

TEXTBOOK(S)	REFERENCE(S)
EE1002 PHYSICS FOUNDATION FOR ELECTRICAL & ELECTRONIC ENGINEERING	
1. Serway, Raymond A and Jewett John W, <u>Physics for Scientists and Engineers with Modern Physics</u> , 8 th Edition, Brooks/Cole, 2010. (QC23.S492P 2010)	1. Giancoli Douglas C, <u>Physics for Scientists & Engineers with Modern Physics</u> , 4 th Edition, Pearson Prentice Hall, 2009. (QC21.2.G433 2009). 2. Young Hugh D, Freedman Roger A, Ford A Lewis and Sears Francis Weston, <u>University Physics : with Modern Physics</u> , 13 th Edition, Addison-Wesley, 2012. (QC21.2.Y72U 2012) 3. Walker Jearl, Halliday David and Resnick Robert, <u>Fundamentals of Physics</u> , 9 th Edition, Wiley, 2011. (QC21.3.W181 2011)
EE1003 INTRODUCTION TO MATERIALS FOR ELECTRONICS	
To be confirmed.	
EE2001 CIRCUIT ANALYSIS	
1. Nilsson James William and Riedel Susan A, <u>Electric Circuits</u> , 9 th Edition, Pearson/Prentice-Hall, 2011. (TK454.N712 2011)	1. Hayt William Hart, Kemmerly Jack Ellsworth and Durbin Steven M, <u>Engineering Circuit Analysis</u> , 7 th Edition, McGraw-Hill, 2007. (TK454.H426 2007) 2. Alexander Charles K and Sadiku Matthew N O, <u>Fundamentals of Electric Circuits</u> , 4 th Edition, McGraw-Hill, 2009. (TK454.A375 2009)
EE2002 ANALOG ELECTRONICS	
1. Jaeger Richard C & Blalock Travis N, <u>Microelectronic Circuit Design</u> , 4 th Edition, McGraw-Hill, 2011. (TK7874.J22M 2011)	1. Razavi Behzad, <u>Fundamentals of Microelectronics</u> , John Wiley, 2008. (TK7874.R278F 2008) 2. Neamen Donald A, <u>Microelectronics: Circuit Analysis and Design</u> , 4 th Edition, McGraw-Hill, 2010. (TK7867.N348M 2010)
EE2003 SEMICONDUCTOR FUNDAMENTALS	
1. Neamen Donald A, <u>Semiconductor Physics and Devices: Basic Principles</u> , 3 rd Edition, McGraw-Hill, 2003. (QC611.N348 2003)	1. Streetman Ben G and Banerjee Sanjay Kumar, <u>Solid State Electronic Devices</u> , 6 th Edition, Pearson/Prentice-Hall, 2006. (TK7871.85.S915 2006) 2. Sze S M, <u>Semiconductor Devices, Physics and Technology</u> , 2 nd Edition, John Wiley, 2002. (TK7871.85.S997 2002) 3. Kasap Safo O, <u>Principles of Electronic Materials and Devices</u> , 3 rd Edition, McGraw-Hill, 2006. (TK453.K19 2006)

TEXTBOOK(S)	REFERENCE(S)
EE2004 DIGITAL ELECTRONICS	
1. Mano M Morris and Ciletti Michael D, <u>Digital Design</u> , 4 th Edition, Pearson Prentice Hall, 2007. (TK7888.3.M285 2007)	1. Wakerly John F, <u>Digital Design: Principles and Practices</u> , 4 th Edition, Pearson Prentice-Hall, 2006. (TK7874.W149 2006)
EE2005 AC CIRCUITS AND MACHINES	
1. Guru Bhag S and Hiziroglu Huseyin R, <u>Electric Machinery and Transformers</u> , 3 rd Edition, Oxford University Press, 2001. (TK2000.G981 2001)	1. Sen Paresh Chandra, <u>Principles of Electric Machines and Power Electronics</u> , 2 nd Edition, John Wiley & Sons, 1997. (TK2000.S474P 1997) 2. Chapman Stephen J, <u>Electric Machinery and Power System Fundamentals</u> , 1 st Edition, McGraw-Hill, 2002. (TK2000.C466E)
EE2006 ENGINEERING MATHEMATICS I	
1. Kreyszig Erwin, <u>Advanced Engineering Mathematics</u> , 9 th Edition, John Wiley, 2006. (QA401.K92 2006) 2. Johnson Richard Arnold and Bhattacharyya Gouri K, <u>Statistics: Principles and Methods</u> , 6 th Edition, John Wiley, 2010. (QA276.12.J68 2010) 3. Patricia J. Y. Wong and Sundararajan N., <u>Engineering Mathematics</u> , McGraw-Hill, 2010.	1. O'Neil Peter V, <u>Advanced Engineering Mathematics</u> , 6 th Edition, Thomson, c2007. (TA330.N58 2007) 2. James Glyn, <u>Advanced Modern Engineering Mathematics</u> , 3 rd Edition, Pearson Prentice-Hall, 2004. (TA330.A244 2004) 3. Milton J Susan and Arnold Jesse C, <u>Introduction to Probability and Statistics: Principles and Applications for Engineering and The Computing Sciences</u> , 4 th Edition, McGraw-Hill, 2003. (TA330.M662 2003) 4. Singh Ravish R and Bhatt Mukul, <u>Engineering Mathematics</u> , McGraw Hill, 2010. (TA333.S617)
EE2007 ENGINEERING MATHEMATICS II	
1. Kreyszig Erwin, <u>Advanced Engineering Mathematics</u> , 9 th Edition, John Wiley, 2006. (QA401.K92 2006)	1. Greenberg Michael D, <u>Advanced Engineering Mathematics</u> , 2 nd Edition, Prentice-Hall, 1998. (TA330.G798 1998) 2. James Glyn, <u>Advanced Modern Engineering Mathematics</u> , 3 rd Edition, Pearson Prentice-Hall, 2004. (TA330.A244 2004) 3. Er Meng Joo, <u>Engineering Mathematics with Real-World Applications</u> , McGraw Hill, 2005. (TA330.E65)
EE2008 DATA STRUCTURES AND ALGORITHMS	
1. Huang Guangbin and Ng Jim Mee, <u>Data Structures and Algorithms</u> , Pearson Education, 2007. (QA76.9.D35D232DS)	1. Johnsonbaugh Richard and Schaefer Marcus, <u>Algorithms</u> , Pearson Education, 2004. (QA76.9.A43J65) 2. Levitin Anany, <u>Introduction to The Design & Analysis of Algorithms</u> , 2 nd Edition, 2007. (QA76.9.A43L666 2007)
EE2010 SIGNALS AND SYSTEMS	
1. Roberts Michael J, <u>Fundamentals of Signals and Systems</u> , 1 st Edition, McGraw-Hill, 2008. (TK5102.9.R646F)	1. Hwei Hsu, <u>Signals and Systems</u> (from Schaum's Outlines), 2 nd Edition, McGraw Hill, 2011. (TK5102.92.H873 2011) 2. Oppenheim Alan V, Willsky Alan S and Nawab Syed Hamid, <u>Signals and Systems</u> , 2 nd Edition, Prentice-Hall, 1997. (QA402.P62 1997) 3. Haykin Simon S and Van Veen Barry, <u>Signals and Systems</u> , Wiley, 2 nd Edition, 2003. (TK5102.5.H419) 4. Mandal Mrinal Kr and Asif Amir, <u>Continuous and Discrete Time Signals and Systems</u> , 1 st Edition, Cambridge University Pres, 2007. (QA402.M271)

