LIST OF SUGGESTED BOOKS OF INDIAN AUTHORS

FOR

POSTGRADUATE DEGREE COURSES IN

ENGINEERING & TECHNOLOGY
[May 2018]

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi 110 070
www.aicte-india.org

COMPUTER SCIENCE & ENGINEERING

SEMESTER -I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Mathematical Foundations for Computer Science	1.	K.Trivedi, Probability and Statistics with Reliability, Queuing, and Computer Science Applications, Wiley
		2.	V. Balakrishnan, Schaum's Outlines of Combinatorics, TMH
		3.	Mansih Sharma & Amit Gupta, The Practice of Business Statistics, KPH, New Delhi
2	Advanced Data Structures	1.	E. Balaguruswamy, Data Structures Using C, TMH
		2.	R.B. Patel, Expert Data Structures with C++, Khanna Book Publishing
		3.	Yashwant Kanetkar, Data Structures Through C, BPB
3	Data Science	1.	V.K. Jain, Data Science & Analytics, Khanna Book Publishing, New Delhi
		2.	Dinesh Kumar, Business Analytics, Wiley India
4	Machine Learning	1.	V.K. Jain, Machine Learning, Khanna Publishing House
		2.	Vinod Chandra S.S., Artificial Intelligence & Machine Learning, PHI
		3.	Rajiv Chopra, Deep Learning
5	Research Methodology and IPR	1.	Ranjit Kumar, Research Methodology: A Step by Step Guide for beginners, Sage Publishing
		2.	T. Ramappa, Intellectual Property Rights Under WTO, S. Chand
		3.	Gupta, Business Research Methods, McGraw Hill Education
6	Ethical Hacking	1.	Harsh Bothra, Hacking, Khanna Book Publishing, New Delhi
		2.	Prateek Shukla & Navneet Mehra, The Unrevealed Secrets of Hacking and Cracking, Unicorn
		3.	Ankit Fadia, The Unofficial Guide to Ethical Hacking, Laxmi Publications
8	Introduction to Intelligent Systems	1.	M.C.Trivedi, Artificial Intelligence, Khanna Publishing House
		2.	Rich, Knight, Shivshankar, Artificial Intelligence, TMH
		3.	Deepak Khemani, A First Course in Artificial Intelligence, McGraw Hill
9	Distributed Systems	1.	Pradeep K. Sinha, Distributed Operating Systems, PHI
		2.	Ikvinderpal Singh, Distributed Systems, Khanna Book Publishing
10	Advanced Wireless and Mobile Networks	1.	Pandya Raj, Mobile, Personal Communications Systems and Services, PHI
		2.	Talukdar, Mobile Computing, TMH
		3.	Brijesh K. Gupta, Mobile Computing, Khanna Publications
11	Operating System Design	1.	M. Singhal, N.G. Shivratri, Advanced Concept in Operating System, McGraw Hill Education
		2.	Ekta Walia, Operating Systems, Khanna Book Publishing Co. (P) Ltd., Delhi
		3.	Godbole, Operating Systems, TMH
12	Cluster and Grid Computing	1.	Janakiram, Grid Computing Models, TMH
		2.	Buyya, High Performance Cluster Computing, Pearson
13	Wireless Access	1.	Singal, Wiresless Communications, TMH

	Technologies	2.	Jaganatham, Principles of Modern Wireless Communications Systems, TMH
14	Smart Sensors and Internet of Things	1.	Jeeva Jose, Internet of Things, Khanna Publishing House
		2.	Raj Kamal, Internet of Things, TMH
		3.	Bahga, Internet of Things, University Press
15	Logic and Functional programming	1.	Saroj Kaushik, Logic and Prolog Programming, New Age International Ltd
16	Recommender System	1.	Charu C. Aggarwal, Recommender Systems: The Textbook, Springer
SEMESTER-II			
17	Soft Computing	1.	Sivanandam & Deepa, Principles of Soft Computing, Wiley India
		2.	S. Rajasekaram & G.A. Vijyalakshmi Pai, Neural Networks, Fuzzy Logic and Genetic Algorithms, PHI
18	Big Data Analytics	1.	V.K. Jain, Big Data and Hadoop, Khanna Book Publishing, Delhi
		2.	Maheshwari, Data Analytics, McGraw
		3.	V.K. Jain, Data Science and Analytics, Khanna Publications, Delhi
19	Web Analytics and Development	1.	Avinash Kaushik, Web Analytics: The Art of Online Accountability, Wiley
		2.	Godbole, Web Technologies, TMH
		3.	Rajkamal, Internet and Web Technologies, TMH
20	Advance Algorithms	1.	Gajendra Sharma, Design & Analysis of Algorithms, Khanna Book Publishing, New Delhi
		2.	Udit Agarwal, Algorithms Design and Analysis, Dhanpat Rai
21	Information Theory & Coding	1.	Monica Borda, Fundamentals in Information Theory and Coding, Springer
		2.	Singh & Sapre, Communication Systems, TMH
		3.	Bose, Information Theory, Coding and Cryptography, THM
22	Security Assessment and Risk Analysis	1.	Dwivedi, Mobile Application Security, TMH
23	Biometrics	1.	Anil Jain, Karthik Nanda Kumar, Introduction to Biometric, Springer
		2.	A. K. Jain, and S. Prabhakar, Handbook of Fingerprint Recognition, Springer
24	Secure Software Design & Enterprise Computing	1.	Feroz Khan, SMAC: Digital Discipline Building Digital Enterprise, TMH
		2.	Rajesh Ray, Enterprise Resource Planning: Text & Cases, TMH
25	Concurrence,	1.	Elmarsi, Navathe, Somayajulu, Gupta, Fundamentals of Database

