	SCILAB		
AICTE Textbook	Completed under Scilab Textbook Companion	Under Progress (Expected date of completion)	Yet to be taken up
	(Number - 48)	(Number - 28)	
Common Subjects			
BS 09: Applied Physics I			
Text/Reference Books:			
Bottaccini M.R, C.E. Merill, Instruments and Measurements, Bell and Howell			✓
Eisberg R, R. Resnick, Quantum Physics of Atoms, Molecules, Solids, Nuclei & Particles, John Wiley			✓
Wehr & Richards, Physics of the Atom, Addison, Wesley			✓
Subramanium & Brij Lal, Text book of Sound			✓
Eugene Hecht &A.R.Ganesan (2009), Optics, Pearson			✓
Francis A.Jenkins, Harvey E.White, Fundamentals of Optics, McGraw Hill			✓
BS 10: Applied Physics II			
Text/Reference Books:			
Kittel C., Introduction to Solid State Physics, Wiley Eastern			✓
Laud B.B., Lasers and Non-Linear Optics, New Age Publications			✓
Benenti, Casati & Strini (2007), Principles of Quantum Computation & Information, Vol. I (Basic concepts),			✓
World Scientific			✓
Berman R., Thermal Conduction in Solids, Oxford Science Publications			✓
Guy K. White, Experimental Techniques in Low Temperature Physics, Oxford Science Publications			✓
Dobson K., D. Grace& D. Lovett, Physics, Collins			✓
BS 12: Applied Physics III			
Text/Reference Books:			
Callister W.C. Jr., Material Science and Engineering: An Introduction, 6 th Edn., John Wiley & Sons	✓		
Kulkarni Sulabha K., Nanotechnology: Principles & Practices, Capitol Publishing Co.			✓
Charles P. Poole, Jr., Frank J. Owens, Introduction to Nanotechnology, Wiley Eastern			✓
Nielsen M. A., I. L. Chuang, Quantum Computation & Quantum Information, Cambridge Univ. Press			✓
Harald Ibach, Hans Luth, Solid State Physics – An Introduction to Theory and Experiment Narosa Publishing			✓

House			
BS 14: Chemistry I			
Text/Reference Books:			
Shashi Chawla (2004), A Text Book of Engineering Chemistry, Dhanpat Rai Publishing Co.			✓
S.S.Dara (2006), Engineering Chemistry, Chand & Co.			✓
Jain and Jain (2006), Engineering Chemistry, Dhanpat Rai Publishing Co.			✓
Journal Biochem. Biophys. Methods, Vol. 67(2-3), 2006, pp.151-61			✓
International Journal of Environmental Analytical Chemistry, Vol. 91 (3), 2011, pp. 272 – 279			✓
Chemical Education Journal, Vol. 13, No. 2, 2009, Reg. No. 13-12, 28,			✓
ES 01: EngineeringGraphics			
Text/Reference Books:			
Bhat, N.D.& M. Panchal (2008), Engineering Drawing, Charotar Publishing House			
Shah, M.B. & B.C. Rana (2008), Engineering Drawing and Computer Graphics, Pearson Education			
Dhawan, R.K. (2007), A Text Book of Engineering Drawing, S. Chand Publications			
Narayana, K.L. & P Kannaiah (2008), Text book on Engineering Drawing, Scitech Publishers			
ES 03: Materials Science			
Text/Reference Books:			
Askeland D.R.,& P. P. Fullay (2007), The Science and Engineering of Materials –4th Cengage Learning			✓
Publishers			
William D. Callister, Jr (2008), Callister‟s Materials Science and Engineering, (Adopted by R.	✓		
Balasubramaniam) Wiley-Eastern			
A.S. Edelstein and R.C. Cammarata Ed.(1998), Nano Materials: Synthesis, Properties and Applications,			✓
Inst. Of Physics Publishing, UK			
Raghavan V (2007), Materials Science and Engineering - A First Course, Prentice Hall, India			✓
James F. Shackelford (1996), Introduction to Materials Science for Engineers, Prentice Hall, India			✓
ES 04: Basic Engineering Mechanics			
Text/Reference Books:			

1. Shanes and Rao (2006), Engineering Mechanics, Pearson Education,			✓
2. Hibler and Gupta (2010),Engineering Mechanics (Statics, Dynamics) by Pearson Education			✓
3. Reddy Vijaykumar K. and K. Suresh Kumar(2010), Singer‟s Engineering Mechanics			✓
4. Bansal R.K.(2010), A Text Book of Engineering Mechanics, Laxmi Publications			✓
5. Khurmi R.S. (2010), Engineering Mechanics, S. Chand & Co.			✓
6. Tayal A.K. (2010), Engineering Mechanics, Umesh Publications			✓
ES 05: Basic Electrical Engineering			
Text/Reference Books:			
Nagrath I.J. and D. P. Kothari (2001), Basic Electrical Engineering, Tata McGraw Hill	✓		
Hayt and Kimberly, Engineering Circuit Analysis, Tata McGraw Hill	✓		
Kulshreshtha D.C. (2009), Basic Electrical Engineering, Tata McGraw Hill		April, 2014	
Rajendra Prasad (2009), Fundamentals of Electrical Engineering, Prentice Hall, India			✓
Hughes, E. 2005), Electrical Technology .Pearson			✓
Parker Smith (2003), Problems in Electrical Engineering , CBS Publishers			✓
Van Valkenburg Network Analysis, Prentice Hall, India		March, 2014	
H. Lee Willis (2004)m Power Distribution Planning Reference Book, CRC Press			✓
ES 07: Basic Electronics Engineering			
Text/Reference Books:			
R. L. Boylestad & Louis Nashlesky (2007), Electronic Devices &Circuit Theory, Pearson Education	✓		
Santiram Kal (2002), Basic Electronics- Devices, Circuits and IT Fundamentals, Prentice Hall, India			✓
David A. Bell (2008), Electronic Devices and Circuits, Oxford University Press	✓		
Thomas L. Floyd and R. P. Jain (2009), Digital Fundamentals, Pearson Education		April, 2014	
R. S. Sedha (2010), A Text Book of Electronic Devices and Circuits, S.Chand & Co.		April, 2014	
R. T. Paynter (2009), Introductory Electronic Devices & Circuits – Conventional Flow Version, Pearson			✓
Education			
ES 08: Basic Electronics Engineering Laboratory			
Text/Reference Books:			

David. A. Bell (2003), Laboratory Manual for Electronic Devices and Circuits, Prentice Hall, India			
Paul B. Zbar, A.P. Malvino and M.A. Miller (2009), Basic Electronics – A Text-Lab. Manual, TMH			
ES 09: Computer Programming			
Text/Reference Books:			
1. Dietel & Dietel (2000), C – How to Program, Pearson Education			✓
2. Ellis Horowitz, Sartaj Sahni, Susan Anderson (1993), Fundamentals of Data Structures in C, Prentice Hall of	✓		
India			
3. B.W. Kernighan and Dennis M.Ritchie (1988), The C Programming Language, Pearson Education			✓
4. J.R. Hanly and E.B. Koffman (2007), Problem Solving and Program Design in C, Pearson Education			✓
5. A.M. Tanenbaum, Y. Langsam & M.J. Augenstein(2005),Data Structures using C, Pearson Education			✓
ES10: Computer Programming Laboratory			
Text/Reference Books:			
Dietel & Dietel (2000), C – How to Program, Pearson Education			
R. J. Dromey (1991), How to solve it by Computer, Prentice-Hall, India.			
ES 11: Basic Simulation Laboratory			
Text/Reference Books:			
1. Strength of Materials – R S Khurmi, S. Chand and Co.			✓
Text/Reference Books:			
Fluid Mechanics and Hydraulic Machines A Lab Manual - T S Desmukh.			
ES 15: Engineering Mechanics			
Text/Reference Books:			
Johnston, R.E., Beer, F., Eisenberg, E. R., & Mazurek, D. Vector Mechanics for Engineers: Statics and			✓
Dynamics: McGraw-Hill.			
Meriam, J. L., & Kraige, L. G. Engineering Mechanics: Statics & Engineering Mechanics: Dynamics: John			✓
Wiley & Sons.			
Hibbeler, R. C. Egineering mechanics: statics and dynamics: Prentice Hall.			✓
Irving, H., Shames, Engineering Mechanics - Statics and Dynamics, Prentice-Hall of India			✓

Pytel, A., Kiusalaas, J., & Sharma, I. Engineering Mechanics: Statics & Engineering Mechanics: Dynamics,			✓
Cengage Learning.			✓
Palanichamy, M.S., Nagan, S., Engineering Mechanics – Statics & Dynamics, TMH			✓
Rajasekaran, S, Sankarasubramanian, G., Fundamentals of Engineering Mechanics, Vikas.Publishing			✓
McLean, Engineering Mechancis, Schaum Series, McGraw Hill.			✓
ES 16: Solid Mechanics			
Text/Reference Books:			
Pytel A H and Singer F L, “Strength of Materials”, Harper Collins, New Delhi.			✓
Beer P F and Johston (Jr) E R, “Mechanics of Materials”, SI Version, McGraw Hill, NY.		May, 2014	
Popov E P, “Engineering Mechanics of Solids”, SI Version, Prentice Hall, New Delhi.			✓
Timoshenko S P and Young D H, “Elements of Strength of Materials”, East West Press,New Delhi.			✓
Shames, I. H., Pitarresi, J. M., “Introduction to Solid Mechanics,” Prentice-Hall, NJ.			✓
NPTEL courses, http://nptel.iitm.ac.in/courses.php, web and video courses on Strength of Materials by Prof.			
Sharma, S. C., and Prof. Harsha, S. P.			
ES 17: Thermodynamics			
Nag.P.K., “Engineering Thermodynamics”, Tata McGraw-Hill, New Delhi.	✓		
Cengel,„Thermodynamics - An Engineering Approach‟ Tata McGraw Hill, New Delhi.			✓
Sonntag, R. E., Borgnakke, C., & Wylen, G. J. V. Fundamentals of thermodynamics	✓		
Wiley.			
Moran, M. J., Shapiro, H. N., Boettner, D. D., & Bailey, M. Fundamentals of Engineering Thermodynamics: John Wiley & Sons.	✓		
Jones, J. B., & Dugan, R. E. Engineering thermodynamics: Prentice Hall.			✓
Potter, M. C., & Somerton, C. W. Schaum's Outline of Thermodynamics for Engineers, McGraw-Hill		April, 2014	
Electrical and Electronics			
Text/Reference Books:			

Field Theory:			
1. N.N. Rao, „Basic Electromagnetics with applications‟, PHI			✓
2. E.C. Jordan and K.G. Balmain, „Electromagnetic waves and radiating systems‟, PHI			✓
3. D.J. Griffith, „Introduction to Electrodynamics‟, PHI .			✓
4. Guru & Hiziroglu, „ Electromagnetic field theory fundamentals‟, Vikas Publishing House			✓
Circuit Theory			
1. Desoer & Kuh, “ Basic Circuit theory”, McGraw Hill.			✓
2. Van Valkenberg , “Network Analysis”, PHI.		April, 2014	
3. Valkenberg & Kinariwala , “Linear Circuits”, PHI.			✓
4. Trick , “Introduction to circuit Analysis”, Wiley.			✓
5. Roy Choudhary , “Networks & systems”, Wiley.			✓
EE 02: Electronic Devices and Systems			
Text/Reference Books:			
Analog:			
1. Millman and Halkias, “Integrated Electronics”, Mc Graw Hill.	✓		
2. R. Boylested and L. Nashelsky, “Electronics Devices and Circuits”, Prentice Hall India.	✓		
3. Millman and Halkias, “Electronics Devices and Circuits”, TMH Edition.			✓
4. Malcolm Goodge, “Analog Electronics Analysis and Synthesis”, TMH Edition.			✓
5. Malvino, “Electronics Principles”, TMH Edition.	✓		
Digital:			
1. RP Jain, „Modern Electronics‟.	✓		
2. AP Malvino and DP Leach, „Digital Principles and applications‟.	✓		
3. Floyd, „Digital Circuits‟.			✓
4. Charles Roth, „Fundamentals of Logic Design‟.			✓
5. H. Taub and D. Schilling, „Digital Integrated Electronics‟.			✓
6. Gothman, “Digital Electronics”.	✓		
EE 03: Electrical Machines I			
Text/Reference Books:			
1. Clayton. A.E.,„Performance and Design of Direct Current Machines‟ UBS Publishers.			✓
2. Irving L. and Kosow, „Electric Machinery and Transformers, Prentice-Hall of India	✓		
3. George Mcphersion ,”An Introduction to Electrical Machines and Transformers”, John Wiley & Sons, NY			✓
4. Nagrath & Kothari, “Electric Machines”, Tata McGraw Hill.	✓		
5. PS Bimbhra, “Electrical Machinery”, Khanna Publishers.			✓