TEXTBOOK(S)	REFERENCE(S)
EE2090 BASIC ENGINEERING MATHEMATICS	
1. Bradley Gerald L, Strauss Monty J and Smith Karl J, <u>Calculus</u> , 3 rd Edition, Prentice-Hall, 2002. (QA303.B811) 2. Stewart James, <u>Calculus</u> , 6 th Edition, Thomson Brooks/Cole, 2008. (QA303.2.S849 2008)	1. Edwards Charles Henry and Penney David E, <u>Calculus</u> , 6 th Edition, Prentice-Hall, 2002. (QA303.E26 2002) 2. Trim Donald W, <u>Calculus for Engineers</u> , 4 th Edition, Pearson, 2008. (QA303.T831C 2008) 3. Kreyszig Erwin, <u>Advanced Engineering Mathematics</u> , 9 th Edition, John Wiley, 2006. (QA401.K92 2006)
EE3001 ENGINEERING ELECTROMAGNETICS	
1. Sadiku Matthew N O, <u>Elements of Electromagnetics</u> , 5 th Edition, Oxford University Press, 2010. (QC760.S125 2010) 2. Hayt William Hart and Buck John A, <u>Engineering Electromagnetics</u> , 7 th Edition, McGraw-Hill, 2006. (QC670.H426 2006)	1. Ulaby Fawwaz Tayssir, <u>Electromagnetics for Engineers</u> , Pearson Prentice-Hall, 2005. (QC760.U36E)
EE3002 MICROPROCESSOR	
1. Chan C C and Siyal M Y, <u>Intel Microprocessors: Design, Interfacing and Programming</u> , 1 st Edition, Prentice-Hall, 2007 (ISBN-13 978-981-06-7698-8)	1. Brey Barry B, <u>The Intel Microprocessors : 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, Pentium Pro Processor, Pentium II, Pentium III, and Pentium 4 and Core2 with 64-bit extensions: Architecture, Programming, and Interfacing</u> , 8 th Edition, Prentice-Hall, 2009. (QA76.8.I292B848I 2009) 2. Mazidi Muhammad Ali and Mazidi Janice Gillispie, <u>The 80x86 IBM PC and Compatible Computers Volumes I & II: Assembly Language, Design and Interfacing (also known as Assembly Language, Design, and Interfacing)</u> , 4 th Edition, Prentice-Hall, 2003. (QA76.8.I292M476T 2003) 3. Hall Douglas V, <u>Microprocessors and Interfacing: Programming and Hardware</u> , 2 nd Edition, McGraw-Hill, 1992. (QA76.6.H175 1992)
EE3003 INTEGRATED ELECTRONICS	
1. Sedra Adel S and Smith Kenneth Carless, <u>Microelectronic Circuits</u> , 6 th Edition, Oxford University Press, 2010. (TK7867.S449 2010)	1. Kang Sung-Mo and Leblebici Yusuf, <u>CMOS Digital Integrated Circuits: Analysis and Design</u> , 3 rd Edition, McGraw-Hill 2005. (TK7871.99.M44K16 2005) 2. Gray Paul R and Meyer Robert G, <u>Analysis and Design of Analog Integrated Circuits</u> , 5 th Edition, John Wiley, 2010. (TK7874.G781 2010) 3. Franco Sergio, <u>Design with Operational Amplifiers and Analog Integrated Circuits</u> , 3 rd Edition, McGraw-Hill, 2002. (TK7874.F825 2002)
EE3011 MODELLING AND CONTROL	
1. Ogata Katsuhiko, <u>Modern Control Engineering</u> , 5 th Edition, Prentice-Hall, 2010. (TJ213.G34 2010)	1. Dorf Richard C and Bishop Robert H, <u>Modern Control Systems</u> , 11 th Edition, Pearson Prentice Hall, 2008. (TJ216.D695 2008) 2. Kuo Benjamin C and Golnaraghi Farid, <u>Automatic Control Systems</u> , 9 th Edition, John Wiley, 2010. (TJ213.K96 2010)
EE3012 COMMUNICATION PRINCIPLES	
1. Couch Leon W, <u>Digital and Analog Communication Systems</u> , 7 th Edition, Prentice-Hall, 2007. (TK5101.C853 2007)	1. Proakis John G and Salehi Masoud, <u>Communication Systems Engineering</u> , 2 nd Edition, Prentice-Hall, 2002. (TK5101.P962 2002) 2. Lathi Bhagwandadas Pannalal, <u>Modern Digital and Analog Communication Systems</u> , 4 th Edition, Oxford University Press, 2009. (TK5101.L352 2009) 3. Haykin Simon S and Moher Michael, <u>Communication Systems</u> , 5 th Edition, John Wiley, 2010. (TK5101.H419 2010)

TEXTBOOK(S)	REFERENCE(S)
EE3013 SEMICONDUCTOR DEVICES AND PROCESSING	
1. Stephen A. Campbell, <u>Fabrication Engineering at the Micro- and Nanoscale</u> , 3 rd Edition, Oxford University Press, 2008. (TK7871.85.C191F)	1. Jaegar Richard C, <u>Introduction to Microelectronic Fabrication: Vol 5 of Modular Series in Solid State Devices</u> , 2 nd Edition, Prentice-Hall, 2002. (TK7874.J22 2002) 2. Quirk Michael and Serda Julian, <u>Semiconductor Manufacturing Technology</u> , Prentice-Hall, 2001 (TK7836.Q93)
EE3014 DIGITAL SIGNAL PROCESSING	
1. Oppenheim Alan V, Schafer Ronald W and Buck John R, <u>Discrete-Time Signal Processing</u> , 3 rd Edition, Pearson Education, 2009. 2. Prandoni Paolo and Vetterli Martin, <u>Signal Processing for Communication</u> , 1 st Edition, EPFL Press. (TK5102.9.P899) Download here http://www.sp4comm.org/webversion.html	1. Mitra Sanjit K, <u>Digital Signal Processing : A Computer Based Approach</u> , 3 rd Edition, McGraw-Hill, 2006. (TK5102.9.M684 2006)
EE3015 POWER SYSTEMS AND CONVERSION	
1. Chapman Stephen J, <u>Electric Machinery and Power System Fundamentals</u> , 1 st Edition, McGraw-Hill, 2002. (TK2000.C466E) 2. Sen Paresh Chandra, <u>Principles of Electric Machines and Power Electronics</u> , 2 nd Edition, John Wiley, 1997. (TK2000.S474P 1997)	1. Wildi Theodore, <u>Electrical Machines, Drives and Power Systems</u> , 6 th Edition, Pearson/Prentice-Hall, 2006. (TK2182.W673 2006) 2. Agrawal Jai P, <u>Power Electronic Systems: Theory and Design</u> , 1 st Edition, Prentice-Hall, 2001. (TK7881.15.A277) 3. Weedy Birron Mathew and Cory Brian John, <u>Electric Power Systems</u> , 4 th Edition, John Wiley, 1998. (TK1001.W394 1998)
EE3017 COMPUTER COMMUNICATIONS	
1. Ng Chee Hock and Ma Maode, <u>Computer Communications</u> , McGraw-Hill, 2009. (TK5105.5.N576)	1. Stallings William, <u>Data and Computer Communications</u> , 8 th Edition, Pearson/Prentice-Hall, c2007. (TK5105.S782 2007) 2. Kurose James F and Ross Keith W, <u>Computer Networking: A Top-Down Approach</u> , 5 th Edition, Addison-Wesley, 2010. (TK5105.875.I57K96 2010) 3. Leon-Garcia Alberto and Widjaja Indra, <u>Communication Networks: Fundamental Concepts and Key Architectures</u> , 2 nd Edition, McGraw-Hill, 2004. (TK5101.L579 2004)
EE3018 INTRODUCTION TO PHOTONICS	
1. Pedrotti Frank L, Pedrotti Leno Matthew and Pedrotti Leno S, <u>Introduction to Optics</u> , 3 rd Edition, Pearson Prentice Hall, 2007. (QC355.2.P372 2007)	1. Smith Warren J, <u>Modern Optical Engineering: The Design of Optical Systems</u> , 4 th Edition, McGraw-Hill, 2008. (TS513.S663 2008) 2. Kasap S O, <u>Optoelectronics and Photonics: Principles and Practices</u> , Prentice-Hall, 2001. (TK8304.K19) 3. Prasad Paras N, <u>Introduction to Biophotonics</u> , Wiley-Interscience, 2003. (QH515.P911)
EE4001 SOFTWARE ENGINEERING	
	1. Sommerville Ian, <u>Software Engineering</u> , 9 th Edition, Addison-Wesley, 2011. (QA76.758.S697 2011) 2. Pressman Roger S, <u>Software Engineering: A Practitioner's Approach</u> , 7 th Edition, McGraw-Hill, 2010. (QA76.758.P935S 2010) 3. Pezze Mauro, and Young Michal, <u>Software Testing and Analysis: Process, Principles and Techniques</u> , Wiley, 2008. (QA76.76.T48P522)