	Parallelism and Distributed System		Systems, Pearson Education
26	Parallel Algorithms	1.	Pai, Data Structures and Algorithms, TMH
		2.	Salaria, Data Structures using C, Khanna Publishing House
		3.	Yashwant Kanitkar, Data Structures Through C, BPB
27	IoT Application and Communication Protocol	1.	Raj Kamal, Internet of Things, TMH
		2.	Jeeva Jose, Internet of Things, Khanna Book Publishing
		3.	Bahga, Internet of Things, University Press
28	Network Security	1.	V.K. Jain, Cryptography and Network Security, Khanna Publishing House
		2.	Atul Kahate, Cryptography and Network Security, TMH
29	Advanced Machine Learning	1.	Rajiv Chopra, Deep Learning, Khanna Book Publishing Co., New Delhi
		2.	V.K. Jain, Machine Learning, Khanna Book Publishing Co., New Delhi
		SEMESTER-III	
30	Cloud Computing	1.	Buyya, Cloud Computing, TMH
		2.	Janakiram, Grid and Cloud Computing, TMH
31	Distributed Databases	1.	Channda Ray, Distributed Database Systems, Pearson
		2.	Saheed K. Rahimi, Distributed Database Systems, Wiley India
32	Business Analytics	1.	Business Analytics, U. Dinesh Kuamr, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publications
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House
33	Industrial Safety	1.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		2.	H. P. Garg, Maintenance Engineering, S. Chand and Company
		3.	A.K. Gupta , Industrial Safety and Environment, Laxmi Publications
34	Operations Research	1.	J.C. Pant, Introduction to Optimisation: Operations Research, Jain Brothers, Delhi,
		2.	Pannerselvam, Operations Research, Prentice Hall of India
34	Cost Management of Engineering Projects	1.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler publisher
		2.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw Hill Book Co. Ltd.
		3.	Rangwala, Estimation, Costing and Valuation, Charotar Publishing House
35	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian Ed.
		3.	Narula & Narula, Material Science, TMH
36	Waste to Energy	1.	O.P. Gupta, Energy Technology, Khanna Publishing
		2.	Khandelwal, K. C., Mahdi, Biogas Technology - A Practical Hand Book,

			TMH
		3.	Waste to Resources, TERI Press, New Delhi
37	Data Warehousing & Mining	1.	Vipin Kumar, Introduction to Data Mining, Pearson
		2.	Ikvinderpal Singh, Data Mining & Warehousing, Khanna Publishing House
38	Web Search & Information Retrieval	1.	Chakrabarti, Mining the Web, Elsevier India Pvt. Ltd
		2.	Avinash Kaushik, Web Analytics, Sybex
39	Compiler for HPC	1.	Raghavan, Principles of Compiler Design, TMH
		2.	A.V. Aho, Principles of Compiler Design, Narosa
40	Optimization Techniques	1.	C.B. Gupta, Optimization Techniques, IK International Publications
		2.	Mohan & Deep, Optimization Techniques, Newage Publications
41	Quantum Computing	1.	Singh & Singh, Elements of Quantum Mechanics, S.Chand Publications
		2.	C.T. Bhunia, Introduction to Quantum Computing, Newage Publishers
42	DNA Computing	1.	Rajagopal, Recombinant DNA & Genetic Engineering, TMH
43	IOT and Smart Cities	1.	Jeeva Jose, Internet of Things, Khanna Book Publishing
		2.	Raj Kamal, Internet of Things, TMH
		3.	Bahga, Internet of Things, University Press
44	Emulation and Simulation Methodologies	1.	Averill M Law, Simulation Modeling and Analysis, TMH

CIVIL ENGINEERING

SEMESTER-I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Advanced Structural Analysis	1.	R. Agor, Structural Analysis, Khanna Publishing House, Delhi
		2.	Pandit, G. S. and Gupta S. P., Structural Analysis A Matrix Approach, TMH
		3.	Reddy, Basic Structural Analysis, McGraw Hill India
2	Advanced Solid Mechanics	1.	D.S. Bedi, Strength of Materials, Khanna Book Publishing
		2.	Ghosh D, Advanced Strength of Materials, New Age International
		3.	Kazimi, Advanced Mechanics of Solid, McGraw Hill
3	Theory of Thin Plates and Shells	1.	Chandrashekhara K, Theory of Plates, Universities Press
		2.	Ramaswamy G.S., Design and Construction of Concrete Shells, CBS Publishers
4	Theory and Applications of Cement Composites	1.	Swamy R.N., Blackie, New Concrete Materials, Academic & Professional Publishers
		2.	S.K. Sharma, Civil Engineering Construction Materials, Khanna Books
5	Theory of Structural Stability	1.	Iyengar, N. G. R., Structural Stability of columns and plates, Eastern West
		2.	Ashwini Kumar, Stability Theory of Structures, Allied Publishers
6	Analytical and Numerical Methods for Structural Engineering	1.	Sastry S. S, Introductory Methods of Numerical Analysis, PHI
		2.	RS Salaria, Computer Oriented Numerical Methods, Khanna Publishing
9	Advanced Hydrology	1.	Ojha & Bhunya, Engineering Hydrology, Oxford University Press
		2.	K. Subramanya, Engineering Hydrology, TMH
10	Advanced Fluid Mechanics	1.	SS Rattan, Fluid Mechanics, Khanna Publishing House
		2.	Ojha & Chandaramouli, Fluid Mechanics, Oxford University Press
		3.	Subramanya, Fluid Mechanics and Hydraulic Machines: Problems and Solutions, TMH
11	Fluvial Hydraulics	1.	R.J. Garde, History of Fluvial Hydraulics, Newage Publications
12	Hydraulic Structures	1.	Singh, B., and Varshney, R.S., Embankment Dam and Engineering, Nemchand & Bross
13	Systems Engineering	1.	Rao, S.S., Engineering Optimization, New Age International (P) Ltd., Delhi