6. MG Say, Theory, ”Performance & Design of A.C. Machines”, CBS Publishers.			✓
EE 04: Measurements and Instruments			
Text/Reference Books:			
1. E.W. Golding & F.C. Widdis, “Electrical Measurement &Measuring Instrument”, A.H. Wheeler& Co. India.			✓
2. A.K. Sawhney, “Electrical & Electronic Measurement & Instrument”, Dhanpat Rai & Sons	✓		
3. Forest K. Harries,“Electrical Measurement”,Willey Eastern Pvt. Ltd. India .			✓
4. M.B. Stout ,“Basic Electrical Measurement” Prentice hall of India.			✓
5. W.D. Cooper,” Electronic Instrument & Measurement Technique “ Prentice Hall International.	✓		
6. Rajendra Prashad ,“Electrical Measurement &Measuring Instrument” Khanna Publisher.			✓
7. J.B. Gupta, “Electrical Measurements and Measuring Instruments”, S.K. Kataria & Sons.		March, 2014	
EE 09: Power Electronics			
Text/Reference Books:			
1. M. Ramamurthy, „Thyristor and their applications‟, East West Publication.			✓
2. PS Bhimbra. „Power Electronics‟, Khanna Publishers.			✓
3. MD Singh and KB Khanchandani, „Power Electronics‟ TMH Edition.			✓
4. AK Gupta and LP Singh, „Power Electronics‟, Dhanpat Rai Publishing Co.			✓
5. Rama Reddy, „Fundamental of Power Electronics‟, Narosa Publishing.			✓
6. G.K. Dubey and C.R. Kasarbada „Power Electronics and Drives', Tata McGraw-Hill			✓
EE 10: Electrical Machines II			
Text/Reference Books:			
1. Fitzgerald & Kingsley, “Electric Machinery” McGraw Hill	✓		
2. Alexander S. Langsdorf, “AC Machines”, Tata McGraw Hill.	✓		
3. MG Say, “Theory Performance and Design of AC Machines” CBS Publisher			✓
4. Nagrath & Kothari,” Electric Machines” TMH	✓		
5. PS Bhimbra, “Electrical Machinery”, Khanna Publishers.			✓
EE 11: Power Systems I			
Text/Reference Books:			

1. Grainger John, J. and Stevenson, Jr. W.D., “Power System Analysis”, McGraw Hill, 1994.	✓		
2. Harder Edwin, I., “Fundamentals of Energy Production”, John Wiley and Sons, 1982.			✓
3. Deshpande, M.V., “Elements of Electric Power Station Design”, A.H. Wheeler and Co. Allahabad, 1979.			✓
4. Burke James, J., “Power Distribution Engineering; Fundamentals and Applications” Marcel Dekker 1996.			✓
5. Wadhwa, C.L., “Electric Power Systems”, Second Edition, Wiley Eastern Limited, 1985.	✓		
6. Nagrath, I.J. and Kothari, D.P., “Power System Engineering”, Tata McGraw Hill, 1995.			✓
EE 13: Electrical Machines Laboratory II			
Text/Reference Books:			
1. I.J.Nagrath and M.Gopal, „Control System Engg“, TMH	✓		
2. M.Gopal, „Control Systems: Principles and Design“, TMH		April, 2014	
2. Ogata, „Control System Engg“, PHI	✓		
3. BC Kuo, „Automatic Control System“, Prentice Hall	✓		
4. RC Dorf and RH Bishop, „Modern Control Systems“, Addison-Wesley Publishers			✓
EE 17: Power Systems II			
Text/Reference Books:			
1. W.D. Stevenson, Jr. “Elements of Power System Analysis”, McGraw Hill.	✓		
2. C.L. Wadhwa, “Electrical Power System”, New Age International.	✓		
3. Chakraborthy, Soni,Gupta & Bhatnagar, “Power System Engineering”, Dhanpat Rai & Co.			✓
4. T.K Nagsarkar & M.S. Sukhija, “Power System Analysis” Oxford University Press,2007.			✓
5. L. P. Singh; “Advanced Power System Analysis & Dynamics”, New Age International			✓
6. Hadi Sadat; “Power System Analysis”, Tata McGraw Hill.			✓
7. P.S.R. Murthy “ Power System Analysis” B.S. Publications,2007.			✓
8. Stagg and El-Abiad, “Computer Methods in Power System Analysis” Tata Mc Graw Hill			✓
9. Kothari & Nagrath, “Modern Power System Analysis” Tata McGraw Hill.	✓		
EE 18: Microprocessors and Microcontrollers			
Text/Reference Books:			
1. R.S. Gaonkar, “Microprocessor Architecture, Programming and Applications”, Penram International.			✓
2. K.J. Ayala, “8051 Microcontroller”, Penram International.			✓

3. D.V. Hall, “Advanced Microprocessor”, TMH.			✓
Text/Reference Books:			
1.G.K. Dubey, “Fundamentals of Electrical Drives” Narosa Publishing House, 1995.			✓
2.SK Pillai, “A First course on Electrical Drives” Wiley Eastern Ltd.			✓
3.V. Subrahmanyam, “ Electric Drives: Concepts and Applications”, Tata Mc Graw Hill			✓
Publishing Co. Ltd., 1994.			
4.GK Dubey, “ Power Semiconductor Controlled Drives, “Prentice Hall, Englewood cliffs, New			✓
Jersey, 1989.			
5.EL- Sharkawi & A Mohamad “ Fundamental of Electric Drive”, Vikas Publishing House			✓
EE 24: Computer Aided Analysis and Design			
Text/Reference Books:			
1. L.P.Singh, „Advanced Power System Analysis and Dynamics‟, New Age International.			✓
2. M.Gopal, „Control Systems: Principles and Design‟, TMH		May, 2014	
3. Vlado Ostovic „Computer-Aided Analysis of Electric Machines: A Mathematical Approach‟, Prentice Hall.			✓
4. Singiresu S. Rao, „ Engineering optimization: theory and practice ‟ , John Wiley & Sons.			✓
5. Paul W. Tuinenga, “SPICE : A guide to circuit Simulation and Analysis Using PSPICE”, Prentice Hall, 1992.			✓
6. M.H. Rashid, “SPICE for Circuits and Electronics Using PSPICE” Prentice Hall of India, 2000.			✓
EE 28: Communication Systems			
Text/Reference Books:			
1. G. Kennedy, “Electronic Communication Systems”, McGraw-Hill, NY .			✓
2. H.Taub and D.L. Schilling, “Principles of Communication Systems”, TMH.			✓
3. W.D. Stanley, “Electronic Communication Systems”, Reston Pub. Co. PH Virginia.			✓
4. W. Tomari & V.F. Alisauskas, “Telecommunications”, PH Inc., NJ.			✓
5. Dungan, Frank R “ Electronic Communication Systems‟ Vikas Publishing House Pvt. Ltd			✓
(Electives under one Group EE*)			
EE*29:Information Technology			
Text/Reference Books:			

1. Leon and Leon, “Fundamental of Information Technology”, Vikas Publishing House.			
2. T.J. O‟Leary & L.I. O‟Leary, “ Computing Essentials 2000-2001-Irwin”, McGraw Hill-2000.			
3. Williams, Sawyer and Hutchinson, “Using Information Technology”, TMH, 2000.			
4. Curtin, Foley, Sen and Morin, “ Information Technology”, TMH.			
EE* 30: Information Security			
Text/Reference Books:			
1. B. Matt, “Computer Security”, Pearson Education., New Delhi, 2003.			
2. W. Stallings, “Cryptography & Network Security”, Pearson Education., New Delhi, 2003.			
3. Rolf Oppliger, “Secrets technologies for world wide web”, 2nd Edn, Artech House, 2003.			
EE*31: Digital Signal Processing			
Text/Reference Books:			
1. S.K. Mitra, “ Digital Signal Processing”, TMH.		April, 2014	
2. Rabinar, Gold, “ Digital Signal Processing” ,PHI.			✓
3. J.G. Proakis and DG Manolakis, “ Digital Signal Processing”,PHI.	✓		
4. Oppenheim and Schafer, “ Discrete Time Signal Processing” , PHI.			✓
5. S. Salivahanan, “Digital Signal Processing”, TMH.	✓		
6. Ingle, Vinay K, “ Digital Signal Processing using Matlab”, Vikas Publishing House			✓
EE*33: High Voltage Engineering			
Text/Reference Books:			
1. M. S. Naidu and V. Kamaraju, “High Voltage Engineering, Tata Mc-Graw Hill.			✓
2. E. Kuffel and W. S. Zacngal, High Voltage Engineering”, Pergamon Press.			✓
3. M. P. Chaurasia , “High Voltage Engineering”, Khanna Publishers			✓
4. R. S. Jha, “High Voltage Engineering”, Dhanpat Rai & sons			✓
5. C. L. Wadhwa, “High Voltage Engineering”, Wiley Eastern Ltd.			✓
6. M. Khalifa, “ High Voltage Engineering Theory and Practice,” Marcel Dekker.			✓
EE*34: Mechatronics			
Text/Reference Books:			

1. Bolton W., “Mechatronics”, Longman, Second Edition, 2004.			✓
2. Histand Michael B.& Alciatore David G., “Introduction to Mechatronics & Measurement Systems”, McGraw			✓
Hill, 2003.			
3. HMT Ltd., “Mechatronics”, Tata McGraw Hill Publishing Co. Ltd., 1998.			✓
4. Nitaigour Premchand Mahalik, “Mechatronics Principles, Concepts * Applications”, TMH 2003.			✓
EE*35: Design of Electrical Machines			
Text/Reference Books:			
1. Clayton A.E., “The performance and design of D.C. Machines”, Pitman (ELBS).			✓
2. Say MG, “The performance and design of A.C. Machines”, Pitman (ELBS).			✓
3. Sawhney AK, “Electrical Machine Design”, Dhanpat Rai & Sons.			✓
EE*36: Computational Intelligence			
Text/Reference Books:			
1. Morris W. Firebaugh, “Artificial Intelligence: A knowledge based approach”, PWS-Kent publishing co.,			✓
2. Rich, “Artificial Intelligence”, McGraw-Hill.			✓
3. Patrick H Winston, “Artificial Intelligence”, Addison Wesley.			✓
4. Peter Jackson, “Introduction to expert systems”, Addison Wesley.			✓
5. Clocksin & Mellish, “Programming in PROLOG”, Springer Pub.			✓
6. John Stobo, “Problem solving with PROLOG”, Pitman Publishing.			✓
EE* 37: Introduction to Robotics			
Text/Reference Books:			
1. John J. Craig, “Introduction to Robotics, Mechanics and Control”, Addison Wesley Publishing.			✓
2. A.J. Koivo, “ Fundamentals for Control of Robotic manipulators”, John Wiley & Sons, NY			✓
3. Lorenzo Sciaviceo, Brsurw Siciliarw, “Modeling & Control of Robot manipulation”, McGraw Hill.			✓
4. M.W. Spong and M. Vidyasagar, “Robot Dyamics and Control,” John Wiley & Sons, NY			✓
EE*38:Non-Conventional Energy Sources and Applications			
Text/Reference Books:			
1. D.S.Chauhan, „Non Conventional Energy Resources‟ New Age Publication			✓