TEXTBOOK(S)	REFERENCE(S)
EE4040 ENGINEERS AND SOCIETY	
	<ol style="list-style-type: none"> 1. Singapore: <u>Journey Into Nationhood</u>, National Heritage Board: Landmark Books, 1998. (DS610.4.S617j) 2. Johnston Stephen F, Gostelow J Paul and King W Joseph, <u>Engineering and Society: Challenges of Professional Practice</u>, Prentice-Hall, 2000. (TA157.J73) 3. Lee Kuan Yew, <u>From Third World to First. The Singapore Story: 1965:2000, Memoirs of Lee Kuan Yew</u>, Times Editions, 2000. (DS598.S7L478f)
EE4041 HUMAN RESOURCE MANAGEMENT	
<ol style="list-style-type: none"> 1. Robbins Stephen P and Judge Timothy <u>Organizational Behavior</u>, 14th Edition, Pearson, 2010. (HD58.7.R636 2011) 	<ol style="list-style-type: none"> 1. Losey Michael R, Meisinger Susan R and Ulrich Dave, <u>The Future of Human Resource Management: 64 Thought Leaders Explore the Critical HR Issues of Today and Tomorrow</u>, John Wiley, 2005. (HF5549.F996F) 2. Collins, James C & Porras, Jerry I, <u>Built to Last: Successful Habits of Visionary Companies</u>, Harper Business, 2002. (HF5386.C712 2002) 3. Kim W Chan and Mauborgne Renée, <u>Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant</u>, Harvard Business School, 2005. (HF5415.153.K49) 4. Mayo Andrew, <u>The Human Value of the Enterprise: Valuing People as Assets - Monitoring, Measuring, Managing</u>, Nicholas Brealey Publishing, 2001. (HD53.M473) 5. George Stephen, <u>The Baldrige Quality System: The Do-it-yourself Way to Transform your Business</u>, John Wiley, 1992. (HD62.15.G349b) 6. Fitz-Enz Jac, <u>The 8 Practices of Exceptional Companies: How Great Organizations Make the most of their Human Assets</u>, AMACOM, 1997. (HD58.9.F548t) 7. Senge Peter M, <u>The Fifth Discipline: The Art and Practice of the Learning Organization</u>, Currency Doubleday, 2006. (HD58.9.S476 2006) 8. Chew Soon Beng, <u>Trade Unionism in Singapore</u>, McGraw-Hill, 1991. (HD6820.67.C529)
EE4105 CELLULAR COMMUNICATION SYSTEM DESIGN	
	<ol style="list-style-type: none"> 1. Karim M R and Saraf Moshen, <u>W-CDMA and CDMA2000 for 3G Mobile Networks</u>, McGraw Hill, 2002. (TK5103.452.K18) 2. Rappaport Theodore S, <u>Wireless Communications: Principles and Practice</u>, 2nd Edition, Prentice-Hall, 2002. (TK5103.2.R221 2002) 3. Garg Vijay Kumar, <u>IS-95 CDMA and CDMA2000: Cellular/PCS Systems Implementation</u>, Prentice-Hall, 2000. (TK5103.452.G231) 4. Proakis John G, Salehi Masoud and Bauch Gerhard, <u>Contemporary Communication Systems Using MATLAB and Simulink</u>, 2nd Edition, Brooks/Cole, 20004. (TK5105.P962 2004) 5. Proakis John G and Manolakis Dimitris G, <u>Digital Signal Processing: Principles, Algorithms and Applications</u>, 3rd Edition, Prentice-Hall, 1996. (TK5102.5.P962D 1996)

TEXTBOOK(S)	REFERENCE(S)
EE4109 MICROWAVE CIRCUIT AND SYSTEM DESIGN	
	<ol style="list-style-type: none"> 1. Pozar David M, <u>Microwave and RF wireless systems</u>, John Wiley, 2001. (TK5103.2.P893) 2. Edde Byron, <u>Radar: Principles, Technology, Applications</u>, Prentice-Hall, 1993. (TK6575.E21) 3. Chang Kai, <u>Handbook of RF/Microwave Components and Engineering</u>, 2nd Edition, John Wiley, 2003. (TK6560.H236)
EE4110 OPTICAL COMMUNICATION SYSTEM DESIGN	
<ol style="list-style-type: none"> 1. Keiser Gerd, <u>Optical Fiber Communications</u>, 3rd Edition, McGraw-Hill, 2000. (TK5103.59.K27 2000) 	<ol style="list-style-type: none"> 1. Hecht Jeff, <u>Understanding Fiber Optics</u>, 5th Edition, Pearson/Prentice-Hall, 2006. (TA1800.H447 2006) 2. Powers John P, <u>An Introduction to Fiber Optic Systems</u>, 2nd Edition, Irwin, 1999. (TA1800.P888 1999) 3. Palais Joseph C, <u>Fiber Optic Communications</u>, 5th Edition, Pearson/Prentice-Hall, 2005. (TK5103.59.P154 2005) 4. Ramswami Rajiv and Sivarajan Kumar N, <u>Optical Networks: A Practical Perspective</u>, 3rd Edition, Morgan Kaufmann 2008.
EE4151 RF AND MICROWAVE ENGINEERING	
<ol style="list-style-type: none"> 1. Pozar David M, <u>Microwave Engineering</u>, 3rd Edition, John Wiley, 2005. (TK7876.P893 2005) 	<ol style="list-style-type: none"> 1. Ramo Simon, Whinnery J R and Van Duzer T, <u>Fields and Waves in Communication Electronics</u>, 3rd Edition, John Wiley, 1994. (QC665.E4R175 1994) 2. Hong Jia-Sheng and Lancaster M J, <u>Microstrip Filters for RF/Microwave Applications</u>, John Wiley, 2001. (TK7876.H769)
EE4152 DIGITAL COMMUNICATIONS	
<ol style="list-style-type: none"> 1. Proakis John G and Salehi Masoud, <u>Communication Systems Engineering</u>, 2nd Edition, Prentice-Hall, 2002. (TK5101.P962 2002) 	<ol style="list-style-type: none"> 1. Haykin Simon S, <u>Communication Systems</u>, 5th Edition, John Wiley, 2010. (TK5101.H419 2010) 2. Lathi Bhagwandas Pannalal, <u>Modern Digital and Analog Communication Systems</u>, 4th Edition, Oxford University Press, 2009. (TK5101.L352 2009)
EE4153 TELECOMMUNICATION SYSTEMS	
<ol style="list-style-type: none"> 1. Flood John Edward, <u>Telecommunications Switching, Traffic and Networks</u>, Prentice-Hall, 1995 (reprinted 1999). (TK5103.F631) 2. Tomasi Wayne, <u>Electronic Communications System: Fundamentals Through Advanced</u>, 5th Edition, Pearson Prentice-Hall, 2005. (TK5101.T655E 2004) 	<ol style="list-style-type: none"> 1. Keiser Gerd, <u>Optical Fibre Communications</u>, 3rd Edition, McGraw Hill, 2000. (TK5103.59.K27 2000) 2. Beasley Jeffrey S and Miller Gray M, <u>Modern Electronic Communication</u>, 9th Edition, Pearson/Prentice-Hall, 2008. (TK5101.M648 2008) 3. Bellamy John C, <u>Digital Telephony</u>, 3rd Edition, John Wiley, 2000. (TK5103.7.B435 2000)
EE4188 WIRELESS COMMUNICATIONS	
<ol style="list-style-type: none"> 1. Rappaport Theodore S, <u>Wireless Communications: Principles and Practice</u>, 2nd Edition, Prentice-Hall, 2002. (TK5103.2.R221 2002) 2. Agrawal Dharma Prakash and Zeng Qing-An, <u>Introduction to Wireless and Mobile Systems</u>, 2nd Edition, Thomson Nelson, 2006. (TK5103.2.A277 2006) 	<ol style="list-style-type: none"> 1. Freeman Roger L, <u>Radio System Design for Telecommunications</u>, 3rd Edition, IEEE/Wiley-Interscience, 2007. (TK6553.F855 2007) 2. Garg Vijay Kumar, <u>Wireless Communications and Networking</u>, Elsevier Morgan Kaufmann, 2007, (TK5103.2.G231WC) 3. Goldsmith Andrea, <u>Wireless Communications</u>, Cambridge University Press, 2005, (TK5103.2.G624)