14	Water Resources Systems Planning	1.	Vedula S. and Mujumdar, P.P., Water Resources Systems, Tata McGraw
		2.	O. P. Gupta, Elements of Water Pollution Control Engineering, Khanna Publishing House
15	Irrigation and Drainage	1.	Asawa, G.L., Irrigation Engineering, New Age International Publishers
		2.	Majumdar, D.K., Irrigation Water Management, PHI Learning

SEMESTER-II			
16	FEM in Structural Engineering	1.	Singiresu S. Rao, The Finite Element Method in Engineering, Elsevier India, Fifth Edition
		2.	Chandrupatla T. R. and Belegundu A.D., Introduction to Finite Elements in Engineering, PHI
17	Structural Dynamics	1.	Chopra A. K., Structural Dynamics and Introduction to Earthquake Engineering, Pearson
		2.	Manish S, Finite Element Methods and Computational Structural Dynamics, PHI
18	Advanced Steel Design	1.	Subramaniam N., Design of Steel Structures, Oxford University Press
		2.	Ramchandra, Design of Steel Structures - Vol. II, Standard Book House, Delhi
		3.	Arya A. S., Ajmani J. L., Design of Steel Structures, Nemchand and Bros.
19	Design of Formwork	1.	Kumar Neeraj Jha, Formwork for Concrete Structures, Tata McGraw Hill
20	Design of High Rise Structures	1.	Taranath B. S., Structural Analysis and Design of Tall Buildings, TMH
		2.	Manohar S. N., Tall Chimneys, Tata Mc Graw Hill Publishing Company,
21	Design of Masonry Structures	1.	Narendra Taly, Design of Reinforced Masonry Structures, ICC, 2nd Edition
22	Design of Advanced Concrete Structures	1.	Varghese P. C., Advanced Reinforced Concrete Design, PHI Learning
		2.	Krishna Raju N., Advanced Reinforced Concrete Design, CBS Publishers
23	Advanced Design of Foundations	1.	Varghese P. C., Design of Reinforced Concrete Foundations, PHI
24	Soil Structure Interaction	1.	Kurian N. P., Design of Foundation System- Principles & Practices, Narosa Publishing
		2.	Desai C.S., Numerical Methods in Geotechnical Engineering, McGraw Hill
25	Design of Industrial	1.	Punmia, Design of Steel Structures, Laxmi Publications
		2.	Subramaniam N., Design of Steel Structures, Oxford University Press

	Structures		
26	Ground Water Engineering	1.	O. P. Gupta, Elements of Water Pollution Control Engineering, Khanna Publishing House
		2.	H.M. Raghunath, Ground Water, Newage Publishers
27	Free Surface Flows	1.	Choudhary, M.H., Open-Channel Flows, Prentice-Hall
		2.	Ranga Raju, K.G., Flow Through Open Channels, Tata McGraw Hill
		3.	Saiful Islam, Open Channel Flow, Khanna Book Publishing
28	Computational Methods in Fluid Mechanics	1.	Chaudhary, H. M., Applied Hydraulic Transient, McGraw Hill India
		2.	SS Rattan, Fluid Mechanics and Hydraulic Machines, Khanna Publications
29	Theory and Applications of GIS	1.	Ghosh, S.K. and Chandra, A.M., Remote Sensing and GIS, Narosa Publishing House
30	Advanced Numerical Analysis	1.	R.S. Salaria, Computer Oriented Numerical Methods, Khanna Publishing House
		2.	S.S. Sastry, Introductory Methods of Numerical Analysis, PHI

SEMESTER-III			
31	Design of Prestressed Concrete Structures	1.	S.B. Vanakudre, Prestressed Concrete, Khanna Books, Delhi
		2.	Krishnaraju N., Prestressed Concrete, Tata McGraw Hill, New Delhi
32	Analytical and Finite Element Analysis of Laminated Composite Plates	1.	Reddy J. N., Mechanics of Laminated Composites Plates and Shells, CRC Press
33	Fracture Mechanics of Concrete Structures	1.	Suryja Kuamar Maiti, Fracture Mechanics, Cambridge University Press
		2.	Prashant Kumar, Elements of Fracture Mechanics, Tata McGraw Hill
34	Design of Plates and Shells	1.	Ramaswamy G. S., Design and Construction of Concrete Shell Roofs, PHI
		2.	Varghese P. C., Design of Reinforced Concrete Shells & Folded Plate, PHI
35	Business Analytics	1.	U. Dinesh Kumar, Business Analytics, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publishing House
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House
36	Industrial Safety	1.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		2.	H. P. Garg, Maintenance Engineering, S. Chand and Company
		3.	A.K.Gupta, Industrial Safety and Environment, Laxmi Publications
37	Operations Research	1.	J.C. Pant, Introduction to Optimisation: Operations Research, Jain Brothers, Delhi