2. G.D. Rai, „Non-conventional energy sources", Khanna Publishers			✓
3. B.H.Khan, „Non Conventional Energy Resources" TMH.			✓
4. H.P.Garg and Jai Prakash, „Solar Energy Fundamentals and Applications", TMH			✓
EE*39: Advanced Instrumentation			
Text/Reference Books:			
1. G.C. Barney, „Intelligent Instrumentation", Prentice Hall, 1995.			✓
2. A.S. Moris, „Principles of Measurement & Instrumentation", Prentice Hall, 1993.			✓
3. S. Gupta , J.P. Gupta, „PC interfacing for Data Acquisition & Process Control", ISA,			✓
4. Gary Johnson, „Lab VIEW Graphical Programming", II Edition, McGraw Hil 1997.			✓
EE*40: Computer Networks			
Text/Reference Books:			
1. Behrouz A. Forouzan, “Data Communication and Networking”, Tata Mc Graw Hill.	✓		
2. A.S. Tanenbaum, “ Computer Networks”, 3rd Edition, Prentice Hall India .			✓
3. S. Keshav, “An Engineering Approach on Computer Networking”, Addition Wesley.			✓
4. W. Stallings, “Data and Computer Communication”, Macmillan Press.			✓
EE*41: Advanced Control Systems			
Text/Reference Books:			
1. M.Gopal, “Digital Control and State variable Methods”, Tata Mc Graw Hill			✓
2. Ajit K.Madal, “Introduction to Control Engineering: Modeling, Analysis and Design” New Age International.			✓
3. D.Landau, “Adaptive Control”, Marcel Dekker Inc.			✓
4. S.Rajasekaran & G.A.Vjayalakshmi Pai, “Neural Networks,Fuzzy Logic and Genetic Alogorithms: Synthesis			✓
and Applications” Prentice Hall of India.			
5. Donald E. Kiv, “Optimal Control Theory: An Introduction” Prentice Hall			✓
6. B.C. Kuo, “Digital Control Systems” Sounders College Publishing			✓
7. C.H.Houpis and G.B.Lamont, “Digital Control Systems: Theory, Hardware, Software”, Mc Graw Hill.			✓
EE*42: Advanced Power Electronics			
Text/Reference Books:			

1. Jacob, Michael Power Electronics: Principles & Application, Vikas Publishing House			✓
2. M.H. Rashid, Power Electronics : Circuits, devices and applications , PHI.			✓
3. Ned Mohan, Tore M. Undeland, William P. Robbins, Power Electronics : Converters, Applications and			✓
Design , John Wiley & Sons.			
4. P.S. Bimbhra, „Power Electronics‟ , Khanna Publishers.			✓
5. M. Ramamoorthy An Introduction to Thyristors and their applications East-West Press.			✓
6. M.D. Singh and K.B. Khanchandani, Power Electronics, Tata McGraw-Hill.			✓
7. A.K. Gupta & L.P. Singh, Power Electronics and Introduction to Drives Dhanpat Rai Publishers			✓
EE*43: Materials in Electrical Systems			
Text/Reference Books:			
1. S.O. Kasap, „Principles of Electrical Engineering Materials,‟ MGH.			✓
2. Mahajan, „Principles of growth and processing of semiconductors,‟ MGH.			✓
3. Dhir, „Electronic components and Materials Principles manufacturing and Maintenance,‟ TMH.			✓
4. Allison, „Electronic Engineering Materials and Devices,‟ TMH.			✓
5. Ruska N Scot, „Microelectronic processing – an introduction to the manufacture of integrated circuits,‟ MGH.			✓
6. Decker, „Electrical Engineering Materials,‟ PHI.			✓
EE*44: Advanced Power Systems			
Text/Reference Books:			
1. D.P. Kothari & I.J. Nagrath, “Modern Power System Analysis” Tata Mc Graw Hill	✓		
2. P.S.R. Murty, “Operation and control in Power Systems” B.S. Publications.			✓
3. N. G. Hingorani & L. Gyugyi, “ Understanding FACTs” Concepts and Technology of Flexible AC			✓
Transmission Systems”			
6. J. Wood & B.F. Wollenburg,“ Power Generation, Operation and Control “ John Wiley			✓
7. O.I. Elgerd, “Electric Energy System Theory” Tata McGraw Hill.			✓
8. P. Kundur, “Power System Stability and Control Mc Graw Hill.			✓
9. M.H. Rashid, “Power Electronics: Circuits, devices and Applications” PHI			✓
10. T. K. Nagsarkar & M.S.Sukhiza, ‟ Power System Analysis‟ Oxford University Press.			✓

EE*45: Switchgear and Relaying			
Text/Reference Books:			
1. A Chakrabarti, ML Soni, PV Gupta and US Bhatnagar, “Power System Engineering” Dhanpat Rai & Sons.			✓
2. IJ Nagrath and DP Kothari,”Power System Engineering” Tata McGraw-Hill.			✓
3. CL Wadhwa, “Electric Power Systems”, Wiley Eastern Limited.	✓		
4. Sunil S. Rao, “Switchgear, Protection and Power Systems”, Khanna Publishers.	✓		
5. Badriram and DN Vishwakarma, “Power System Protection and Switchgear”, TMH			✓
EE*46: Utilization of Electrical Energy & Electric Traction			
Text/Reference Books:			
1. E. Openshaw Taylor, “Utilization of Electric Energy”, Orient Longmans.			✓
2. P.V. Gupta et. al, “A Course in Electrical Power”, Dhanpat Rai & Sons Delhi			✓
3. H. Partap, “Art & Science of Utilization of Electrical Energy”.			✓
4. N.V. Suryanarayana, “Utilization of Electric Power” .			✓
5. BR Sharma, “Utilization of Electrical. Energy”.			✓
6. AT Dover, “Electric Traction”, Pitman.			✓
Electronics and telecommunications			
EC 01: Signals and Systems			
Text/Reference books:			
1. A.V. Oppenheim, A.S. Willsky and I.T. Young, "Signals and Systems", Prentice Hall, 1983.	✓		
2. R.F. Ziemer, W.H. Tranter and D.R. Fannin, "Signals and Systems - Continuous and Discrete", 4th edition,			✓
Prentice Hall, 1998.			
3. A. Papoulis, "Circuits and Systems: A Modern Approach", HRW, 1980.			✓
4. B.P. Lathi, "Signal Processing and Linear Systems", Oxford University Press, c1998.	✓		
5. Douglas K. Lindner, "Introduction to Signals and Systems", Mc-Graw Hill International Edition: c1999.			✓
6. Simon Haykin, Barry van Veen, "Signals and Systems", John Wiley and Sons (Asia) Private Limited, c1998.			✓
7. Robert A. Gabel, Richard A. Roberts, "Signals and Linear Systems", John Wiley and Sons, 1995.			✓
8. M. J. Roberts, "Signals and Systems - Analysis using Transform methods and MATLAB", TMH, 2003.			✓

9. I. J. Nagrath, S. N. Sharan, R. Ranjan, S. Kumar, "Signals and Systems", TMH New Delhi, 2001.	✓		
10.Ashok Ambardar,"Analog and Digital Signal Processing", 2nd Edition, Brooks/ Cole Publishing Company	✓		
(An international Thomson Publishing Company), 1999.			
EC 02: Digital Electronics			
Text/Reference Books:			
1. J. F. Wakerly: Digital Design, Principles and Practices, 4th Edition, Pearson Education, 2005			✓
2. Charles H Roth: Digital Systems Design using VHDL, Thomson Learning, 1998			✓
3. H. Taub and D. Schilling, Digital Integrated Electronics, McGraw Hill, 1977.			✓
4. D.A. Hodges & H.G. Jackson, Analysis & Design of Digital Integrated Circuits, McGraw Hill, 1983.			✓
5. F.J. Hill and G.L. Peterson, Switching Theory and Logic Design, John Wiley, 1981.			✓
6. Z. Kohavi, Switching and Finite Automata Theory, McGraw Hill, 1970.	✓		
EC 03: Electronic Devices			
Text/Reference Books:			
1. D. A. Neamen, Semiconductor Physics and Devices (IRWIN), Times Mirror High Education Group, 1997.	✓		
2. E.S. Yang, Microelectronic Devices, McGraw Hill, Singapore, 1988.			✓
3. B.G. Streetman, Solid State Electronic Devices, Prentice Hall of India, New Delhi, 1995.	✓		
4. J. Millman and A. Grabel, Microelectronics, McGraw Hill, International, 1987.			✓
5. A.S. Sedra and K.C. Smith, Microelectronic Circuits, Saunder's College Publishing, 1991.	✓		
6. R.T. Howe and C.G. Sodini, Microelectronics: An integrated Approach, Prentice Hall International, 1997.			✓
EC 04: Principles of Communication			
Text/Reference Books:			
1. Haykin S., "Communications Systems", John Wiley and Sons, 2001.			✓
2. Proakis J. G. and Salehi M., "Communication Systems Engineering", Pearson Education, 2002.		March, 2014	
3.Taub H. and Schilling D.L., "Principles of Communication Systems", Tata McGraw Hill, 2001.			✓
EC 05: Analog Electronics			

Text/Reference Books:			
1. J.V. Wait, L.P. Huelsman and GA Korn, Introduction to Operational Amplifier theory and applications,			✓
McGraw Hill, 1992.			
2. J. Millman and A. Grabel, Microelectronics, 2nd edition, McGraw Hill, 1988.			✓
3. P. Horowitz and W. Hill, The Art of Electronics, 2nd edition, Cambridge University Press, 1989.			✓
4. A.S. Sedra and K.C. Smith, Microelectronic Circuits, Saunder's College Publishing, Edition IV	✓		
5. Paul R.Gray \& Robert G.Meyer, Analysis and Design of Analog Integrated Circuits, John Wiley, 3rd Edition			✓
EC 06: Control Systems			
Text/Reference Books:			
1. Gopal. M., “Control Systems: Principles and Design”, Tata McGraw-Hill, 1997.		May, 2014	
2. Kuo, B.C., “Automatic Control System”, Prentice Hall, sixth edition, 1993.	✓		
3. Ogata, K., “Modern Control Engineering”, Prentice Hall, second edition, 1991.	✓		
4. Nagrath & Gopal, “Modern Control Engineering”, New Age International, New Delhi			✓
EC 07: Probability and Stochastic Processes			
Text/Reference Books:			
1. H. Stark and J. Woods, ``Probability and Random Processes with Applications to Signal Processing,'' Third			✓
Edition, Pearson Education			
2. A. Papoulis and S. Unnikrishnan Pillai, ``Probability, Random Variables and Stochastic Processes,'' Fourth			✓
Edition, McGraw Hill.			
3. K. L. Chung, Introduction to Probability Theory with Stochastic Processes, Springer International,			✓
4. P. G. Hoel, S. C. Port and C. J. Stone, Introduction to Probability, UBS Publishers,			✓
5. P. G. Hoel, S. C. Port and C. J. Stone, Introduction to Stochastic Processes, UBS Publishers			✓
6. S. Ross, Introduction to Stochastic Models, Harcourt Asia, Academic Press.			✓
EC 08: Linear Algebra			
Text/Reference Books:			
1. K. Hoffman and R. Kunze, Linear Algebra, Prentice-Hall (India), (1986).			✓