TEXTBOOK(S)	REFERENCE(S)
EE4189 SPREAD SPECTRUM COMMUNICATIONS	
1. Sklar Bernard, <u>Digital Communications: Fundamentals and Applications</u> , 2 nd Edition, Prentice-Hall, 2001. (TK5103.7.S628 2001)	1. Ziemer Rodger E and Peterson Roger L, <u>Introduction to Digital Communication</u> , Prentice-Hall, 2001. (TK5103.7.Z66I) 2. Lathi Bhagwandas Pannalal, <u>Modern Digital and Analog Communication Systems</u> , 4 th Edition, Oxford University Press, 2009. (TK5101.L352 2009) 3. Haykin Simon S, <u>Communication Systems</u> , 5 th Edition, John Wiley, 2010. (TK5101.H419 2010) 4. Dixon Robert Clyde, <u>Spread Spectrum Systems: With Commercial Applications</u> , 3 rd Edition, John Wiley, 1994. (TK5102.5.D621 1994)
EE4207 CONTROL ENGINEERING DESIGN	
	1. Maciejowski Jan Marian, <u>Predictive Control with Constraints</u> , Prentice-Hall, 2002. (TJ217.6.M152) 2. Gopal M, <u>Digital Control and State Variable Methods : Conventional and Neural-Fuzzy Control Systems</u> , 3 rd Edition, TaTa-McGraw Hill, 2009. (TJ223.M53G659D 2008).
EE4208 INTELLIGENT SYSTEMS DESIGN	
	1. Haralick Robert M and Shapiro Linda G, <u>Computer and Robot Vision</u> , Addison-Wesley, 1993. (TA1632.H254)
EE4265 PROCESS CONTROL SYSTEMS	
1. Seborg Dale E, Edgar Thomas F and Mellichamp Duncan A, <u>Process Dynamics and Control</u> , 3 rd Edition, Wiley, 2011. (TP155.75.S443 2011)	1. Ogunnaike Babatunde A and Ray W Harmon, <u>Process Dynamics, Modeling and Control</u> , Oxford University Press, 1994. (TP155.75.G35) 2. Luyben Michael L and Luyben William L, <u>Essentials of Process Control</u> , McGraw-Hill, 1997. (TP155.75.L978) 3. Shinskey F Greg, <u>Process Control Systems: Application, Design and Tuning</u> , 4 th Edition, McGraw-Hill, 1996. (TP155.75.S556 1996)
EE4266 COMPUTER VISION	
1. Gonzalez Rafael C, <u>Digital Image Processing</u> , 3 rd Edition, Prentice-Hall, 2008. (TA1632.G643 2008)	1. Awcock G J and Thomas Ray, <u>Applied Image Processing</u> , McGraw-Hill, 1996. (TA1637.A965) 2. Duda Richard O, Hart Peter E and Stork David G, <u>Pattern Classification</u> , 2 nd Edition, John Wiley, 2001. (Q327.D844 2001)
EE4268 ROBOTICS AND AUTOMATION	
1. Craig John J, <u>Introduction to Robotics: Mechanics and Control</u> , 3 rd Edition, Prentice-Hall, 2005. (TJ211.C886 2005)	1. Schilling Robert J, <u>Fundamentals of Robotics: Analysis and Control</u> , Prentice-Hall, 1990. (TJ211.S334) 2. Niku Saeed B, <u>An Introduction to Robotics Analysis, Systems, Applications</u> , Prentice-Hall, 2001. (TJ211.N694)
EE4273 DIGITAL CONTROL SYSTEMS	
1. Ogata Katsuhiko, <u>Discrete-Time Control Systems</u> , 2 nd Edition, Prentice-Hall, 1995. (QA402.G34 1995) 2. Franklin Gene F, Powell J David and Workman Michael L, <u>Digital Control of Dynamic Systems</u> , 3 rd Edition, Addison-Wesley, 1998. (TJ223.M53F831 1998)	1. Astrom Karl Johan and Wittenmark Bjorn, <u>Computer-Controlled Systems: Theory and Design</u> , 3 rd Edition, Prentice-Hall, 1997. (TJ213.A859 1997) 2. Phillips Charles L and Nagle H Troy, <u>Digital Control System Analysis and Design</u> , 3 rd Edition, Prentice-Hall, 1995. (TJ223.M53P558 1995) 3. Gopal M, <u>Digital Control and State Variable Methods: Conventional and Neural-Fuzzy Control Systems</u> , 3 rd Edition, Tata-McGraw Hill, 2008. (TJ223.M53G659D 2008)

TEXTBOOK(S)	REFERENCE(S)
EE4285 COMPUTATIONAL INTELLIGENCE	
<ol style="list-style-type: none"> 1. Buckley, James J and Eslami, Esfandiar, <u>An introduction to fuzzy logic and fuzzy sets</u>, Physica-Verlag, 2002. (QA76.9.S63B924) 2. Zurada Jacek M, <u>Introduction to Artificial Neural Systems</u>, West, 1992. (QA76.87.Z96) 3. Back Thomas, <u>Evolutionary Algorithms in Theory and Practice: Evolution Strategies, Evolutionary Programming, Genetic Algorithms</u>, Oxford University Press, 1996. (QA402.5.B365) 	<ol style="list-style-type: none"> 1. Terano Toshiro, Asai Kiyoji and Sugeno Michio, <u>Fuzzy Systems Theory and its Applications</u>, Academic Press, 1992. (QA248.T315) 2. Lin Ching Tai and Lee C S George, <u>Neural Fuzzy Systems: A Neuro-Fuzzy Synergism to Intelligent Systems</u>, Prentice-Hall, 1996. (TJ217.25.L735)
EE4303 MIXED-SIGNALIC DESIGN	
<ol style="list-style-type: none"> 1. Sansen Wiley M C, <u>Analog Design Essentials</u>, Springer, 2006. (TK7874.654.S229) 	<ol style="list-style-type: none"> 1. Baker R Jacob, <u>CMOS: Circuit Design, Layout, and Simulation</u>, 3rd Edition, IEEE Press, 2010. (TK7871.99.M44B168 2008) 2. Gray Paul R, <u>Analysis And Design Of Analog Integrated Circuits</u>, 5th Edition, Wiley, 2009. (TK7874.G781 2009)
EE4304 RADIO FREQUENCY INTEGRATED SYSTEM DESIGN	
<ol style="list-style-type: none"> 1. Razavi Behzad, <u>RF Microelectronics</u>, Prentice-Hall, 1998. (TK6560.R278) 	<ol style="list-style-type: none"> 1. Yeo Kiat Seng, Do Manh Anh and Boon Chirn Chye, <u>Design of CMOS RF Integrated Circuits and Systems</u>, World Scientific, 2010. (TK7874.78.Y46) 2. Couch Leon W, <u>Digital and Analog Communication Systems</u>, 7th Edition, Pearson/Prentice-Hall, c2007. (TK5101.C853 2007) 3. Razavi Behzad, <u>Design of Analog CMOS Integrated Circuits</u>, McGraw-Hill, 2001. (TK7874.654.R278)
EE4305 DIGITAL DESIGN USING HDL	
<ol style="list-style-type: none"> 1. Yalamanchili Sudhakar, <u>VHDL: A Starter's Guide</u>, 2nd Edition, Pearson/Prentice Hall, 2005. (TK7885.7.Y16 2005) 	<ol style="list-style-type: none"> 1. Roth, Charles H and John Lizy Kurian, <u>Digital Systems Design using VHDL</u>, 2nd Edition, Thomson, 2008. (TK7888.4.R845D 2008) 2. Chu Pong P, <u>RTL hardware design using VHDL</u>, John Wiley, 2006. (TK7868.D5C559)
EE4340 VLSI SYSTEMS	
<ol style="list-style-type: none"> 1. Dally William J and Poulton John W, <u>Digital Systems Engineering</u>, Cambridge University Press, 1998. (TK7888.3.D147) 	<ol style="list-style-type: none"> 1. Hayes John Patrick, <u>Computer Architecture and Organization</u>, 3rd Edition, McGraw-Hill, 1998. (QA76.9.A73H417 1998) 2. Mano M Morris and Kime Charles R, <u>Logic and Computer Design Fundamentals</u>, 4th Edition, Pearson/Prentice-Hall, 2008. (TK7888.4.M285 2008) 3. Stallings William, <u>Computer Organization and Architecture: Designing for Performance</u>, 8th Edition, Prentice-Hall, 2010. (QA76.9.C643S782 2010) 4. Rabaey Jan M, Chandrakasan Anantha and Borivoje Nikolic, <u>Digital Integrated Circuits: A Design Perspective</u>, 2nd Edition, Pearson Education, 2003. (TK7874.65.R112 2003) 5. Wolf Wayne, <u>Modern VLSI Design: System-on-chip Design</u>, 3rd Edition, Prentice Hall, 2002. (TK7874.65.W855 2002)