		2.	Pannerselvam, Operations Research, Prentice Hall of India
		3.	Iyer, Operation Research, TMH
38	Cost Management of Engineering Projects	1.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler Publisher, Delhi
		2.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw Hill Book Co. Ltd.
		3.	Rangwala, Estimation,Costing and Valuation, Charotar Publishing House
39	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer India
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian Ed.
40	Waste to Energy	1.	O.P. Gupta, Energy Technology, Khanna Publishing House
		2.	Khandelwal, K. C. and Mahdi, Biogas Technology - A Practical Hand Book, TMH
		3.	Waste to Resources, TERI Press New Delhi
41	Computer Methods in Hydraulics and Hydrology	1.	Chaudhry M.H., Open-Channel Flow-2nd Edition, Springer Verlag
		2.	Saiful Islam, Open Channel Flow, Khanna Book Publishing
42	Stochastic Hydrology	1.	P.J.R. Reddy, Stochastic Hydrology, Laxmi Publications, Delhi

MECHANICAL ENGINEERING

SEMESTER-I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Advanced Stress Analysis	1.	Arbind Kumar Singh, Mechanics of Solids, Prentice-Hall of India
		2.	Srinath S L, Advanced Mechanics of Solids, Tata McGraw Hill Education, New Delhi
		3.	M. L. Munjal, Noise and Vibration Control, IISc Press, World Scientific
2	Advanced Vibrations and Acoustics	1.	S.S. Rao, Mechanical Vibrations, Pearson
		2.	Grover G K, Mechanical Vibrations, Nemchand Publishers, Roorki
		3.	Sujatha, Vibrations and Acoustics, TMH
3	Advanced Machine Design	1.	Sadhu Singh, Machine Design, Khanna Publishing House, New Delhi
		2.	Khurmi & Gupta, A Textbook of Machine Design, S.Chand Publications, New Delhi
		3.	Bhandari, Introduction to Machine Design, TMH
4	Design for Manufacturing and Assembly	1.	S.S. Rao, Engineering Optimization, Newage Publications
5	Mathematical Methods in Engineering	1.	J. B. Doshi, Differential Equations for Scientists and Engineers, Narosa, New Delhi
		2.	Chandrika Prasad, Advanced Engineering Mathematics, Khanna Book Publishing Co. (P) Ltd.
		3.	S. P. Gupta, Statistical Methods, S. Chand & Sons
6	Advanced Engineering Materials	1.	Rangwala, Engineering Materials, Charotar Publishing House
		2.	Agarwal, Introduction to Engineering Materials, TMH
7	Mechanics of Composite Materials	1.	Bhagwan D. Agarwal, Analysis and Performance of Fiber, Wiley India
		2.	Madhujit Mukhopadhyay, Mechanics of Composite Materials and Structures, University Press
8	Analysis and Synthesis of Mechanisms	1.	R.V. Dukkipati, Spatical Mechanism, Narosa Publications
9	Thermodynamics and Combustion	1.	Nag, Engineering Thermodynamics, TMH
		2.	Rao Y.V.C., Postulational and Statistical Thermodynamics, Allied Publishers India
		3.	Anil Date, Analytical Combustion, Cambridge India
10	Advanced Fluid Dynamics	1.	S.S. Rattan, Fluid Mechanics, Khanna Book Publishing Co. (P) Ltd.
		2.	Pijush K. Kundu, Ira M Kohen and David R. Dawaling, Fluid Mechanics, Fifth Edition
11	Nuclear Engineering	1.	Vaidyananthan, Nuclear Reactor Engineering, S.Chand
		2.	R.K. Singhal, Nuclear eactors, Newage Publications, New Delhi