2. G.H. Golub and C.F. Van Loan, Matrix Computations, North Oxford Academic, 1983.			✓
3. G. Bachman and L. Narici, Functional Analysis, Academic Press, 1966.			✓
4. E.Kreyszig, Introductory functional analysis with applications John Wiley, 1978.			✓
EC 11:ElectroMagnetic Theory			
Text/Reference Books:			
1. R.K. Shevgaonkar, „Electromagnetic Waves, Tata McGraw Hill India, 2005		April, 2014	
2. E.C. Jordan & K.G. Balmain, Electromagnetic waves & Radiating Systems, Prentice Hall, India			✓
3. Narayana Rao, N: Engineering Electromagnetics, 3rd ed., Prentice Hall, 1997.			✓
4. David Cheng, Electromagnetics, Prentice Hall			✓
EC 12: Digital Signal Processing			
Text/Reference Books:			
1. A.V. Oppenheim and Schafer, Discrete Time Signal Processing, Prentice Hall, 1989.			✓
2. John G. Proakis and D.G. Manolakis, Digital Signal Processing: Principles, Algorithms And	✓		
Applications, Prentice Hall, 1997.			
3. L.R. Rabiner and B. Gold, Theory and Application of Digital Signal Processing, Prentice Hall, 1992.			✓
4. J.R. Johnson, Introduction to Digital Signal Processing, Prentice Hall, 1992.			✓
5. D. J. DeFatta, J. G. Lucas and W. S. Hodgkiss, Digital Signal Processing, John Wiley & Sons,1988.			✓
EC 13: Microprocessors and Microcontrollers			
Text/Reference Books:			
1. R. S. Gaonkar, Microprocessor Architecture: Programming and Applications with the 8085/8080A,			✓
Penram International Publishing, 1996			
2.D A Patterson and J H Hennessy, "Computer Organization and Design The hardware and software interface.			✓
Morgan Kaufman Publishers.			
3. Douglas Hall, Microprocessors Interfacing, Tata McGraw Hill, 1991.			✓
4. Kenneth J. Ayala, The 8051 Microcontroller, Penram International Publishing, 1996.			✓
EC 14: VLSI Design			

Text/Reference Books:			
1. N. Weste and K. Eshranghian, Principles of CMOS VLSI Design, Addison Wesley. 1985			✓
2. L. Glaser and D. Dobberpuhl, The Design and Analysis of VLSI Circuits, Addison Wesley, 1985			✓
3. C. Mead and L. Conway, Introduction to VLSI Systems, Addison Wesley, 1979.			✓
4. J. Rabaey, Digital Integrated Circuits: A Design Perspective, Prentice Hall India, 1997.			✓
5. D. Perry, VHDL, 2nd Ed., McGraw Hill International, 1995.			✓
EC 15: Introduction to Digital communication			
Text/Reference Books:			
1. Wozencraft J. M. and Jacobs I. M., ``Principles of Communication Engineering",John Wiley, 1965.			✓
2.Barry J. R., Lee E. A. and Messerschmitt D. G., ``Digital Communication", Kluwer Academic Publishers, 2004			✓
3. Proakis J.G., ``Digital Communications", 4th Edition, McGraw Hill, 2000.			✓
EC 16: Communication Networks			
Texts/Reference Books:			
1.R G Gallager and D Bertsekas, Data Networks, Prentice Hall of India, 1992.			✓
2.J F Hayes, Modelling and Analysis of Computer Communication Networks, Plenum Publishers, NY,1984.			✓
3.W Stallings, Data and Computer Communications, Prentice Hall of India, 1997.			✓
4.R Rom and M Sidi, Multiple Access Protocols, Springer Verlag, 1990.			✓
5.M DePrycker, ATM-solutions for Broadband ISDN, Prentice Hall of USA, 1995.			✓
EC*22:Microwave Theory and Techniques			
Text/ReferenceBooks			
1.R.E. Collins, Microwave Circuits, McGraw Hill			✓
:2.K.C. Gupta and I.J. Bahl, Microwave Circuits, Artech house			✓
EC*23: IC Technology			
Text/Reference Books:			
1. C.Y. Chang and S.M.Sze (Ed), ULSI Technology, McGraw Hill Companies Inc, 1996.			✓
2. S.K. Ghandhi, VLSI Fabrication Principles, John Wiley Inc., New York, 1983.			✓

3. S.M. Sze (Ed), VLSI Technology, 2nd Edition, McGraw Hill, 1988.			✓
EC*24: Fiber Optic Communication			
Text/Reference Books			
1. J. Keiser, Fibre Optic communication, McGraw-Hill, 2nd Ed. 1992.			✓
2. J.E. Midwinter, Optical fibers for transmission, John Wiley, 1979.			✓
3. T. Tamir, Integrated optics, (Topics in Applied Physics Vol.7), Springer-Verlag, 1975.			✓
4. J. Gowar, Optical communication systems, Prentice Hall India, 1987.			✓
5. S.E. Miller and A.G. Chynoweth, eds., Optical fibres telecommunications, Academic Press, 1979.			✓
6. G. Agrawal, Nonlinear fibre optics, Academic Press, 2nd Ed. 1994.			✓
7. G. Agrawal, Fiber optic Communication Systems, John Wiley and sons, New York, 1992			✓
8. F.C. Allard, Fiber Optics Handbook for engineers and scientists, McGraw Hill, New York (1990).			✓
EC*25: Information Theory and Coding			
Text/Reference Books:			
1. N. Abramson, Information and Coding, McGraw Hill, 1963.			✓
2. M. Mansurpur, Introduction to Information Theory, McGraw Hill, 1987.			✓
3. R.B. Ash, Information Theory, Prentice Hall, 1970.			✓
4. Shu Lin and D.J. Costello Jr., Error Control Coding, Prentice Hall, 1983.			✓
EC*26: Speech and Audio Processing			
Text/Reference Books:			
“Digital Speech” by A.M.Kondoz, Second Edition (Wiley Students‟ Edition), 2004.			✓
“Speech Coding Algorithms: Foundation and Evolution of Standardized Coders”, W.C. Chu, Wiley			✓
Inter science, 2003.			
EC^29:Adaptive Signal Processing			
Text/Reference Books:			
1. S. Haykin, Adaptive filter theory, Prentice Hall, 1986.			✓
2. B. Widrow and S.D. Stearns, Adaptive signal processing, Prentice Hall, 1984.			✓

EC^30: Antennas and Propagation			
Text/Reference Books:			
1.J.D. Kraus, Antennas, McGraw Hill, 1988.			✓
2.C.A. Balanis, Antenna Theory - Analysis and Design, John Wiley, 1982.			✓
3.R.E. Collin, Antennas and Radio Wave Propagation, McGraw Hill, 1985.			✓
4.R.C. Johnson and H. Jasik, Antenna Engineering Handbook, McGraw Hill, 1984.			✓
5.I.J. Bahl and P. Bhartia, Micro Strip Antennas, Artech House, 1980.			✓
6.R.K. Shevgaonkar, Electromagnetic Waves, Tata McGraw Hill, 2005	✓		
7. R.E. Crompton, Adaptive Antennas, John Wiley			✓
EC^31: Bio-Medical Electronics			
Text/Reference Books:			
1.W.F. Ganong, Review of Medical Physiology, 8th Asian Ed, Medical Publishers, 1977.			✓
2.J.G. Websster, ed., Medical Instrumentation, Houghton Mifflin, 1978.			✓
3.A.M. Cook and J.G. Webster, eds., Therapeutic Medical Devices, Prentice-Hall, 1982.			✓
EC^32: Mobile Communication and Networks			
Text/Reference Books:			
1.WCY Lee, Mobile Cellular Telecommunications Systems, McGraw Hill, 1990.			✓
2.WCY Lee, Mobile Communications Design Fundamentals, Prentice Hall, 1993.			✓
3.aymond Steele, Mobile Radio Communications, IEEE Press, New York, 1992.			✓
4.AJ Viterbi, CDMA: Principles of Spread Spectrum Communications, Addison Wesley, 1995.			✓
5.VK Garg &JE Wilkes, Wireless & Personal Communication Systems, Prentice Hall, 1996.			✓
EC^33: Image and Video Processing			
Text/Reference Books:			
“Digital Image Processing”, by R.C.Gonzalez and R.E. Woods, Second Edition, Pearson Education.			✓
“Fundamentals of Digital Image Processing”, by Anil Kumar Jain. Prentice Hall of India.			✓
“Video Processing” by Murat Tekalp.			✓

Mechanical Engineering			
ME 01: Mechanisms and Machines			
1. Mallik, A. K., Ghosh, A., & Dittrich, G. Kinematic analysis and synthesis of mechanisms: CRC Press.			✓
2. Uicker, J. J., Pennock, G. R., & Shigley, J. E. Theory of machines and mechanisms: OUP.			✓
3. Norton, R. L. Design of machinery: An Introduction to the Synthesis and Analysis of Mechanisms and Machines: McGraw-Hill.			✓
4. Rattan.S.S. Theory of Machines: McGraw-Hill Education (India) Pvt Ltd.		March, 2014	
5. Rao, J. S. The Theory Of Machines Through Solved Problems: New Age International			✓
6. Ballaney PL, Theory of Machines and Mechanisms, Khanna Publications.			✓
7. Bevan, T. The theory of machines: A Text-Book for Engineering Students: Pearson Education		April, 2014	
8. Vinogradov, O. G. Fundamentals of kinematics and dynamics of machines and mechanisms: CRC Press			✓
9. PTEL courses: http://nptel.iitm.ac.in/courses.php, related web and video resources on Kinematics of Machines and Dynamics of Machines.			
ME 02: CAD and Computer Graphics			
1. McConnell, J. J. Computer graphics theory into practice Jones and Bartlett Publishers.			✓
2. Davis, M. J. Computer Graphics Nova Science Pub Inc.			✓
3. Rogers, D. F., Earnshaw, R. A., Graphics, B. C. S. C., Group, D., & Society, C. G. Computer graphics techniques theory and practice Springer-Verlag			✓
4. Salomon, D. Transformations and projections in computer graphics Springer.			✓
5. Bethune, J. D. Engineering Design and Graphics with SolidWorks Prentice Hall.			✓
6. Zeid, I. Mastering CAD/CAM (Engineering Series) McGraw-Hill Higher Education			✓
7. NPTEL courses http//nptel.iitm.ac.in/courses.php- web and video resources on Computer Aided Design and Manufacturing.			
ME 03: Engineering Workshop II			
1. Kalpakjian, S., & Schmid, S. R. Manufacturing processes for engineering materials: Pearson Education.			✓
2. DeGarmo, E. P., Black, J. T., & Kohser, R. A. Materials and processes in manufacturing: Wiley.			✓
3. Lindberg, R. A. Processes and materials of manufacture: Allyn and Bacon.			✓
4. Chapman, W. Workshop Technology: Edward Arnold.			✓

5. NPTEL courses, http://www.nptel.iitm.ac.in/courses.php?disciplineId=112 web and video resources on Manufacturing Processes II by Prof. A.K. Chattopadhyay,Prof. A.B. Chattopadhyay,Prof. S. Paul.			
ME 04: Design of Machine Elements			
1. Budynas, R. G., & Nisbett, J. K.. Shigley's mechanical engineering design: McGraw-Hill.			✓
2. Norton, R. L. Machine design: an integrated approach: Prentice Hall			✓
3. Spotts, M. F., Shoup, T. E., & Hornberger, L. E. Design of machine elements: Pearson /Prentice Hall			✓
4. Hamrock,B.J. et.al., Fundamentals of Machine Elements, McGraw Hill			✓
5. Bhandari, V. B. Design of Machine Elements: McGraw-Hill Education (India) Pvt Ltd.		May, 2014	
6. Juvinall, R. C., & Marshek, K. M. Fundamentals of machine component design: John Wiley.			✓
7. NPTEL courses: http://nptel.iitm.ac.in/courses.php - web and video resources on Dynamics of Mechanical System/ Design of Machine Elements /Machine Design.			
ME 05: Primary Manufacturing			
1. Rao.P.N. 2001. Manufacturing technology: foundry, forming and welding: McGraw-Hill.			✓
2. Ghosh, A., & Mallik, A. K. 1986. Manufacturing science: Ellis Horwood.			✓
3. Kalpakjian, S., & Schmid, S. R. 2008. Manufacturing processes for engineering materials: Pearson Education.			✓
4. Campbell, J. S. Principles of manufacturing materials and processes: Tata McGraw-Hill			✓
5. Date. P.P. Introduction to manufacturing processes;Jaico Publishing House			✓
6. NPTEL courses, http://www.nptel.iitm.ac.in/courses.php?disciplineId=112 web and video resources on Manufacturing Processes I			
ME 06: Fluid Mechanics			
1. Som, S. K., & Biswas, G. Introduction to fluid mechanics and fluid machines: Tata McGraw-Hill.		May, 2014	
2. Fox, R. W., McDonald, A. T., & Pritchard, P. J. Introduction to fluid mechanics: Wiley	✓		
3. Munson, B. R., Young, D. F., & Okiishi, T. H. Fundamentals of fluid mechanics: Student solutions manual: Wiley.	✓		
4. Bansal, R. K. A textbook of fluid mechanics and hydraulic machines: (in S.I. units): Laxmi Publications.		May, 2014	
5. Massey, B. S., & Ward-Smith, J. Mechanics of fluids: Stanley Thornes.		April, 2014	