TEXTBOOK(S)	REFERENCE(S)
EE4341 ADVANCED ANALOG CIRCUITS	
1. Franco Sergio, <u>Design with Operational Amplifiers and Analog Integrated Circuits</u> , 3 rd Edition, McGraw-Hill, 2002. (TK7874.F825 2002)	1. Toumazou Chris, Lidgey F J and Haigh David G, <u>Analogue IC Design: The Current-Mode Approach</u> , Peregrinus, 1990. (TK7874.A532) 2. Davidse J, <u>Analogue Electronic Circuit Design</u> , Prentice-Hall, 1991. (TK7874.D251A) 3. Gray Paul R, <u>Analysis and Design of Analog Integrated Circuits</u> , 5 th Edition, John Wiley, 2009. (TK7874.G781 2009) 4. Sanchez-Sinencio Edgar and Andreou Andreas G, <u>Low-Voltage/Low-Power Integrated Circuits and Systems: Low-Voltage Mixed Signal Circuits</u> , IEEE Press, 1999. (TK7874.66.L922)
EE4343 RADIO FREQUENCY CIRCUITS	
1. Ludwig Reinhold and Bretchko Pavel, <u>RF Circuit Design: Theory and Applications</u> , 2 nd Edition, Prentice-Hall, 2008.	1. Smith Jack R, <u>Modern Communication Circuits</u> , 2 nd Edition, McGraw-Hill, 1998. (TK6553.S651 1998) 2. White Joseph F, <u>High Frequency Techniques : An Introduction to RF and Microwave Engineering</u> , IEEE Press, 2004. (TK7876.W585H) 3. Wolaver Dan H, <u>Phase-Locked Loop Circuit Design</u> , Prentice-Hall, 1991. (TK7872.P38W848)
EE4344 ANALYSIS AND DESIGN OF INTEGRATED CIRCUITS	
1. Allen Phillip E and Holberg Douglas R, <u>CMOS Analog Circuit Design</u> , 2 nd Edition, Oxford University Press, 2002. (TK7874.A428 2002) 2. Weste Neil H E and Harris David Money, <u>CMOS VLSI Design: A Circuit and Systems Perspective</u> , 4 th Edition, Addison Wesley, 2011. (TK7874.W525 2011)	1. Rabaey Jan M, Chandrakasan Anantha P and Nikolic Borivoje, <u>Digital Integrated Circuits: A Design Perspective</u> , 2 nd Edition, Pearson Education, 2003. (TK7874.65.R112 2003) 2. Sansen Wiley M C, <u>Analog Design Essentials</u> , Springer, 2006. (TK7874.654.S229) 3. Johns David A and Ken Martins, <u>Analog Integrated Circuit Design</u> , John Wiley & Sons, 1997. (TK7874.J65)
EE4413 DSP SYSTEM DESIGN	
	1. Mitra, Sanjit Kumar, <u>Digital Signal Processing : a Computer Based Approach</u> , , 3 rd Edition, McGraw-Hill, 2006 (TK5102.9.M684 2006) 2. Proakis John G and Manolakis Dimitris G, <u>Digital Signal Processing: Principles, Algorithms and Applications</u> , 4 th Edition, Prentice-Hall, 2006. 3. Kuo Sen M, Lee Bob H and Tian Wenshun, <u>Real-Time Digital Signal Processing: Implementations and Applications</u> , 2 nd Edition, John Wiley, c2006. (TK5102.9.K96R 2006) 4. Oppenheim Alan V, Schafer Ronald W, and Buck John R, <u>Discrete-Time Signal Processing</u> , 3 rd Edition, Prentice-Hall, 2009. 5. Lapsley Phil, <u>DSP Processor Fundamentals: Architectures and Features</u> , IEEE Press, 1997. (TK5102.9.D811) 6. Ackenhusen John G, <u>Real Time Signal Processing: Design and Implementation of Signal Processing Systems</u> , Prentice-Hall, 1999. (TK5102.9A182)

TEXTBOOK(S)	REFERENCE(S)
EE4455 EMBEDDED SYSTEMS	
<ol style="list-style-type: none"> 1. Wolf Wayne, <u>High-Performance Embedded Computing: Architectures, Applications, and Methodologies</u>, 1st Edition, Elsevier/Morgan Kaufmann, 2007 (TK7895.E42W855) 2. Gan Woon-Seng and Kuo Sen M, <u>Embedded Signal Processing with the Micro Signal Architecture</u>, Wiley-Interscience, 2007. (TK5102.9.G195) 	<ol style="list-style-type: none"> 1. Katz David J and Gentile Rick, <u>Embedded Media Processing</u>, Elsevier/Newnes, 2006. (TK5102.9.K19) 2. Noergaard Tammy, <u>Embedded Systems Architecture: A Comprehensive Guide for Engineers and Programmers</u>, Elsevier/Newnes, 2005. (TK7895.E42N769) 3. Wolf Wayne Hendrix, <u>Computers as Components: Principles of Embedded Computing System Design</u>, 2nd Edition, Morgan Kaufmann, 2008. (QA76.9.S88W855 2008) 4. Kuo Sen M and Gan Woon-Seng, <u>Digital Signal Processors: Architectures, Implementations and Applications</u>, Pearson Prentice Hall, 2005 (TK5102.9.K96)
EE4475 AUDIO SIGNAL PROCESSING	
<ol style="list-style-type: none"> 1. Bosi Marina and Goldberg Richard E, <u>Introduction to Digital Audio Coding and Standards</u>, Kluwer Academic, 2003. (TK7881.4.B743) 2. Kuo Sen M and Gan Woon-Seng, <u>Digital Signal Processors: Architectures, Implementations and Applications</u>, Pearson Prentice-Hall, 2005. (TK5102.9.K96) 3. Gardner William G, <u>3-D Audio Using Loudspeakers</u>, Kluwer Academic, 1998. (TK7881.83.G228) 	<ol style="list-style-type: none"> 1. Pohlmann Ken C, <u>Principles of Digital Audio</u>, 5th Edition, McGraw-Hill, 2005. (TK7881.4.P748 2005) 2. Watkinson John, <u>The Art of Digital Audio</u>, 3rd Edition, Focal Press, 2001. (TK7881.4.W336 2001)
EE4476 IMAGE PROCESSING	
<ol style="list-style-type: none"> 1. Gonzalez Rafael C and Woods Richard E, <u>Digital Image Processing</u>, 3rd Edition, Prentice Hall, 2008. (TA1632.G643 2008) 	<ol style="list-style-type: none"> 1. Pratt William K, <u>Digital Image Processing: PIKS Inside</u>, 4th Edition, John Wiley, 2007. (TA1632.P917 2007) 2. Pitas Ioannis, <u>Digital Image Processing Algorithms and Applications</u>, John Wiley, 2000. (TA1637.P681) 3. Jain Anil K, <u>Fundamentals of Digital Image Processing</u>, Prentice-Hall, 1989. (TA1632.J25)

TEXTBOOK(S)	REFERENCE(S)
EE4478 DIGITAL VIDEO PROCESSING	
<ol style="list-style-type: none"> 1. Shi Yun Q and Sun Huifang, <u>Image and Video Compression for Multimedia Engineering: Fundamentals, Algorithms, and Standards</u>, 2nd Edition, CRC Press, 2008. (QA76.575.S555 2008) 2. Wang Yao, Ostermann Jeorn and Zhang Ya-Qin, <u>Video Processing and Communications</u>. Prentice Hall, 2002. (TK5105.2.W246) 	<ol style="list-style-type: none"> 1. Symes Peter, <u>Digital Video Compression</u>, McGraw-Hill, 2004. (TK6680.5.S986D) 2. Schaar Mihaela van der, Turaga Deepak S and Stockhammer Thomas, <u>MPEG-4 Beyond Conventional Video Coding: Object Coding, Resilience, and Scalability</u>, 1st Edition, Morgan & Claypool, 2006. (TK6680.5.S291) 3. Richardson Iain E G, <u>The H.264 Advanced Compression: Standard</u>, 2nd Edition, Wiley, 2010. (TK6680.5.R522 2010) 4. Tekalp A Murat, <u>Digital Video Processing</u>, Prentice-Hall, 1995. (TK6680.5.T266) 5. ISO/IEC 11172-2, <u>Information Technology - Coding of Moving Pictures and Associated Audio for Digital Storage Media at up to about 1.5 Mbit/s, Part 2: Video</u>, BSI, 1995. (QC100.B862 BS EN ISO/IEC 11172-2 1995) 6. ISO/IEC IS 13818-2, <u>Information Technology - Generic Coding of Moving Pictures and Associated Audio Information: Video</u>, 1995. (TK277.I85 ISO/IEC13818-2 1996(E)) 7. ISO/IEC IS 14496, <u>Information Technology - Coding of Audio-Visual Objects - Part 2: Visual</u>, Geneva, 1999. (TK277.I85 ISO/IEC14496-2(E))
EE4483 ARTIFICIAL INTELLIGENCE AND DATA MINING	
<ol style="list-style-type: none"> 1. Luger George F, <u>Artificial Intelligence : Structures and Strategies for Complex Problem Solving</u>, 6th Edition, Addison-Wesley, 2008. 2. Dunham Margaret H, <u>Data Mining Introductory and Advanced Topics</u>, Pearson/Prentice-Hall, 2003. (QA76.9.D343D917) 	<ol style="list-style-type: none"> 1. Han Jiawei and Kamber Micheline, <u>Data Mining: Concepts and Techniques</u>, 2nd Edition, Elsevier / Morgan Kaufmann, 2006. (QA76.9.D343H233 2006) 2. S. Russell and P. Norvig, <u>Artificial Intelligence A Modern Approach</u>, 3rd Edition, Prentice Hall, 2010. (Q335.R967A 2010)
EE4490 MULTIMEDIA SYSTEMS	
<ol style="list-style-type: none"> 1. Li Ze-Nian and Drew Mark S, <u>Fundamentals of Multimedia</u>, Pearson Prentice-Hall, 2004. (QA76.575.L693) 	<ol style="list-style-type: none"> 1. Steinmetz Ralf and Nahrstedt Klara, <u>Multimedia: Computing, Communications and Applications</u>, Prentice-Hall, 1997. (QA76.575.S823 1997)
EE4503 POWER ENGINEERING DESIGN	
<ol style="list-style-type: none"> 1. Kasikci Ismail, <u>Analysis and Design of Low-voltage Power Systems: An Engineer's Field Guide</u>, 1st Edition, Wiley-VCH, 2004. (TK1001.K19) 2. Blackburn J Lewis and Domin thomas J, <u>Protective Relaying: Principles and Applications</u>, 3rd Edition, CRC Press, 2007. (TK2861.B628 2007) 	<ol style="list-style-type: none"> 1. <u>Code of Practice for Electrical Installations</u>, (Singapore Standards, CP5 1998), Singapore Productivity and Standards Board, 1998. (QC100.S617 CP5 1998) 2. Anderson Paul M, <u>Power System Protection</u>, 1st Edition, McGraw-Hill, 1999. (TK1010.A548)
EE4504 DESIGN OF CLEAN ENERGY SYSTEMS	
<ol style="list-style-type: none"> 1. Simões Marcelo Godoy and Farret Felix A, <u>Renewable Energy Systems – Design and Analysis with Induction Generators</u>, CRC Press, 2004. (TJ808.S593) 2. Green M A, <u>Third Generation Photovoltaics Advanced Solar Energy Conversion</u>, Springer, 2006. 	<ol style="list-style-type: none"> 3. Thomas Ackemann, <u>Wind Power in Power Systems</u>, John Wiley, 2005. (TK1541.W763)