12	Energy Conservation and Management	1.	O.P. Gupta, Energy Technology, Khanna Book Publishing House
		2.	A. Chakrabarti, Energy Engineering and Management, PHI
		3.	O.P Jahkar, Energy Conservation in Buildings, Khanna Publications
13	Air Conditioning System Design	1.	Sadhu Singh, Refrigeration and Air Conditioning, Khanna Publishing House
		2.	Arora, Refrigeration and Air Conditioning, TMH
		3.	Manohar Prasad, Refrigeration & Air Conditioning, New Age Publishers
14	Gas Turbines	1.	V. Ganesan, Gas Turbines, Tata McGraw Hill
		2.	R. Yadav, Steam and Gas Turbines and Power Plant Engineering, Central Publishing House
15	Research Methodology and IPR	1.	Ranjit Kumar, Research Methodology: A Step by Step Guide for Beginners, Sage India
		2.	Panneerselvam R., Research Methodology, PHI
		3.	Srivasatava, Business Research Methodology, TMH
	SEMESTER-II		
16	Finite Element Method	1.	Chandrupatla & Belegundu, Introduction to Finite Elements in Engineering, PHI
		2.	S.S. Bhavikati, Finite Element Analysis, Newage Publications
		3.	Krishnamurthy, Finite Element Analysis, TMH
17	Computer Aided Design	1.	Anil Kumar, Chemical Process Synthesis and Engineering Design, TMH
		2.	Rao, Computer Aided Manufacturing, TMH
		3.	O.P. Gupta, Chemical Process Technology, KBP, Delhi
18	Robotics	1.	S. Mukherjee, Robotics, Khanna Book Publishing Co., New Delhi
		2.	S.K. Saha, Introduction to Robotics, TMH
		3.	T.C. Manjunath, Fundamentals of Robotics, Nandu Printers and Publishers Private Limited, Mumbai
19	Fracture Mechanics	1.	Prashant Kumar, Elements of Fracture Mechanics, McGraw Hill Education
		2.	Surjya Kumar Maiti, Fracture Mechanics: and applications Fundamentals; Cambridge University Press
		3.	K Ramesh, Engineering fracture Mechanics, NPTEL
20	Multi-body Dynamics	1.	Nikravesh, P.E., Computer Aided Analysis of Mechanical Systems, PHI
21	Optimization Techniques in Design	1.	J. S. Arora, Introduction to Optimum Design, McGraw Hill
22	Advanced Heat Transfer	1.	Gupta and Prakash, Engineering Heat Transfer, New Chand and Bros, Roorkee
		2.	R.C. Sachdeva, Fundamentals of Engineering Heat and Mass Transfer, Wiley Eastern Ltd., India
		3.	PK Nag, Heat and Mass Transfer, TMH

23	Steam Engineering	1.	P.K. Nag, Power Plant Engineering, TMH
		2.	Domkundwar, A Course in Power Plant Engineering, Dhanapat Rai
24	Refrigeration and Cryogenics	1.	P. Chatopadhyay, Boiler Operation Engineering: Questions and Answers, Tata McGrawHill
		2.	Sadhu Singh, Refrigeration and Air Conditioning, Khanna Publishing House
		3.	Arora, Refrigeration and Air Conditioning, TMH
25	Design of Heat Exchangers	1.	Ramesh K. Shah, Fundamentals of Heat Exchanger Design, Wiley India
26	Computational Fluid Dynamics	1.	Murlidhar and Sundarrajan, Computational Fluid Flow & Heat Transfer, Narosa Publication
		2.	Dr. Suhas Patankar, Numerical Methods in Fluid Flow & Heat Transfer, CRC Press
27	Modelling of IC Engines	1.	V. Ganesan, Gas Turbines, Tata McGraw Hill
		2.	R. Yadav, Steam and Gas Turbines And Power Plant Engineering, Central Publishing House

SEMESTER-III			
28	Advanced Finite Element Method	1.	Chandrupatla and Belegundu, Introduction to Finite Elements in Engineering, PHI
		2.	S.S. Bhavikati, Finite Element Analysis, Newage Publications
		3.	Krishnamurthy, Finite Element Analysis, TMH
29	Advanced Metallurgy	1.	O.P. Khanna, Text book of Material Science and Metallurgy, Dhanpat Rai
		2.	O.P. Gupta, Objective Type Questions & Answers in Metallurical Engineering, Khanna Book Publishing
30	Industrial Safety	1.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		2.	H. P. Garg, Maintenance Engineering, S. Chand and Company
		3.	A.K.Gupta Industrial Safety and Environment, Laxmi Publications
31	Operations Research	1.	J.C. Pant, Introduction to Optimisation: Operations Research, Jain Brothers, Delhi
		2.	Pannerselvam, Operations Research, Prentice Hall of India
		3.	Iyer, Operation Research, TMH
32	Cost Management of Engineering Projects	1.	T.S. Grewal, Cost Accounting, S.Chand Publications
		2.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler publisher
		3.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw Hill Book Co. Ltd.
33	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian edition

34	Waste to Energy	1.	A. Chandra, Non-Conventional Energy, Khanna Book Publishing Co. Delhi
		2.	O.P. Gupta, Energy Technology, Khanna Publishing House
		3.	Khandelwal, K. C. and Mahdi, Biogas Technology - A Practical Hand Book, TMH
35	Design of Solar and Wind System	1.	Khandelwal, K. C. and Mahdi, S. S., Biogas Technology - A Practical Hand Book-Vol. I & II, Tata
		2.	O.P. Gupta, Energy Technology, Khanna Publishing House
36	Advanced Mathematical Methods in Engineering	1.	J. B. Doshi, Differential Equations for Scientists and Engineers, Narosa, New Delhi
		2.	Chandrika Prasad, Advanced Engineering Mathematics, Khanna Book Publishing Co. (P) Ltd.
		3.	S. P. Gupta, Statistical Methods, S. Chand & Sons
37	Business Analytics	1.	U. Dinesh Kumar, Business Analytics, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publishing House
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House