6. NPTEL courses: http://nptel.iitm.ac.in/courses.php - web and video resources on Fluid Mechanics.			
ME 07: Heat Transfer			
1. Som, S. K Introduction To Heat Transfer. Prentice-Hall of India Pvt. Ltd.	✓		
2. Incropera, F. P., DeWitt, D. P., Bergman, T. L., & Lavine, A. S. Fundamentals of Heat and Mass Transfer: John Wiley & Sons.	✓		
3. Özısık, M. N. Heat transfer: a basic approach: McGraw-Hill.		April, 2014	
4. Holman, J. P. Heat Transfer: McGraw Hill Higher Education.	✓		
5. Çengel, Y. A. Heat transfer: a practical approach: McGraw-Hill.	✓		
6. Lienhard, J. H., & Lienhard, J.H. A Heat Transfer Textbook: Fourth Edition: Dover Publications	✓		
ME 08: Control Engineering			
1. Kuo, B. C., Automatic Control Systems, Prentice Hall.	✓		
2. Ogata, K., Modern Control Engineering, Prentice Hall	✓		
3. Franklin, G. F., Powell, J. D., Emami-Naeini, A., Feedback Control of Dynamic Systems, Pearson Education Inc.			✓
4. Gopal. M., Control Systems Principles and Design, Tata McGraw-Hill.		March, 2014	
5. Eronini Umez-Eronini, System Dynamics & Control, Brooks/ Cole Publishing Company.			✓
6. Mukherjee.A, Karmakar.R and Samantaray.A.K, Bond Graph in Modeling, Simulation and Fault Identification, I. K. International Publishing House Pvt. Ltd			✓
7. Karnopp, Margolis, Rosenberg, System Dynamics Modeling and Simulation of Mechatronic Systems,Wiley (Higher education).			✓
8. Bernard Friedland, Control Systems Design, McGraw-Hill.			✓
9. NPTEL courses, http//nptel.iitm.ac.in/courses.php, web and video courses on Control Engineering by Professor Gopal, M., Prof. Agashe, S. D, and Sivakumar, M. S.			
ME 09: Integrated Design & Manufacturing			
1. Asimow, M. Theory and principles of engineering design: Course 106B: Engineering Design: Dept. of Engineering, Univ. of Calif.			✓
2. Asimov, M. Introduction to design: Prentice-Hall.			✓
3. Pugh, S. Total design: integrated methods for successful product engineering: Addison- Wesley Pub.			✓
4. Bralla, J. G. Design for manufacturability handbook: McGraw-Hill.			✓
5. Fiksel, J., & Fiksel, J. R. Design for environment: a guide to sustainable product development: McGraw-Hill.			✓
6. Anderson, D. M. Design for manufacturability & concurrent engineering: how to design for low cost, design in high quality, design for lean manufacture, and design quickly for fast production: CIM Press.			✓
7. Ashby, M. F. Materials selection in mechanical design: Elsevier Butterworth- Heinemann.			✓

ME 10: Machine Tools and Machining			
1. Sen, G. C., & Bhattacharyya, A. Principles of Machine Tools: New Central Book Agency			✓
2. Bhattacharyya A, Theory & Practice Of Metal Cutting, New Central Book Agency			✓
3. Boothroyd, G., & Knight, W. A. Fundamentals of machining and machine tools: Taylor and Francis.			✓
4. Trent, E. M. Metal cutting: Butterworth Heinemann			✓
5. Stephenson, D. A., & Agapiou, J. S. Metal cutting theory and practice: CRC Taylor & Francis.			✓
6. Dotson, C. Fundamentals of dimensional metrology: Thomson Delmar.			✓
7. Kelly, P. Metrology: BiblioBazaar.			✓
8. Jain, R.K., Engineering Metrology, Khanna Publisher			✓
9. Smith, G. T. Industrial metrology: surfaces and roundness: Springer.			✓
10. Griffiths, B. Manufacturing surface technology: surface integrity & functional performance:Taylor & Francis.			✓
11. NPTEL courses, http://www.nptel.iitm.ac.in/courses.php?disciplineId=112 web and videoresources on Manufacturing Processes II by Prof. A.K. Chattopadhyay,Prof. A.B. Chattopadhyay,Prof. S. Paul.			
ME11:Non-Traditional and Computer Aided Manufacturing			
1. Mishra, P. K., Non Conventional Machining, Narosa Publishing House			✓
2. Pandey and Shan, Modern Machining Processes, McGraw Hill			✓
3. Bhattacharya, A., New Technology, Institution of Engineers (I)			✓
4. Jain, S. K. and Schmid, S. R., Manufacturing Engg. & Technology, Addison Wesley Ltd.			✓
5. NPTEL courses, http://www.nptel.iitm.ac.in/courses.php?disciplineId=112 web and video resources on Manufacturing Processes & Advanced manufacturing processes.			
ME12:IC Engines and Refrigeration			
1. Ganesan.V. Internal combustion engines: Tata Mcgraw-Hill Publishing Company Limited.		April, 2014	
2. Heywood, J. B. Internal combustion engine fundamentals: McGraw-Hill.			✓
3. Pulkrabek, W. W. Engineering Macmillan.			✓
4. Arora, C. P. Refrigeration and air conditioning: McGraw-Hill.		April, 2014	
5. Stoecker, W. F., & Jones, J. W. Refrigeration and air conditioning: McGraw-Hill.			✓
6. Lumley, J. L;Engines: an introduction: Cambridge University Press.			✓

7. Ferguson, C. R., & Kirkpatrick, A. T. Internal combustion engines: applied thermosciences: John Wiley.			✓
8. Stone, R. Introduction to internal combustion engines:			✓
9. Whitman, W. C., Johnson, W. M., & Tomczyk, J. Refrigeration & air conditioning technology: Delmar			✓
10. Dossat. Principles of Refrigeration: Pearson Education.			✓
ME13:Power Plant Engineering			
1. Nag.P.K. Power plant engineering: Tata McGraw-Hill.		March, 2014	
2. Arora, S. C., & Domkundwar, S. A course in power plant engineering: Dhanpat Rai.			✓
3. Elanchezhian, C. Power Plant Engineering: I.K. International Pub. House.			✓
4. Sharma, P. C. Power Plant Engineering: S. K. Kataria & Sons.			✓
5. Drbal, L. F., Boston, P. G., Westra, K. L., Black, & Veatch. Power plant engineering: Chapman & Hall			✓
6. Skrotzki, B. G. A., & Vopat, W. A. Power station engineering and economy: McGraw- Hill.			✓
ME14:Project andProduction Management			
1. Shtub, A., Bard, J. F., & Globerson, S. Project management: engineering, technology, and implementation: Prentice Hall.			✓
2. Lock, D. Project management: Gower			✓
3. Kerzner, H. Project Management: A Systems Approach to Planning, Scheduling, and Controlling: John Wiley & Sons.			✓
4. Murthy, P. R. Production and Operations Management: New Age International (P) Ltd. Publishers.			✓
5. Panneerselvam, R. Production and Operations Management: Prentice-Hall of India Pvt. Ltd.			✓
6. Mayer, R. R. Production management: McGraw-Hill.			✓
7. Harding, H. A. Production management: Macdonald and Evans.			✓
ME*15:Environmental Pollution andAbatement			✓
1. Schnelle, K. B., & Brown, C. A. Air pollution control technology handbook: CRC Press.			✓
2. Peavy, H. S., Rowe, D. R., & Tchobanoglous, G. Environmental engineering: McGraw-Hill.			✓
3. Vesilind, P. A., Morgan, S. M., & Heine, L. G Introduction to Environmental Engineering: Cengage Learning.			✓
ME*16: Soft Computing Techniques			
1. Konar, A Computational intellingence [i.e. intelligence]: principles, techniques, and applications: Springer.			✓
2. Friedman, M., & Kandel, A. Introduction to pattern recognition: statistical, structural, neural, and fuzzy logic approaches: World Scientific.			✓
3. Jang, J. S. R., Sun, C. T., & Mizutani, E. Neuro-fuzzy and soft computing: a computational approach to learning and machine intelligence: Prentice Hall.			✓

4. Mitchell, M. An introduction to genetic algorithms: MIT Press.			✓
5. Ross, T. J. Fuzzy Logic with Engineering Applications: John Wiley & Sons.			✓
ME*17: Vibration and Noise Contro			
1. Meirovitch Leonard; Element of Vibration Analysis; TMH			✓
2. Singiresu Rao, Mechanical Vibrations , Pearson Education		March, 2014	
3. Dukikipati RV Srinivas J Text book of Mechanical Vibrations; PHI			✓
4. Thomson , W.T., Theory of Vibration with Applications , C.B.S Pub & distributors			✓
5. Ambekar A.G., Mechanical Vibrations and Noise Engineering; PHI.			✓
6. G.K. Grover, Mechanical Vibration , Nem chand and Bross , Roorkee .		March, 2014	
ME*18: Advanced Mechanics of Solids			
1. Bruhns, O. T Advanced mechanics of solids: Springer			✓
2. Cook, R. D., & Young, W. C. Advanced mechanics of materials: Macmillan			✓
3. Ugural, A. C., & Fenster, S. K. Advanced strength and applied elasticity: PTR Prentice Hall.			✓
4. Hartog, J. P. D. Advanced strength of materials: Dover Publications.			✓
5. Boresi, A. P., Schmidt, R. J., & Sidebottom, O. M. Advanced Mechanics of Materials: John Wiley			✓
6. Solecki, R., & Conant, R. J. Advanced mechanics of materials: Oxford University Press.			✓
ME*19:Advanced Computer Graphics and Solid Modeling			
1. Hoffmann, C.M., Geometric and Solid Modeling: an introduction, Morgan Kaufman.			✓
2. Farin, G., Curves and Surfaces for Computer Aided Geometric Design: A Practical Guide, Academic Press Inc.			✓
3. Watt A. and M. Watt, Advanced Animation and Rendering Techniques Theory and Practice, Addison-Wesley.			✓
4. Foley, J.D., A. van Dam, S. Feiner, and J. Hughes, Computer Graphics: Principles and Practice, Addison-Wesley			✓
5. Neider, J., T. Davis, and M. Woo, OpenGL Programming Guide , Addison-			✓
6. WesleyBlinn J., A Trip Down the Graphics Pipeline. Jim Blinn's Corner Morgan Kaufmann			✓
ME* 20: Finite Element Methods in Engineering			
1. Chandrupatla T.R., and Belegundu A.D., Introduction to Finite Elements in Engineering, Pearson Education			✓
2. David V Hutton, Fundamentals of Finite Element Analysis McGraw-Hill Int. Ed.			✓
3. Rao S.S. The Finite Element Method in Engineering, Pergammon Press.			✓