TEXTBOOK(S)	REFERENCE(S)
EE4530 POWER SYSTEM ANALYSIS AND CONTROL	
1. Saadat Hadi, <u>Power System Analysis</u> , 2 nd Edition, McGraw-Hill, 2002 (TK1001.S111 2002)	1. Weedy Birron Mathew and Cory Brian John, <u>Electric Power Systems</u> , 4 th Edition, John Wiley, 1998. (TK1001.W394 1998) 2. Grainger John J and Stevenson William D, <u>Power System Analysis</u> , McGraw-Hill, 1994. (TK3001.G743)
EE4532 POWER ELECTRONICS AND DRIVES	
1. Mohan Ned, Undeland Tore M and Robbins William P, <u>Power Electronics: Converters, Applications and Design</u> , 3 rd Edition, John Wiley, 2003. (TK7881.15.M697 2003) 2. Rashid M H, <u>Power Electronics: Circuits, Devices & Applications</u> , 3 rd Edition, Pearson/Prentice Hall, 2004. (TK7881.15.r224 2004)	1. Krein Philip T, <u>Elements of Power Electronics</u> , 1 st Edition, Oxford University Press, 1998. (TK7881.15.K92) 2. Erickson Robert Warren and Maksimovic Dragan, <u>Fundamentals of Power Electronics</u> , 2 nd Edition, Kluwer Academic/Springer, 2001. (TK7881.15.E68 2001)
EE4533 POWER APPARATUS AND SYSTEM PROTECTION	
1. Haddad A and Warne D F, <u>Advances in High Voltage Engineering</u> , IEE (IEE Power and Energy Series), 2004. (TK153.A244) 2. Blackburn J Lewis, <u>Protective Relaying: Principles and Applications</u> , 3 rd Edition, CRC Press, 2007.	1. Bergen Arthur R and Vittal Vijay, <u>Power System Analysis</u> , 2 nd Edition, Prentice-Hall, 2000. (TK1001.B495 2000) 2. Grainger John J and Stevenson William D, <u>Power System Analysis</u> , McGraw-Hill, 1994. (TK3001.G743) 3. Naidu M S and Kamaraju V, <u>High Voltage Engineering</u> , 2 nd Edition, McGraw-Hill, 1996. (TK3001.N155 1996) 4. Ram Badri and Vishwakarma D N, <u>Power System Protection and Switchgear</u> , 1 st Edition, McGraw-Hill, 1995. (1 st Printing) (TK2861.R165)
EE4534 MODERN DISTRIBUTION SYSTEMS WITH RENEWABLE RESOURCES	
1. Pabla A S, <u>Electric Power Distribution</u> , 5 th Edition, McGraw-Hill, 2005. (TK3001.P112E 2005) 2. Masters Gilbert M, <u>Renewable and Efficient Electric Power Systems</u> , John Wiley, 2004. (TK1005.M423)	1. Dugan Roger C, McGranaghan M F, Santoso S and Beaty H Wayne, <u>Electrical Power Systems Quality</u> , 2 nd Edition, McGraw-Hill, 2003. (TK1010.D866 2003) 2. Boyle Godfrey, <u>Renewable Energy: Power for A Sustainable Future</u> , 2 nd Edition, Oxford University Press, 2004. (TJ808.R411RE 2004) 3. Larminie James and Dicks Andraw, <u>Fuel Cell Systems Explained</u> , 2 nd Edition, John Wiley, 2003. (TK2931.L324 20030)
EE4613 CMOS PROCESS AND DEVICE SIMULATION	
	1. Arora Narain, <u>MOSFET Modeling for VLSI Simulation: Theory and Practice</u> , World Scientific, 2007. (TK7871.95.A769M) 2. Tsividis Yannis, <u>Operation and Modeling of the MOS Transistor</u> , 2 nd Edition, WCB/McGraw-Hill, 1999. (TK7871.99.M44T882 1999) 3. Kramer Kevin M and Hitchon W Nicholas G, <u>Semiconductor Devices: A Simulation Approach</u> , Prentice-Hall, 1997. (TK7871.85.K89)

TEXTBOOK(S)	REFERENCE(S)
EE4614 DEVICE PARAMETER EXTRACTION AND LAYOUT IMPLEMENTATION	
	<ol style="list-style-type: none"> 1. Synopsis TCAD Manual – MEDICI. 2. Schroder Dieter K, <u>Semiconductor Material and Device Characterization</u>, 3rd Edition, IEEE Press, 2006. (QC611.S381 2006) 3. Liou Juin J, Ortiz-Conde Adelmo and Garcia-Sanchez F, <u>Analysis and Design of MOSFETs – Modeling, Simulation, and Parameter Extraction</u>, Kluwer Academic Publishers, 1999. (TK7871.95 L763) 4. Rabaey Jan M, Chandrakasan Anantha, and Nikolic Borivoje, <u>Digital Integrated Circuits: A Design Perspective</u>, 2nd Edition, Pearson Education, 2003. (TK7874.65.R112 2003)
EE4645 MICROFABRICATION ENGINEERING	
<ol style="list-style-type: none"> 1. Stephen A. Campbell, <u>Fabrication Engineering at the Micro- and Nanoscale</u>, 3rd Edition, Oxford University Press, 2008. (TK7871.85.C191F) 	<ol style="list-style-type: none"> 1. Mahajan Subhash and SreeHarsha K S, <u>Principles of Growth and Processing of Semiconductors</u>, WCB/McGraw-Hill, 1999. (TK7871.85.M214) 2. Van Zant Peter, <u>Microchip Fabrication: A Practical Guide to Semiconductor Processing</u>, 5th Edition, McGraw-Hill, 2004. (TK7871.85.V217 2004) 3. Ghandhi Sorab Khushro, <u>VLSI Fabrication Principles: Silicon and Gallium Arsenide</u>, 2nd Edition, John Wiley, 1994. (TK7874.G411 1994)
EE4646 VLSI TECHNOLOGY	
<ol style="list-style-type: none"> 1. Wolf Stanley and Tauber Richard N, <u>Silicon Processing for the VLSI Era</u>, Vol.1, 2nd Edition, Lattice Press 2000 (TK7874.W855 2000 V1) 2. Chang C Y and Sze S M, <u>ULSI Devices</u>, John/Wiley 2000 (TK7874.76.U46D) 	<ol style="list-style-type: none"> 1. Kuo James B and Lin Shih-Chia, <u>Low-Voltage SOI CMOS VLSI Devices and Circuits</u>, Wiley, 2001. (E-Book) (TK7874.66.K96V) 2. Houssa Michel, <u>High-k Gate Dielectrics</u>, Institute of Physics, 2004. (TK7871.99.M44H638K)
EE4647 MICROELECTRONIC DEVICES	
<ol style="list-style-type: none"> 1. Sze S M, <u>Semiconductor Devices, Physics and Technology</u>, 2nd Edition, John Wiley, 2002. (TK7871.85.S997 2002) 2. Neamen Donald A, <u>Semiconductor Physics and Devices: Basic Principles</u>, 3rd Edition, McGraw-Hill, 2003. (QC611.N348 2003) 	<ol style="list-style-type: none"> 1. Dimitrijevic Sima, <u>Understanding Semiconductor Devices</u>, Oxford University Press, 2000 (TK7871.85.D582)
EE4648 FLAT PANEL DISPLAY TECHNOLOGIES	
	<ol style="list-style-type: none"> 1. Keller Peter A, <u>Electronic Display Measurement: Concepts, Techniques, and Instrumentation</u>, John Wiley 1997. (TK7882.I6K29) 2. Yeh Pochi and Gu Claire, <u>Optics of Liquid Crystal Displays</u>, 2nd Edition, John Wiley 2010. (TK7872.L56Y43 2010) 3. Sherr Sol, <u>Applications for Electronic Displays Technologies and Requirements</u>, John Wiley, 1998. (TK7882.I6S553 1998) 4. Lueder Ernst, <u>Liquid Crystal Displays : Addressing Schemes and Electro-Optical Effects</u>, 2nd Edition, John Wiley, 2010. (TK7872.L56L948C)
EE4694 IC RELIABILITY AND FAILURE ANALYSIS	
<ol style="list-style-type: none"> 1. Ebeling Charles E, <u>An Introduction to Reliability and Maintainability Engineering</u>, 2nd Edition, Waveland Press, 2010. (TA169.E15 2010) 	<ol style="list-style-type: none"> 1. Ohring Milton, <u>Reliability and Failure of Electronic Materials and Devices</u>, Academic Press, 1998. (TK7870.23.H38) 2. O'Connor Patrick D T and Newton David, <u>Practical Reliability Engineering</u>, 4th Edition, Wiley, 2002 (TS173.C18 2002)