TELECOMMUNICATION & ELECTRICAL ENGINEERING

SEMESTER-I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Advanced Digital Signal Processing	1.	Shaila D. Apte, Advanced Digital Signal Processing, Wiley India
		2.	Vijay Madisetti, The Digital Signal Processing Handbook, CRC Press
		3.	Salivahanan, Digital Signal Processing, TMH
2	Digital Image and Video Processing	1.	S.Shridhar, Digital Image Processing, Oxford University Press
		2.	M.C. Trivedi, Digital Image Processing, Khanna Book Publishing House
3	DSP Architecture	1.	Venkatraman B. & Bhaskar M., Digital Signal Processors: Architecture, Programming & Applications, TMH
		2.	V. Udayashankara, Modern Digital Signal Processing, PHI
		3.	Jayaraman, Digital Signal Processing, TMH
4	Computer Vision	1.	Dictionary of Computer Vision, Wiley
		2.	Rajiv Chopra, Deep Learning, Khanna Publishing House
		3.	A.Ravichandran, Computers Today
5	Remote Sensing	1.	Chandra, A.M., Remote Sensing and GIS, Ghosh, Narosa Publishing
		2.	Manugula & Bommakanti, Photogrammetry, GIS & Remote Sensing, Educreation Publishing
6	Voice and Data Networks	1.	Kumar, D. Manjunath and J. Kuri, Communication Networking, Elsevier India
		2.	Bhavneet Sidhu, An Integrated approach to Computer Networks, Khanna Book Publishing, Delhi
		3.	Sanjay Sharma, A course in Computer Networks, Katsons, New Delhi
7	Audio Video Coding & Compression	1.	Mohammed Ghanbari, Standard Codecs: Image Compression to Advanced Video, Institution of Engineering and Technology
		2.	Ranjan Bose, Information Theory, Coding and Cryptography, TMH
8	Advanced Communication Networks	1.	Nader F. Mir, Computer and Communication Networks, Pearson
		2.	ITI Saha Misra, Wireless Communications and Networks, McGraw Hill
9	Wireless and Mobile Communication	1.	V.K. Garg, Principles and Applications of GSM, Pearson
		2.	V.K. Garg, IS-95 CDMA and CDMA 2000, Pearson
10	Wireless Sensor Networks	1.	C.S. Raghavendra, K. M. Sivalingam, T. Znati, Editors, Wireless Sensor Networks, Springer India
		2.	Misra, Wireless Communication and Netorks, McGraw Hill
11	Optical Networks	1.	Rajiv Ramaswami, Sivarajan, Sasaki, Optical Networks, MK, Elsevier India
		2.	Siva Ram Murthy, WDM Optical Networks, Pearson
		3.	Chakrabarti, Optical Fiber Communications, TMH

12	RF and Microwave Circuit Design	1.	R.S. Rao, Microwave Engineering, PHI
		2.	Das, Microwave Engineering, TMH
13	DSP Architecture	1.	Venkatramani B., Bhaskar M., Digital Signal Processors: Architecture, Programming and Applications, McGraw India
		2.	M. Sasikumar, D. Shikhare, Ravi Prakash, Introduction to Parallel Processing, PHI,
		3.	Salivahanan, Digital Signal Processing, TMH
14	Microcontrollers and Programmable Digital Signal Processors	1.	Venkatramani B. and Bhaskar M. Digital Signal Processors: Architecture, Programming and Applications, Mcgraw Higher Ed
		2.	Nagoorkani, Microprocessors and Microcontrollers, TMH
15	Digital Signal and Image Processing	1.	S. K. Mitra, Digital Signal Processing – A Computer based Approach, TMH
		2.	A. K. Jain, Fundamentals of Digital Image Processing, Prentice Hall
16	Programming Languages for Embedded Software	1.	Shibu, Introduction to Embedded Systems, McGraw Hill
		2.	R.B. Patel, Expert Data Structures with C, Khanna Publishing House
		3.	R.S. Salaria, Data Strcutures using C++, Khanna Publishing House
17	VLSI Signal Processing	1.	Rishabh Anand, Digital System Design Using VHDL, Khanna Book Publishing, Delhi
		2.	Virendra Kumar, Parallel Algorithms and Computation, BPB
18	Parallel Processing	1.	V. Rajaraman, L. Sivaram Murthy, Parallel Computers, PHI
		2.	Virendra Kumar, Parallel Algorithms and Computation, Khanna Publishing House
19	System Design with Embedded Linux	1.	Karim Yaghmour, Buidling Embedded Linux Systems, Orielly Publishers
		2.	R. Bhardwaj, Mastering Linux Kernel Development, Packt India
20	CAD of Digital System	1.	N.A. Sherwani, Algorithms for VLSI Physical Design Automation, Springer India
		2.	P.P. Sahu, VLSI Design, TMH
	SEMESTER-II		
21	Pattern Recognition and Machine Learning	1.	Khandelwal, K. C., Mahdi, S. S., Biogas Technology - A Practical Hand Book-Vol. I & II, Tata
		2.	M. Narasimha Murty, V. Susheela Devi, Pattern Recognition, Springer
		3.	Rajiv Chopra, Machine Learning, Khanna Book Publishing, New Delhi
22	Advanced Compute Architecture	1.	Ikvinderpal Singh, Advanced Computer Organisation Architecture, Khanna Publishing House
		2.	Rajiv Chopra, Advanced Computer Architecture, S.Chand Publications