4. Logan D.L., A First course in the Finite Element Method, Third Edition, Thomson Learning,			✓
5. Robert D.Cook., David.S, Malkucs Michael E Plesha , Concepts and Applications of Finite Element Analysis.			✓
6. Reddy J.N, An Introduction to Finite Element Method, McGraw-Hill International Student Edition			✓
7. O.C.Zienkiewicz and R.L.Taylor, The Finite Element Methods, Vol.1. The basic formulation and linear problems, Vol.1, Butterworth Heineman.			✓
ME^ 21:Advanced Fluid Mechanics			
1. Kundu, P. K., Cohen, I. M., & Dowling, D. R. Fluid Mechanics with Multimedia DVD: Elsevier Science & Technology.			✓
2. Muralidhar, K., & Biswas, G. Advanced engineering fluid mechanics: Alpha Science International.			✓
3. Graebel, W. P. Advanced fluid mechanics: Academic Press.			✓
4. Streeter, V. L. Fluid mechanics: McGraw-Hill.		April, 2014	
5. Fox, R. W., McDonald, A. T., & Pritchard, P. J. Introduction to Fluid Mechanics: John Wiley.	✓		
6. Anderson, J. D. Computational fluid dynamics: the basics with applications: McGraw-Hill.			✓
7. Yahya, S. M Fundamentals of Compressible Flow: New Age International.		April, 2014	
ME^22:Advanced Engineering Thermodynamics			
1. Bejan, A. Advanced engineering thermodynamics: John Wiley & Sons.			✓
2. Bejan, A. Entropy generation minimization: the method of thermodynamic optimization of finite-size systems and finite-time processes: CRC Press.			✓
3. Annamalai, K., & Puri, I. K.Advanced thermodynamics engineering: CRC Press.			✓
4. Wark, K. Advanced thermodynamics for engineers: McGraw-Hill.			✓
5. Winterbone, D. E. Advanced thermodynamics for engineers: Arnold			✓
ME^23:Introduction to Human Body Mechanics			
1. LeVeau, B. F. Biomechanics of Human Motion: Basics and Beyond for the Health Professions: Slack Incorporated.			✓
2. Tözeren, A. Human body dynamics: classical mechanics and human movement: Springer.			✓
3. Yamaguchi, G. T. Dynamic Modeling of Musculoskeletal Motion: A Vectorized Approach for Biomechanical Analysis in Three Dimensions: Springer.			✓
4. Zatsiorsky, V. M. Kinematics of human motion: Human Kinetics.			✓
5. Nordin, M., & Frankel, V. H. Basic biomechanics of the musculoskeletal system: Lippincott Williams & Wilkins.			✓
6. Winter, D. A. Biomechanics and Motor Control of Human Movement: Wiley			✓

7. Perry, J. Gait analysis: normal and pathological function: Slack			✓
ME^24:Tribology			
1. I.M. Hutchings, Tribology, Friction and Wear of Engineering Material, Edward Arnold			✓
2. T.A. Stolarski, Tribology in Machine Design , Industrial Press Inc			✓
3. E. P.Bowden and Tabor.D., Friction and Lubrication , Heinemann Educational Books Ltd			✓
4. A. Cameron, Basic Lubrication theory , Longman, U.K.., 1981.			✓
5. M. J.Neale (Editor), Tribology Handbook, Newnes. Butter worth, Heinemann, U.K.			✓
ME^25:Turbo Machinery			
1. Yahya, S. M. Turbines compressors and fans: Tata McGraw-Hill.		March, 2014	
2. Gorla, R. S. R., & Khan, A. A. Turbomachinery: Design and Theory: Marcel Dekker, Inc.	✓		
3. Dixon, S. L. Fluid mechanics and thermodynamics of turbo machinery: Butterworth-Heinemann.			✓
4. Peng, W. W. Fundamentals of turbomachinery: J. Wiley.			✓
5. Baskharone, E. A. Principles of turbomachinery in air-breathing engines: Cambridge University Press.			✓
ME^26:Welding Technology			
1. Abbott, J., & Smith, K. M.Welding Technology: Texas State Technical College Publishing.			✓
2. Radhakrishnan.V.M. Welding Technology and Design, New Age International Pub. Ltd.,			✓
3. Little R.L.,Welding Technology Tata McGraw-Hill			✓
4. Partner R.S.Welding Process and Technology, Khanna Publishers			✓
5. Lancaster J.F.,Metallurgy of Welding,George Allen and Unwin			✓
6. “AWS Welding Hand Book”, Volume 1 to 4, AWS.			✓
ME^27: Automobile Engineering			
1. Crolla, D. Automotive Engineering: Powertrain, Chassis System and Vehicle Body: Butterworth-Heinemann.			✓
2. Heisler, H. Advanced vehicle technology: Butterworth-Heinemann.			✓
3. Happian-Smith, J. An introduction to modern vehicle design: Butterworth-Heinemann.			✓
4. Newton, Steeds and Garet, Motor vehicles, Butterworth Publishers.			✓
5. Crouse, W. H., & Anglin, D. L. Automotive Mechanics, Study Guide: McGraw-Hill			✓
ME+28: Quality Assurance and Reliability			
1. D C Montgomery ;Introduction to statistical Quality Control , John Wiley and Sons.			✓
2. J M Juran, Frank M Gryna ;Quality Planning & Analysis; Tata McGraw Hill,			✓

3. NVR Naidu, KM Babu and G. Rajendra; Total Quality Management; New Age International Pvt.			✓
4. Grant and Leavenworth ; Statistical Quality Control, McGraw Hill,			✓
5. Janet L Novak and Kathleen C Bosheers ;The QS9000 Documentation Toolkit," Prentice Hall PTR,			✓
6. Suresh Dalela and Saurabh ;ISO 9000 a Manual for Total Quality Management, S. Chand Co.			✓
7. Kesavan R;Total Quality Management -., I.K. International.			✓
ME+29:Mechanical Handling Systems and Equipment			
1. N. Rudenko, „Material Handling Equipments", Peace Publishers, Moscow.			✓
2. James M. Apple, „Material Handling System Design", John-Willlwy and Sons Publication, New York.			✓
3. John R. Immer, „Material Handling" McGraw Hill Co. Ltd., New York.			✓
4. Colin Hardi, „Material Handling in Machine Shops". Machinery Publication Co. Ltd., London.			✓
5. M .P. Nexandrn, „Material Handling Equipment", MIR Publication, Moscow.			✓
6. C. R. Cock and J. Mason, „Bulk Solid Handling", Leonard Hill Publication Co. Ltd., U.S.A.			✓
7. Spivakovsy, A.O. and Dyachkov, V.K., „Conveying Machines", Volumes I and II, MIR Publishers			✓
8. Kulwiac R. A., „Material Handling Hand Book", JohnWilly Publication, New York.			✓
ME+30:Simulation of Mechanical Systems			
1. Geoffrey Gordon ,System Simulation; Prentice Hall.			✓
2. Robert E. Shannon ; System Simulation: The Art and Science ; Prentice Hall			✓
3. J. Schwarzenbach and K.F. Gill Edward Arnold; System Modelling and Control			✓
4. M Close and Dean K. Frederick; Modeling and Analysis of Dynamic Systems ;Houghton Mifflin			✓
108ME+31:Applied Elasticity and Plasticity			
1. A I Lurie ; Theory of Elasticity (Foundations of Engineering Mechanics)			✓
2. Gladwell G M Kluwer ; Contact Problems in the Classical Theory of Elasticity; Aca			✓
3. Chakrabarty J.,Applied Plasticity; Springer-Verlag			✓
4. R. Hill ;The Mathematical Theory of Plasticity, Oxford University			✓
ME+32:Modern Control Theory			
1. Chen C. T., „Linear Systems: Theory & Design", Oxford University Press New York			✓
2. Gopal M., „Modern Control Systems Theory", New Age International New Delhi.			✓

3. Goodwin , Graebe S F & Salgado M E, „Control Systen Design‟, Prentice Hall			✓
4. Ogata K., „Discrete Time Control Systems‟, (Prentice Hall of India, Delhi)			✓
ME+33:Non-Destructive Evaluation and Testing			
1. P. Halmshaw ;Non-Destructive Testing			✓
2. Metals Handbook Vol. II, Non-destructive inspection and quality control.			✓
ME+34: Technology ofSurfaceCoating			
1. Brian N. Chapman ;Science and technology of surface coating, Academic Press.			✓
2. Niir Board ;Modern technology of surface coating with formulae & their applications, Asian Pacific Business Press,			✓
3. Swaraj Paul ;Surface coatings: science & technology, Edition 2, J. Wiley, ISBN 0471958182.			✓
4. P. Ghosh ;Adhesive and Coating Technology, Tata McGraw Hill.			✓
5. Donatas Satas, Arthur A. Tracton ;Coatings technology handbook, Marcel Dekker.			✓
ME+35: Mechatronics			
1. David G. Alciatore, and Michael B. Histand, “Introduction to Mechatronics and Measurement Systems”, Tata McGraw Hill, New Delhi.			✓
2. W. Bolton, “Mechatronics”, Pearson Education Asia, New Delhi.			✓
3. Dan Necsulescu, “Mechatronics”, Pearson Education Asia, New Delhi.			✓
4. N. P. Mahalik, “Mechatronics”, Tata McGraw Hill, New Delhi.			✓
5. Wolfram Stadler, “Analytical Robotics and Mechatronics”, McGraw-Hill Book Co.			✓
6. Eronini Umez-Eronini, “System Dynamics & Control”, Thomson Asia			✓
7. Shetty Devdas and Richard A Kolk, “Mechatronics System Design”, Thomson Learning, Vikas Publishing House, New Delhi.			✓
MEx36:Design and Optimization			
1. H. Adeli. Advances in Design Optimization.			✓
2. Robert F. RHYDER ,Manufacturing Process Design and Optimization, , New York: Marcel Dekker,			✓
3. S.S.Rao ,Optimization: Theory & Application Wiley Eastern			✓
4. K. Deb ,Optimization for engineering design, Prentice Hall India			✓
5. J.S.Arora ,Introduction to optimum design, McGraw Hill			✓
MEx37: Machinery Fault Diagnostics and Signal Processing			
1. E. S. Tehrani and K. Khorasani,Fault diagnostics of a nonlinear system using a hybrid approach ,Springer.			✓
2. Paresh Girdhar, Cornelius Scheffer ,Practical machinery vibration analysis and predictive maintenance, Elsevier			✓

3. Rolf Isermann, B. Freyermuth, Fault Detection, Supervision and Safety for Technical Processes, Pergamon Press.			✓
MEx38:Nuclear Power Generation and Supply			
1. A.K. Raja, A.P. Srivastava & M. Dwivedi, An Introduction on Nuclear Engineering,			✓
2. Arora & Domkundwar ,A course in Power Plant Engg-			✓
3. P.K. Nag.Nuclear Power Plant, Power Plant Engg. (Steam & Nuclear)			✓
4. Glasstone & Sesons- Nuclear Engineering			✓
MEx39:QuantityProduction Methods			
1. Groover, M. P. Fundamentals of Modern Manufacturing: Materials, Processes, and Systems, John Wiley & Sons			✓
2. Wakil, S. D. E. Processes and design for manufacturing: PWS Pub. Co			✓
3. Kalpakjian, S. Manufacturing engineering and technology: Addison-Wesley Pub. Co.			✓
4. Lindberg, R. A.Processes and materials of manufacture: Allyn and Bacon.			✓
5. Ghosh, A., & Mallik, A. K. Manufacturing science: Ellis Horwood.			✓
6. Mishra P.K.Nonconventional machining. Narosa Publishing House			✓
7. A. Ghosh ; Rapid Prototyping.			✓
8. Donaldson, C., LeCain, G. H., & Goold, V. C. Tool design: McGraw-Hill.			✓
9. P.Palay; Material cutting Tool production.			✓
10. Parsons, S. A. J. Metrology and gauging: Macdonald & Evans.			✓
MEx40: Theory of Combustion and Emission			
1. V .Ganesan, Internal Combustion Engines, Tata McGraw Hill Book Co.		March, 2014	
2. John B. Heywood, Internal Combustion Engine Fundamentals. Tata McGraw Hill New Delhi			✓
3. Mathur, M. L, and Sharma. R. P., A Course in Internal Combustion Engines, Dhanpat Rai- Publications New Delhi			✓
4. Obert, E. F., Internal Combustion Engine and Air Pollution, International Text Book Publishers			✓
5. K.K. Ramalingam, Internal Combustion Engines, Scitech Publications (India) Pvt. Ltd.			✓
6. Cohen, H, Rogers, G. E. C, and Saravanamuttoo, H. I. H., Gas Turbine Theory, Longmans			✓
MEx41: Computational Fluid Dynamics			
1. Muralidhar, K., and Sundararajan, T., “Computational Fluid flow and Heat Transfer", Narosa Publishing House,			✓
2. Ghoshdasdidar, P.S., “Computer simulation of flow and heat transfer", Tata McGraw – Hill, New Delhi			✓

