTICE AND RESEARCH METHODOLOGY

- DAWSON, C. W. Projects in Computing and Information Systems: A Student's Guide. Addison-Wesley, 2005
- BOTT, F. Professional Issues in Information Technology. British Computer Society, 2005
- WARBURTON, N. The Basics of Essay Writing. Routledge, 2006
- BIGGAM, J. Succeeding with your Master's Dissertation: A Step-by-step Guide. McGraw-Hill, 2008.
- HORN, R. Researching and Writing Dissertations: A complete guide for business students. Chartered Institute of Personnel and Development, 2012.
- HANSSON, Sven Ove, "Science and Pseudo-Science", The Stanford Encyclopaedia of Philosophy (Fall 2008 Edition), Edward N. Zalta (ed.)
- AYRES, R. The Essence of Professional Issues in Computing. Prentice Hall, 1999
- CORNFORD, T. & SMITHSON, S. Project Research in Information Systems: A Student's Guide (2nd ed.) Palgrave, 2006
- LLOYD, I. Legal Aspects of the Information Society. Butterworths, 2000
- POLONSKY, M. & WALLER, D. Designing and Managing a Research Project. Sage, 2005
- REED, C. & ANGEL, J. Computer Law (5th ed.). Oxford University Press, 2003
- FISHER, C.M., Researching and Writing a Dissertation : An Essential Guide for Business Students, Harlow, Financial Times/Prentice Hall, 2010.

CE903-7-SP GROUP PROJECT

- DAWSON, C., Projects in Computing and Information Systems: A Students Guide, Addison-Wesley, 2005
- SOMMERVILLE, I., Software Engineering, Pearson Education, 2004