23	IOT and Applications	1.	Jeeva Jose, Internet of Things, Khanna Book Publishing Co., New Delhi
		2.	Vijay Madisetti and Arshdeep Bahga, Internet of Things, VPT
		3.	Raj Kamal, Internet of Things, First edition, McGraw Hill India
24	Digital Design and Verification	1.	Samir Palnitkar, Verilog HDL: A guide to Digital Design and Synthesis, Prentice Hall
25	Multispectral Signal Analysis	1.	Pramod K. Varshney, Manoj K. Arora, Advanced Image Processing Techniques for Remotely Sensed Hyperspectral Data, Springer India
26	Audio Processing	1.	Shaila D. Apte, Speech and audio processing, 2nd Edition, Wiley India
		2.	Bali & bali, Audio Video Systems, Khanna Publishing House
27	Biomedical Signal Processing	1.	D C Reddy, Biomedical Signal Processing, McGraw Hill
		2.	R.M. Rangayyan, Biomedical Signal Analysis, Wiley India
28	Antennas and Radiating Systems	1.	I.J.Bhal and P.Bhartia, Micro-strip antennas, Artech House
		2.	T. K. Sarkar, Smart Antennas, Wiley
29	Advanced Digital Signal Processing	1.	Shaila D. Apte, Advanced Digital Signal Processing, Wiley, India
		2.	Salivahanan, Digital Signal Processing, TMH
30	Satellite Communication	1.	S. K. Raman, Fundamentals of Satellite Communication, Pearson
		2.	Pritchard, Satellite Communications, Pearson
31	Internet of Things	1.	Jeeva Jose, Internet of Things, Khanna Book Publishing Co., New Delhi
		2.	Raj Kamal, Internet of Things, First edition, McGraw Hill
		3.	A Bahaga, V. Madisetti, Internet of Things- Hands on approach, VPT
32	Voice and Data Networks	1.	Bhavneet Sidhu, An Integrated approach to Computer Networks, Khanna Book Publishing
		2.	Vijay Ahuja, Design and Analysis of Computer Communication Networks, McGraw Hill
33	MIMO System	1.	R.S. Kshetrimayum, Fundamentals of MIMO Wireless Communications, Cambridge University Press
34	Programmable Networks – SDN, NFV	1.	Vivek Tiwari, SDN and OpenFlow for Beginners, Kindle Edition

35	Analog and Digital CMOS VLSI Design	1.	P Rabaey, A P Chandrakasan, B Nikolic, Digital Integrated Circuits: A Design, PHI
36	VLSI Design Verification and Testing	1.	Vijay Ahuja, Communications Network Design and Analysis of Computer Communication Networks, McGraw Hill
		2.	Bhavneet Sidhu, An Integrated approach to Computer Networks, Khanna Book Publishing
		3.	P.P. Sahu, VLSI Design, TMH
37	Memory Technologies	1.	Ashok K Sharma, Advanced Semiconductor Memories: Architectures, Designs and Applications, Wiley India
38	SoC Design	1.	P Mishra and N Dutt, Processor Description Languages, Morgan Kaufmann
39	Low Power VLSI Design	1.	Kaushik Roy, Sharat C.Prasad, Low Power CMOS VLSI Design, Wiley India
		2.	P. Rashinkar & Singh, Low Power Design Methodologies
		3.	P.P. Sahu, VLSI Design, TMH
40	Network Security and Cryptography	1.	V.K. Jain, Crptography and Network Security, Khanna Book Publishing
		2.	Atul Kahate, Crptography and Network Security, McGraw Hill
41	Physical Design Automation	1.	N.A. Sherwani, Algorithms for VLSI Physical Design Automation, Springer India
		2.	V.K. Jain, Cryptography and Network Security, Khanna Book Publishing
		3.	Atul Kahate, Cryptography and Network Security, McGraw Hill India
	SEMESTER-III		
42	Artificial Intelligence	1.	M.C. Trivedi, Artificial Intelligence, Khanna Publishing House, Delhi
		2.	P.Joshi, P.Kulkarni, Artificial Intelligence: Building Intelligent Systems, PHI
		3.	R.B. Mishra, Artificial Intelligence, PHI
43	Optimization Techniques	1.	J. S. Arora, Introduction to Optimum Design, McGraw Hill India
44	Business Analytics	1.	U. Dinesh Kumar, Business Analytics, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publishing House
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House
45	Industrial Safety	1.	L.M. Deshmukh, Industrial Safety Management, Tata McGraw Hill
		2.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		3.	H. P. Garg, Maintenance Engineering, S. Chand and Company

46	Operations Research	1.	J.C. Pant, Introduction to Optimisation: Operations Research, Jain Brothers, Delhi
		2.	Pannerselvam, Operations Research, Prentice Hall of India
		3.	Iyer, Operation Research, TMH
47	Cost Management of Engineering Projects	1.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler Publisher, Delhi
		2.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw
		3.	Rangwala, Estimation, Costing and Valuation, Charotar Publishing House
48	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer India
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian Edition
49	Waste to Energy	1.	O.P. Gupta, Energy Technology, Khanna Publishing
		2.	Khandelwal, K. C. and Mahdi, Biogas Technology - A Practical Hand Book, TMH
		3.	Waste to Resources, TERI Press New Delhi
50	Pattern Recognition and Machine Learning	1.	Khandelwal, K. C. and Mahdi, S. S., Biogas Technology - A Practical Hand Book-Vol. I & II, TMH
		2.	M. Narasimha Murty, V. Susheela Devi, Pattern Recognition, Springer India
		3.	Rajiv Chopra, Machine Learning, Khanna Book Publishing, New Delhi
51	Remote Sensing	1.	Basudeb Bhatta, Remote Sensing and GIS, Oxford Publications
		2.	BC Panda, Remote Sensing, Viva Books
52	Communication Network	1.	Vijay Ahuja, Communications Network Design and Analysis of Computer Communication Networks, TMH
		2.	Bhavneet Sidhu, An Integrated Approach to Computer Networks, Khanna Publishing House
53	Nano Materials and Nanotechnology	1.	T. Pradeep, A Textbook of Nanoscience and Nanotechnology, TMH
		2.	Murthy, Shankar, Raj, Textbook of Nanosciene and Nanotechnology, University Press
54	Disaster Management	1.	S.C. Sharma, Disaster Management, Khanna Publishing
		2.	R. Nishith, Singh AK, Disaster Management in India, New Royal Co.
		3.	Mukesh Kapoor, Disaster Management, Saurabh Publishing House