TEXTBOOK(S)	REFERENCE(S)
EE4695 SEMICONDUCTOR PHYSICS	
1. Omar M Ali, <u>Elementary Solid State Physics: Principles and applications</u> , Addison-Wesley Publishing Co., 1993. (QC176.M54) 2. McKelvey John Philip, <u>Solid State Physics for Engineering and Materials Science</u> , Krieger Publishing Co, 1993. (QC176.M154)	1. Kittel Charles and McEuen Paul, <u>Introduction to Solid State Physics</u> , 8 th Edition, John Wiley, 2005. (QC176.K62 2005) 2. Singh Jasprit, <u>Physics of Semiconductors and their Heterostructures</u> , McGraw-Hill, 1993. (QC611.S617)
EE4717 WEB APPLICATION DESIGN	
	1. Grove Ralph F, <u>Web-based Application Development</u> , Jones and Bartlett Publishers, 2010. (TK5105.888.G883) 2. Deitel Paul J, <u>Java : How to Program</u> . Pearson Prentice Hall, 2010. (QA76.73.J38D325 2010) 3. Metlapalli Prabhakar, <u>JavaServer Pages Illuminated</u> , Jones and Bartlett Publishers, 2008. (TK5105.8885.J38M592) 4. Kurniawan Budi, <u>Struts Design and Programming : A Tutorial</u> , 1 st Edition, BrainySoftware.com, 2005. (TK5105.8885.S76K96)
EE4718 ENTERPRISE NETWORK DESIGN	
	1. Leon-Garcia Alberto and Widjaja Indra, <u>Communication Networks: Fundamental Concepts and Key Architectures</u> , 2 nd Edition, McGraw-Hill, 2004. (TK5101.L579 2004) 2. Kurose James F and Ross Keith W, <u>Computer Networking: A Top-Down Approach</u> , 5 th Edition, Pearson/Addison-Wesley, c2010. (TK5105.875.I57K96 2010) 3. CCIE Fundamentals: <u>Network Design and Case Studies</u> , 2 nd Edition, Cisco Press, 2002. (TK5105.5.C386)
EE4756 COMPUTER ARCHITECTURE	
1. Hennessy John L and Patterson David A, <u>Computer Architecture: A Quantitative Approach</u> , 3 rd Edition, Morgan Kaufmann, 2003. (QA76.9.A73H515 2003).	1. Hennessy John L and Patterson David A, <u>Computer Architecture: A Quantitative Approach</u> , 4 th Edition, Morgan Kaufmann, 2007. (QA76.9.A73H515 2007) 2. Patterson David A and Hennessy John L, <u>Computer Orgnaization and Design: The Hardware/Software Interface</u> , 4 th Edition, Elsevier/Morgan Kaufmann, 2009. (QA76.9.C643P317 2009) 3. Baron Robert J and Higbie Lee, <u>Computer Architecture</u> , Addison-Wesley, 1992. (QA76.9.A73B265)
EE4758 COMPUTER SECURITY	
1. Stallings William, <u>Cryptography and Network Security: Principles and Practice</u> , 5 th Edition, Pearson/Prentice- Hall, 2011. (TK5105.59.S782C 2011)	1. Bishop Matt, <u>Introduction to Computer Security</u> , Addison-Wesley, 2004. (QA76.9.A25B622T) 2. Pieprzyk Josef, Hardjono Thomas and Seberry Jennifer, <u>Fundamentals of Computer Security</u> , Springer, 2003. (QA76.9.A25P614)

TEXTBOOK(S)	REFERENCE(S)
EE4761 COMPUTER NETWORKING	
1. Kurose James F and Ross Keith W, <u>Computer Networking: A Top-Down Approach</u> , 5 th Edition, Addison-Wesley, c2010. (TK5105.875.I57K96 2010)	1. Leon-Garcia Alberto and Widjaja Indra, <u>Communication Networks: Fundamental Concepts and Key Architectures</u> , 2 nd Edition, McGraw-Hill, 2004. (TK5101.L579 2004) 2. Stallings William, <u>Data and Computer Communications</u> , 8 th Edition, Pearson/Prentice-Hall, c2007. (TK5105.S782 2007) 3. Comer Douglas E, <u>Internetworking with TCP/IP</u> , 5 th Edition, Pearson Prentice-Hall, 2006. (TK5105.585.C732 2006)
EE4791 DATABASE SYSTEMS	
1. Hoffer Jeffrey A, Ramesh V and Topi Heikki, <u>Modern Database Management</u> , 10 th Edition, Pearson/Prentice-Hall, 2011. (QA76.9.D3M143 2011)	1. Connolly Thomas M and Begg Carolyn E, <u>Database Systems: A Practical Approach to Design, Implementation, and Management</u> , 5 th Edition, Addison-Wesley, 2010. (QA76.9.D26C752 2010) 2. Elmasri Ramez and Navathe Shamkant, <u>Fundamentals of Database Systems</u> , 6 th Edition, Pearson Addison-Wesley, 2011. (QA76.9.D3E48 2011) 3. Date C J, <u>An Introduction to Database Systems</u> , 8 th Edition, Addison-Wesley, 2004. (QA76.9.D3D232 2004) 4. Coronel Carlos, Morris Steven and Rob Peter, <u>Database Systems: Design, Implementation, and Management</u> , 9 th Edition, Course Technology, 2011. (QA76.9.D26R628 2011)
EE4815 OPTICAL DESIGN	
1. Smith Warren J, <u>Modern Optical Engineering: The Design of Optical Systems</u> , 4 th Edition, McGraw-Hill, 2008. (TS513.S663 2008) 2. Keln J. Kuhn, <u>Laser Engineering</u> , Prentice Hall, 1998. (TA1675.K96)	1. Hecht Eugene, <u>Optics</u> , 4 th Edition, Addison-Wesley, 2002. (QC355.2.H447 2002) 2. Fischer Robert Edward and Tadic-Galeb Biljana, <u>Optical System Design</u> , McGraw-Hill, 2008. (TK8315.F529 2008) 3. Meyrueis Patrick and Kress B, <u>Digital Diffractive Optics: An Introduction to Planar Diffractive Optics and related Technology</u> , John Wiley, 2000. (TA1750.M615)
EE4816 PHOTONIC DEVICES: DESIGN AND CHARACTERIZATION	
1. Nelson Jenny, <u>The Physics of Solar Cells</u> , Imperial College Press, 2003. (TK2960.N427)	1. Chuang Shun Lien, <u>Physics of Photonic Devices</u> , 2 nd Edition, Wiley 2009. (QC673.C559P) 2. Pierret Robert F, <u>Advanced Semiconductor Fundamentals</u> , 2 nd Edition, Prentice Hall, 2003. (TK7871.85.P623 2003) 3. Singh Jasprit, <u>Optoelectronics An Introduction to Materials and Devices</u> , McGraw-Hill, 1996. (TA1750.S617) 4. Kasap Safa O, <u>Principles of Electronic Materials and Devices</u> , 3 rd Edition, McGraw-Hill, 2006. (TK453.K19 2006)