3. Anderson, D. A., Tannehill, J. L, and Pletcher, R.H., “Computational fluid mechanics and Heat Transfer", Hemisphere Publishing Corporation,			✓
4. John David Anderson, "Computational Fluid Dynamics: The Basics with Applications", McGraw Hill , New York			✓
MEx42: Robotics: Mechanics and Control			
1. John J. Craig, Introduction to Robotics: Mechanics and Control, Addison-Wesley.			✓
2. Tsuneo Yoshikawa, Foundations of Robotics, MIT Press.			✓
3. Saeed B. Niku, Introduction to Robotics: Analysis, Systems, Applications, Pearson Education Inc.			✓
4. Spong M. W., and Vidyasagar M., Robot Dynamics and Control, John Wiley & Sons.			✓
5. Murray R. M., et al, A Mathematical Introduction to Robotic Manipulation, CRC Press,			✓
6. Waldron K. J., and Kinzel G. L., Kinematics, Dynamics and Design of Machinery, John Wiley			✓
7. Eronini Umez-Eronini, System Dynamics & Control, Brooks/ Cole Publishing Company,.			✓
8. Amalendu Mukherjee, Ranjit Karmakar and Arun Kumar Samantaray, Bond Graph in Modelling, Simulation and Fault Identification, I. K. International Publishing House Pvt. Ltd			✓
Computer Science			
CS 01: Data Structures & Algorithms			
1.Data Structures and Algorithms by Alfred V. Aho, Jeffrey D. Ullman & John E. Hopcraft, Addison Westlwy Series (19836)			✓
2. Data Structures and Algorithm Analysis in Java (3rd Edition) by Mark Allen Weiss, Addison Wesley, (2011).			✓
1. T.H. Cormen, C.E. Leiserson, and R.L. Rivest. Introduction to Algorithms. The MIT Press and McGraw-Hill Book Company, Cambridge, Massacusetts, 1990 (Available in Indian Edition).			✓
2. Steven S. Skiena. The Algorithm Design Manual. Springer, Second Edition, 2008.			✓
CS 02: Computer Organization and Design			
1. Computer Organization by V. Carl Hamacher, Safwat G. Zaky and Zvonko G. Vranesic , McGraw-Hill series (2002)			✓
1.Computer Organization and Design, by David Patterson and John Hennessey, ” Elsevier. 2008.			✓
2.Computer System Architecture by Mano, M.M.,, Prentice Hall of India, New Delhi, 1992		May, 2014	
3.Computer Systems Design and Architecture (2nd Edition) by Vincent P. Heuring and Harry F. Jordan (Dec 6, 2003)			✓
4.Computer Architecture and Organization, by Hayes, J.P.1998, McGraw-Hill			✓

CS 03: Discrete Mathematics			
1. “Discrete Mathematics and Its Applications”, by Kenneth H. Rosen, Tata McGraw Hill, 6th edition, ISBN: 0072880082© 2007			✓
2. ” Elements of Discrete Mathematics”, by C. L. Liu, Tata McGraw Hill Education Private Limited, 3rd edition,2008			✓
CS 04: Digital Systems			
1. M Morris Mano, Digital Design, 3rd Edition, 2006, PHI			✓
2. R. P Jain, Modern Digital Electronics, Second Edition, TMH	✓		
3. Bignell &Donovan Digital Electronics, 4th Edition, 2007, Thomson Learning.			✓
1. Tocci : Digital Systems PHI , 6e, 2001			✓
2. Uyemura : Digital Systems Design, 2003, Thomson Learning			✓
3.Anand Kumar : Digital Integrated Electronics ,2ed 2009			✓
CS 05: Operating Systems (Unix Programming)			
1. Operating Systems Concepts – Silberschatz, Galvin, Wiley Publications (2008)			
2. Modern Operating Systems - Andrew S. Tenenbaum, Pearson Education Asia / PHI (2005)			✓
3.UNIX System Programming Using C++,by Terrence Chan: Prentice Hall India, 1999.			✓
4. Advanced Programming in UNIX Environment, by W. Richard Stevens: 2nd Ed, Pearson Education, 2005.			✓
1.Operating Systems – William Stallings, Pearson Education Asia (2002)			✓
2.Operating Systems - Nutt, Pearson Education Asia (2003)			✓
CS 06: Formal Languages & Automation Theory			
1.An Introduction to Formal Languages and Automata, by Peter Linz, Third Edition, Narosa Publishers (1998)			✓
CS 07: Design and Analysis of Algorithms			
1.Introduction to Design and Analysis of Algorithms, Anny Levitin, Person Education Press. 2007.			✓
2. Gilles Brassard & Paul Bratley, Fundamental Algorithms, Prentice-Hall. 1998			✓
1. Cormen, Leizerson & Rivest, Introduction to algorithms, Prentice-Hall. (2002 .			✓
2. Aho, HopCroft, Ullman, The Design and Analysis of Computer Algorithms, Addison-Wesley. 2001.			✓
3. Horowitz & Sahni, Fundamentals of Computer Algorithms, Galgotia Publication. 1999			✓
1.Computer Networks, by Andrew S Tanenbaum, PHI. (2010)			✓
2.Data and Computer Communications , by Walliam Stallings, PHI. (2002)			✓
1.Data Communications, Computer networking on OSI , by Fred Halsall, Addison Wesley Publishing Co.1998			✓

2. Computer Networking -A Top-Down Approach Featuring the Internet , James F. Kurose and Keith W. Ross , Addison Wesley Publishing Co. 2004			✓
3.Computer Networks: Protocols standards and interfaces , by Uyless Black, Prentice Hall.2002			✓
4.Data communication & Networks , by Behrou A. Forouzan, Tata McGraw Hill. 2002			✓
CS 09: Data Base Management Systems			
1. Fundamentals of Database System Elmasri and Navathe (4rd Edition), Pearson Education Asia (2008)			✓
2. Database System Concepts - Henry F Korth, Abraham Silbershatz, Mc Graw Hill 2nd edition. (2005)			✓
1.An Introduction to Database Systems - C.J.Date (7th Edition) Pearson Education Asia (2006)			✓
2.An Introduction to Database Systems – Bibin C. Desai ,Galgotia Publications , (2000)			✓
CS 10: Software Engineering			
1. Fundamentals of Software Engineering by Rajib Mall, – PHI-3rd Edition, 2009.			✓
1.Software Engineering, by Ian Sommerville, Pearson Education Inc., New Delhi, (2009).			✓
2. Software Engineering: A Practitioner‟s Approach”, by Roger S. Pressman, McGraw-Hill. (2005).			✓
CS 11: Compiler Design			
1. Compilers: Principles, Techniques, and Tools , by A.V. Aho, Monica Lam, Ravi Sethi, and J.D. Ullman, (2nd ed.), Addison-Wesley, 2007 (main text book, referred to as ALSU in lab assignments).			✓
2. K.D. Cooper, and Linda Torczon, Engineering a Compiler, Morgan Kaufmann, 2004			✓
1. K.C. Louden, Compiler Construction: Principles and Practice, Cengage Learning, 1997			✓
2. D. Brown, J. Levine, and T. Mason, LEX and YACC, O‟Reilly Media, 1992.			✓
CS 12: Cryptography & Information Security			
1. William Stallings, Cryptography and Network Security, 4th Edition, Pearson Education/PHI. 2006			✓
1. Charlie Kaufman, Radia Perlman, Mike Speciner, Network Security: Private Communication in Public World, 2nd Edition,2011, Pearson Education.			✓
2. Atul Kahate, Cryptography and Network Security, TMH. (2003)			✓
CS 13: Object Oriented Analysis and Design			
1.Applying UML and Patterns: An Introduction to object-oriented Analysis and Design and iterative development, by Craig Larman, Pearson Education. (1998)			✓

1. Design Patterns - Elements of Reusable Object-Oriented Software, Gamma, et. al., Addison-Wesley. (1994)			✓
CS 14: Distributed Computing Systems			
1. "Advanced Concepts in Operating Systems", by Mukesh Singhal & Niranjan G Shivaratri,Tata McGraw Hill (2001).			✓
2. “Distributed System: Concepts and Design”, by Coulouris, Dollimore, Kindberg , Pearson Education (2006)			✓
1.Tanenbaum S , “Distributed Operating Systems”, Pearson Education (2005)			✓
2. P K Sinha, “"Distributed System: Concepts and Design”, PHI (2004).			✓
CS 15: Graph Theory			
1.Graph Theory, by J. A. Bondy and U. S. R. Murthy, Springer Verlag (2008.)			✓
2.Introduction to Graph Theory,by D. B. West, PHI, 2004.			✓
1 Graph Theory, by R. Diestel : Springer Verlag (Free Download available).(2003)			✓
CS 16: Artificial Intelligence			
1.Stuart Russell and Peter Norvig. Artificial Intelligence – A Modern Approach, Pearson Education Press, 2001.			✓
2.Kevin Knight, Elaine Rich, B. Nair, Artificial Intelligence, McGraw Hill, 2008.			✓
1.George F. Luger, Artificial Intelligence, Pearson Education, 2001.			✓
2.Nils J. Nilsson, Artificial Intelligence: A New Synthesis, Morgan Kauffman, 2002.			✓
CS 17: Computer Graphics and Visualization			
1.Edward Angel, Interactive Computer Graphics. A Top-Down Approach Using OpenGL (fifth Edition), Pearson Education, 2008			✓
2.Donald Hearn and Pauline Baker, Computer Graphics with OpenGL (third edition), Prentice Hall, 2003			✓
2.Donald Hearn and Pauline Baker, Computer Graphics with OpenGL (third edition), Prentice Hall, 2003			✓
3.F. S. Hill Jr. and S. M. Kelley, Computer Graphics using OpenGL (third edition), Prentice Hall, 2006			✓
4.Peter Shirley and Steve Marschner, Computer Graphics (first edition), A. K. Peters, 2010			✓
Web Resources: http://www.graphicsforum.in This website contains several resources relevant to this course; May be beneficial to both students / instructors.			✓
CS 18: Simulation and Modelling			
1.Jerry Banks, John S. Carson II, Barry L. Nelson and David M. Nicol, Discrete-Event System and Simulation, Prentice Hall of India, New Delhi, 2005			✓
2.Averill M. Law, Simulation modeling and analysi (SIE), Tata McGraw Hill India, 2007			✓

3.David Cloud, Larry Rainey, Applied Modeling and Simulation, Tata McGraw Hill, India			✓
1.Gabriel A. Wainer, Discrete-event modeling and simulation: a practitioner's approach, CRC Press, 2009.			✓
2. Bernard P. Zeigler, Herbert Praehofer, Tag Gon Kim, Theory of modeling and simulation: integrating discrete event and continuous complex dynamic systems, Academic Press, 2000.			✓
3. Averill M. Law, W. David Kelton, Simulation modeling and analysis, McGraw Hill, 2000.			✓
4. Walter J. Karplus, George A. Bekey, Boris Yakob Kogan, Modeling and simulation: theory and practice, Springer, 2003.			✓
5.Stanislaw Raczynski, Modeling and simulation: the computer science of illusion, Wiley, 2006.			✓
6.Mohammad Salameh Obaidat, Georgios I. Papadimitriou, Applied system simulation: methodologies and application, Springer, 2003.			✓
7.van Dijk, Nico M.; Boucherie, Richard J. (Eds.) 2011. Queueing Networks: A Fundemental Approach. 798 p. 148 illus. Springer.			✓
8.Bhat, U. Narayan, An Introduction to Queueing Theory: Modeling and Analysis in Applications, Springer 2008 (Birkhäuser Boston).			✓
9.James J. Nutaro, Building software for simulation: theory and algorithms, with applications in C++. Wiley, 2010.			✓
CS 19: Internet Web Programming			
1. Deitel & Deitel, JAVA : How to Program, Pearson education , 7e (2008)			✓
2. Deitel & Deitel, Internet and World Wide Web How to Program, Pearson education, 3e ,(2005)			✓
1. Ivan BayRoss, Web Enabled Commercial Application using Java 2, bpb publication (1998)			✓
2. David Flanagan , Java Script The Definitive Guide, O"relly, 5e (2006)			✓
CS 20: Embedded Computing Systems			
1. Embedded Systems Design – A Unified Hardware /Software Introduction, by Frank Vahid and Tony Givargis, John Wiley.(2001)			✓
2. An Embedded Software Primer, by David E.Simon, Pearson Education Asia. (1999)			✓
1. Wayne Wolf, Computers as Components; Principles of Embedded Computing System Design – Harcourt India, Morgan Kaufman Publishers.(2000)			✓
CS 21: Software Testing			
1. Srinivasan Desikan, Gopalaswamy Ramesh: Software testing Principles and Practices, TMH. (2005)			✓
1. Aditya P Mathur: Foundations of Software Testing, Pearson Education. (2008).			✓
2. Ron Patton: Software Testing, 2nd Edition, Pearson. (2005),			✓
3. Mauro Pezze and Michal Young. Software Testing and Analysis, Wiley. (2006)			✓

CS 22: Data Mining			
1. Pang-Ning Tan, Michael Steinbach and Vipin Kumar, Introduction to Data Mining. Pearson (2005), India. ISBN 978-8131714720			✓
2. Jiawei Han and Micheline Kamber, Data Mining: Concepts and Techniques, Morgan Kaufmann, 3rd edition (July 2011). 744 pages. ISBN 978-0123814791			✓
3. Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques, Morgan Kaufmann, 3rd edition (January 2011). 664 pages. ISBN 978-0123748560.			✓
1. T. Hastie, R. Tibshirani and J. H. Friedman, The Elements of Statistical Learning, Data Mining, Inference, and Prediction. Springer, 2nd Edition, 2009. 768 pages. ISBN 978-0387848570			✓
2. C. M. Bishop, Pattern Recognition and Machine Learning. Springer, 1st edition, 2006. 738 pages. ISBN 978-0387310732			✓
CS 23: Advanced Computer Architecture			
1.David A. Patterson and John L. Hennessy, Computer Organization and Design: The Hardware and Software Interface, Morgan Kaufmann Publishers, Fourth Edition.(2009)			✓
1.John L. Hennessy and David A. Patterson, Computer Architecture: A Quantitative Approach, Morgan Kaufmann Publishers (2007)			✓
CS 24: Approximation of Algorithms			
1.Approximation Algorithms, by Vijay Vazirani, Springer-Verlag, ISBN: 3-540-65367-8, published 2001.			✓
1.Dorit Hochbaum (Editor), Approximation Algorithms for NP-Hard Problems, Brooks/Cole Pub Co; ISBN: 0534949681; 1st edition (July 26, 1996)			✓
2.Alexander Schrijver, Theory of Linear and Integer Programming, ISBN: 0471982326, Wiley, John & Sons, Incorporated, June 1998.			✓
CS 25: Mobile Computing			
1.Wireless Communications and Networking, Willam Stallings, Pearson Education. (2002)			✓
2.“Fundamentals of Mobile & Pervasive Computing ” by Frank Adelstein, Sandeep Ks Gupta ,ISBN : 9780070603646, TMH (2005)			✓
1.Jochen Schiller, "Mobile Communications," Addison-Wesley (2009)			✓
2.R. Dayem, "Mobile Data & Wireless Lan Technologies," Prentice-Hall (2005)			✓
CS 26: Pattern Recognition			
1.V. Susheela Devi and M. Narasimha Murty, Pattern Recognition: An Introduction, Universities Press, Hyderabad, 2011.			✓
1.R. O. Duda, P. E. Hart and D. G. Stork, Pattern Classification, John Wiley and Sons, 2000.			✓

2.M. Narasimha Murty and V. Susheela Devi, Pattern Recognition, NPTEL Web Course, 2011 (http://nptel.iitm.ac.in/courses.php?disciplineId=106).	NA	NA	NA
CS 27: Information Retrieval			
1.C. D. Manning, P. Raghavan, and H. Schutze, An Introduction to Information Retrieval, Cambridge University Press, 2009.			✓
1.R. Baeza-Yates and B. Ribeiro-Neto, Modern Information Retrieval, Pearson Education, 1999.			✓
CS 28: Software Architecture			
1. Software Architecture – perspectives on an emerging discipline - Mary Shaw, David Garlan, PHI (1996)			✓
2. Mary Shaw and David Garlan, “Software Architecture – Perspectives on an emerging Discipline”, PHI, 2003			✓
1. Hong Zhu, “ Software Design Methodology – From principles to Architectural styles”, Elsevier, 2006.			✓
2. David Budgen, “Software Design”, Pearson Education, 2004			✓
CS 29: VLSI Design & Algorithms			
1.Jan M. Rabaey, A. Chandrakasan, and B. Nikolic, Digital Integrated Circuits: A design Perspective, Pearson Education, 2002			✓
1.S.M.Kang & Y. Leblebici, CMOS Digital Integrated Circuits, McGraw Hill, 2002			✓
2.Ken Martin, Digital Integrated Circuit Design, Oxford Press, 2000.			✓
CS 30: Soft Computing			
1. S.N. Shivanandam, Principle of soft computing, Wiley. ISBN13: 9788126527410 (2011)			✓
2. Jyh-Shing Roger Jang, Chuen-Tsai Sun, Eiji Mizutani, “Neuro-Fuzzy and Soft Computing”, Prentice-Hall of India, 2003.			✓
3. George J. Klir and Bo Yuan, “Fuzzy Sets and Fuzzy Logic-Theory and Applications”, Prentice Hall, 1995.			✓
4. James A. Freeman and David M. Skapura, “Neural Networks Algorithms, Applications, and Programming Techniques”, Pearson Edn., 2003.			✓
1. Mitchell Melanie, “An Introduction to Genetic Algorithm”, Prentice Hall, 1998.			✓
2. David E. Goldberg, Genetic Algorithms in Search, Optimization & Machine Learning, Addison Wesley, 1997.			✓
CS 31: Game Theory			
1.Martin Osborne. An Introduction to Game Theory. Oxford University Press, 2003.			✓
2.Y. Narahari. Essentials of Game Theory and Mechanism Design. IISc Press, 2011			✓
1.Phiip D. Straffin, Jr. Game Theory and Strategy. The Mathematical Association of America, January 1993.			✓
2.Ken Binmore, Fun and Games : A Text On Game Theory, D. C. Heath & Company, 1992.			✓
CS 32: Combinational Optimization			

1.Optimization: Theory and Applications.by Rao S.S., John Wheily & Sons Publication, 4th edition, 2009			✓
2.Operations Research: Applications and Algorithms by Wayne L. Winston, PWS-Kent Pub. Co., 1991			✓
CS 33: Computer Vision			
1. D. H. Ballard and C. M. Brown: Computer Vision, Prentice Hall, New York,1986.			✓
2. R. M. Haralick, L. G. Shapiro: Computer and Robot Vision, Addison-Wesley Pub Co, reading, Mass., 1992.			✓
1. Y. Shirai: Three-Dimensional Computer Vision, Springer-Verlag Berlin, 1988.			✓
2. B. K. P. Horn: Robot Vision, MIT Press, Cambridge, 1986.			✓
CS 34: Software Project Management			
1.Bob Hughes, Mike Cotterell, “Software Project Management”, Tata McGraw Hill. (2009)			✓
1. Royce, “Software Project Management”, Pearson Education. (2005).			✓
2. Robert K. Wysocki, “Effective Software Project Management”, Wiley.(2006)			✓
CS 35: Human Computer Interface			
1,“Human Computer Interaction” by Alan Dix, Janet Finlay , ISBN : 9788131717035, Pearson Education (2004)			✓
2.“Designing the User Interface - Strategies for Effective Human Computer Interaction”, by Ben Shneiderman ISBN : 9788131732557, Pearson Education (2010).			✓
1.Usability Engineering: Scenario-Based Development of Human-Computer Interaction , by Rosson, M. and Carroll, J. (2002			✓
2.The Essentials of Interaction Design, by Cooper, et al. , Wiley Publishing(2007)			✓
3.Usability Engineering, by Nielsen, J. Morgan Kaufmann, San Francisco, 1993. ISBN 0-12-518406-9			✓
4.The Resonant Interface: HCI Foundations for Interaction Design , by Heim, S. , Addison-Wesley. (2007)			✓
5.Usability engineering: scenario-based development of human-computer interaction, By Rosson, M.B & Carroll, J.M. , Morgan Kaufman.(2002)			✓
CS*36: Cloud Computing			
1.Anthony T.Velte, Toby J.Velte and Robert E, Cloud Computing – A Practical Approach, TMH , 2010			✓
2.Michael Miller, Cloud Computing – Web based Applications, Pearson Publishing, 2011			✓
1.Resources from Internet	NA	NA	NA
CS*37: Web Service and Service Oriented Architecture			
1.Eric Newcomer, Greg Lomow, “Understanding SOA with Web Services”, Pearson Education, 2005			✓

2.James McGovern, Sameer Tyagi, Michael E Stevens, Sunil Mathew, “Java Web Services Architecture”, Elsevier, 2003			✓
1.Thomas Erl, “Service Oriented Architecture”, Pearson Education, 2005.			✓
2. Frank Cohen, “FastSOA”, Elsevier, 2007.			✓
CS*38: Bioinformatics			
1.S C Rastogi, N Mdndiratta, P Rastogi, Bioinformatics Methods and Applications, Genomics, Proteomics and Drug Discovery, PHI. 2006			✓
2 BryanBergeron, Bioinformatics Computing, Pearson Education. 2003			✓
CS*39: Script Programming			
1. Programming Perl, 3rd Edition By Larry Wall, Tom Christiansen, Jon Orwant O'Reilly 2000			✓
2. Beginning Python: From Novice to Professional, Magnus Lie Hetland, Apress, 2008, ISBN 1- 59059-982-9			✓
3. PhP 5 Power programming available at: http://ptgmedia. pearsoncmg. com/images/013147149X/downloads/013147149X_book.pdf	NA	NA	NA
4. Professional Windows PowerShell Programming ISBN: 978-0-470-17393-0 Wrox book Professional			✓
CS*40: Multimedia Computing			
1.“Multimedia Computing Communications & Applications ” by Ralf Steinmetz, Klara Nahrstedt , , Pearson Education (2004)			✓
2.Principles of Multimedia by Parekh Ranjan,Tata McGraw-Hill (2007)			✓
1.Multimedia Systems, By John E Koegal, Buford, IIBK. (1994)			✓
2.Virtual Reality Systems, John Vince, ACM Press (1995)			✓
3.Computer Networks, A S Tanenbaum, Fourth Edition.(2004)			✓