TEXTBOOK(S)	REFERENCE(S)
EE4836 SEMICONDUCTOR OPTOELECTRONICS	
1. Kasap Safa O, <u>Optoelectronics and Photonics: Principles and Practices</u> , Prentice-Hall, 2001. (TK8304.K19) 2. Nelson Jenny, <u>The Physics of Solar Cells</u> , Imperial College Press, 2003. (TK2960.N427)	1. Pierret Robert F, <u>Advanced Semiconductor Fundamentals</u> , 2 nd Edition, Prentice Hall, 2003. (TK7871.85.P623 2003) 2. Kasap Safa O, <u>Principles of Electronic Materials and Devices</u> , 3 rd Edition. McGraw-Hill, 2006. (TK453.K19 2006) 3. Chuang Shun Lien, <u>Physics of Photonic Devices</u> , 2 nd Edition, Wiley 2009. (QC673.C559P) 4. Singh Jasprit, <u>Electronic and Optoelectronic Properties of Semiconductor Structures</u> , Cambridge University Press, 2003. (QC611.6.E45S617) 5. Soga Tetsuo, <u>Nanostructured Materials for Solar Energy Conversion</u> , 1 st Edition, Elsevier, 2006. (TK2960.N186)
EE4838 LASER ENGINEERING AND APPLICATIONS	
1. Svelto Orazio, <u>Principles of Lasers</u> , 5 th Edition, Springer, 2010.	1. Graham-Smith Francis Sir, King Terry A and Wilkins Dan, <u>Optics and Photonics: An Introduction</u> , 2 nd Edition, John Wiley, c2007. (QC446.2.G742 2007) 2. Vij D R and Mahesh K, <u>Medical Applications of Lasers</u> , Kluwer Academic, 2002. (R857.L37M489)
EE4839 FIBRE OPTIC COMMUNICATIONS	
1. Hecht Jeff, <u>Understanding Fiber Optics</u> , 5 th Edition, Pearson/Prentice-Hall 2006. (TA1800.H447 2006)	1. Dutton Harry J R, <u>Understanding Optical Communications</u> , Prentice-Hall, 1998. (TK5103.59.D981) 2. Palais Joseph C, <u>Fiber Optic Communications</u> , 5 th Edition, Pearson/Prentice-Hall, 2005. (TK5103.59.P154 2005) 3. Derickson Dennis, <u>Fiber Optic Test and Measurement</u> , Prentice-Hall, 1998. (TK5103.59.D433) 4. Ramaswami Rajiv and Sivarajan Kumar N, <u>Optical Networks: A Practical Perspective</u> , 3 rd Edition, Morgan Kaufmann, 2008.
EE4840 BIOPHOTONICS	
1. Prasad Paras N, <u>Introduction to Biophotonics</u> , Wiley-Interscience, 2003. (QH515.P911)	1. Tözere Aydin and Byers Stephen W, <u>New Biology for Engineers and Computer Scientists</u> , Pearson/Prentice Hall, 2004. (QH506.T314) 2. Niemz Markolf H, <u>Laser-Tissue Interactions [electronic resource]: Fundamental and Applications</u> , 3 rd Edition, Springer, 2007. 3. Vo-Dinh Tuan, <u>Biomedical Photonics Handbook</u> , CRC Press, 2003. (R857.O6.B615B)
EE4901 BIOMEDICAL CONTROL SYSTEMS DESIGN	
	1. Khoo Michael C K, <u>Physiological Control Systems : Analysis, Simulation and Estimation</u> , IEEE Press, 2000. (QP33.6.M36K45) 2. Kuo Benjamin C and Golnaraghi Farid, <u>Automatic Control Systems</u> , 9 th Edition, John Wiley, 2008. 3. Little John N, <u>Control System Toolbox for Use with MATLAB : User's Guide</u> , The Math Works, Inc. 1998. (QA297.C764)

TEXTBOOK(S)	REFERENCE(S)
EE4902 DESIGN OF MEDICAL INFORMATION PROCESSING SYSTEMS	
	<ol style="list-style-type: none"> 1. Bruce Eugene N, <u>Biomedical Signal Processing and Signal Modeling</u>, John Wiley, 2001. (R857.S47B886) 2. Proakis John G and Manolakis Dimitris G, <u>Digital Signal Processing: Principles, Algorithms and Applications</u>, 4th Edition, Pearson Prentice-Hall, c2007. (TK5102.9.P932) 3. Blake Andrew and Isard Michael, <u>Active Contours: The Application of Techniques from Graphics, Vision, Control Theory and Statistics to Visual Tracking of Shapes in Motion</u>, Springer, 1998. (TA1634.B636)
EE4903 PHYSIOLOGICAL SYSTEMS ANALYSIS	
	<ol style="list-style-type: none"> 1. Widmaier Eric P, Raff Hershel, Strang Kevin T and Vander Arthur J, <u>Vander's Human Physiology: The Mechanisms of Body Function</u>, 11th Edition, McGraw-Hill, c2008. 2. Khoo Michael C K, <u>Physiological Control Systems: Analysis, Simulation, and Estimation</u>, IEEE Press, 2000. (QP33.6.M36K45) 3. Marieb Elaine Nicpon, <u>Essentials of Human Anatomy and Physiology</u>, 9th Edition, Pearson/Benjamin Cummings, 2009. (QP34.5.M334 2009) 4. Silverthorn Dee Unglaub, <u>Human Physiology : An Integrated Approach</u>, 4th Edition, Pearson/Benjamin Cummings, c2007. (QP34.5.S587 2007)
EE4904 BIOMEDICAL INSTRUMENTATION	
<ol style="list-style-type: none"> 1. Webster John G and Webster John W, <u>Medical Instrumentation: Application and Design</u>, 4th Edition, John Wiley, 2010. 2. Carr, Joseph J and Brown John M, <u>Introduction to Biomedical Equipment Technology</u>, 4th Edition, Prentice Hall 2001. (R856.C311 2001) 	<ol style="list-style-type: none"> 1. Brown B H, <u>Medical Physics and Biomedical Engineering</u>, Institute Of Physics, 1999. (R895.M489) 2. Bushberg Jerrold T, Seibert J A, Leidholdt E M and Boone J M, <u>The Essential Physics of Medical Imaging</u>, 2nd Edition, Lippincott Williams & Wilkins, 2002. (RC78.7.D53E78) 3. Ganong William F, <u>Review of Medical Physiology</u>, 22th Edition, Lange Medical Publications, 2005. (QP1.G198 22ND ED 2005)
EE4905 BIOMEDICAL SIGNAL PROCESSING	
	<ol style="list-style-type: none"> 1. Bruce Eugene N, <u>Biomedical Signal Processing and Signal Modeling</u>, John Wiley, 2001. (R857.S47B886) 2. Northrop Robert B, <u>Signals and Systems Analysis in Biomedical Engineering</u>, 2nd Edition, CRC Press, 2010. (R856.N877 2010) 3. Proakis John G and Manolakis Dimitris G, <u>Digital Signal Processing: Principles, Algorithms and Applications</u>, 3rd Edition, Prentice-Hall, 1996. (TK5102.5.P962D 1996) 4. Webster John G and Clark John W, <u>Medical Instrumentation: Application and Design</u>, 4th Edition, John Wiley, 2010. (R856.M489 2010)

TEXTBOOK(S)	REFERENCE(S)
EE4906 MEDICAL IMAGING SYSTEMS	
<ol style="list-style-type: none"> 1. Prince Jerry L and Links Jonathan M, <u>Medical Imaging, Signals and Systems</u>, Pearson Prentice Hall, 2006. (RC78.7.D53P955) 2. Gonzalez Rafael C and Woods Richard Eugene, <u>Digital Image Processing</u>, 3rd Edition, Prentice Hall, 2008. (TA1632.G643 2008) 	<ol style="list-style-type: none"> 1. Cho Z H, Jones Joie P, and Singh Manbir, <u>Foundations of Medical Imaging</u>, John Wiley, 1993. (RC78.7.D53C454) 2. Kak Avinash. C and Slaney Malcolm, <u>Principles of Computerized Tomographic Imaging</u>, Society of Industrial and Applied Mathematics, 2001. (RC78.7.T6K13) 3. Bushong Stewart C, <u>Magnetic Resonance Imaging: Physical and biological Principles</u>, 3rd Edition, Mosby, 2003. (RC78.7.N83B979 2003) 4. Bushberg Jerrold T, Seibert J A, Leidholdt E M and Boone J M, <u>The Essential Physics of Medical Imaging</u>, 2nd Edition, Lippincott Williams & Wilkins, 2002. (RC78.7.D53E78) 5. Angelsen Bjorn A J, <u>Ultrasound Imaging: Waves, Signals and Signal Processing</u>, Emantec, 2000. (RC78.7.U4A584)