ELECTRICAL ENGINEERING

SEMESTER-I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Electric Drives System	1.	A.K. Babu, Electric & Hybrid Vehicles, Khanna Publishing House
		2.	R. Krishanan, Electric motor drives modeling, analysis and control, PHI
		3.	Subrahmanyam, Electric Drives, Concepts and Applications, TMH
2	Modeling and Analysis of Electrical Machines	1.	R. Krishnan, Electric Motor & Drives: Modeling, Analysis and Control, PHI
		2.	P.S. Bimbhra, Electrical Machines, Khanna Book Publishing Co., Delhi
		3.	Vedam Subryamanhyam, Thyristor Control of Electric Drives, Tata McGraw Hill
3	Advanced Power Electronic Circuits	1.	Rashid, Power Electronics, Prentice Hall India
		2.	G.K. Dubey & C.R. Kasaravada Power Electronics & Drives, Tata McGraw Hill
		3.	PC Sen, Modern Power Electronics, S.Chand Publishing
4	Optimal and Adaptive Control	1.	A.P. Sage, Optimal and Adaptive Control, PHI
5	Power Quality	1.	Simmi P Burman and Bipin Singh, Power Quality, S.K.Kataria and Sons
		2.	S.Chattopadhay, Madhuchanda Mitra, Electric Power Quality, Springer
6	Dynamics of Electrical Machines	1.	G.C. Garg, Electrical Machines-I, II Khanna Book Publishing Co., New Delhi
		2.	R Krishnan, Electric Motor Drives, Modeling, Analysis, and Control, Pearson Education
		3.	Mulukutla Sarma, Electric Machines: Steady-State Theory and Dynamic Performance CL Engg., Cengage Learning
7	Static VAR Controllers and Harmonic Filtering	1.	Ned Mohan, Power Electronics, John Wiley and Sons
		2.	JC Das, Power System Harmonics and Passive Filter Design, Wiley IEEE Press
8	PWM converter and Applications	1.	Mohan, Undeland and Robbins, Power Electronics: Converters, Applications and Design, Wiley
		2.	Satish Kumar Pedapalli, Pulse Width Modulation: Analysis and Performance in Multilevel Inverters, De Gruyter Oldenbourg
9	Power Semiconductor Devices & Modeling	1.	Y P Abbi and Shashank Jain, Handbook on Energy Audit and Environment Management, TERI
		2.	B.Jayant Baliga, Power Semiconductor Devices, Pws Pub Co
		3.	B.J. Baliga, Fundamentals of Power Semiconductor Devices, Springer
10	Research Methodology and IPR	1.	Ranjit Kumar, Research Methodology, Sage Publishing
		2.	R. Pannerselvam, Research Methodology, PHI
		3.	D.Chawla and N.Sondhi, Research Methodology-Concepts & Cases, Vikas Publishing House

11	Mathematical Methods in Control	1.	Papoulis & Pillai, Probability, Random Variable and Stochastic Processes, McGraw Hill
		2.	K.B.Dutta, Mathematical Methods of Science and Engineering: Aided with MATLAB, Cengage Learning India Pvt. Ltd.
12	Non-Linear Systems	1.	V.Lakshimnathan, Practical Stability of Non-Linear Systems, World Scientific
		2.	Khalil, Non-Linear Systems, Pearson
13	Robotics and Automation	1.	S. Mukherjee, Robotics, Khanna Book Publishing Co., New Delhi
		2.	Ghosh, Control in Robotics and Automation: Sensor Based Integration, Allied Publishers
		3.	K.Goyal and D.Bhandari, Industrial Automation and Robotics, S.K.Kataria and Sons
14	Digital Control	1.	Gopal, Digital Control and State Variable Methods, McGraw Higher Ed
		2.	A. Ambikapathy, Control Systems, Khanna Publishing House, Delhi
		3.	V.I. Goerge, Digital Control Systems, Cengage
15	Non-Linear CONTROL	1.	Khalil, Non-Linear Control, Pearson
		2.	B.N. Sarkar, Advanced Control Systems, PHI
		3.	Gopal, Control Systems, TMH
17	SCADA system and Applications	1.	Rajesh Mehra, PLCs and SCADA: Theory & Practice, Laxmi Publications
		2.	Bisht T k, Scada and Energy Management System, S. Kataria & Sons
18	Renewable Energy Systems	1.	Ranjan Rakesh, Kothari D.P, Singal K.C, Renewable Energy Sources and Emerging Technologies, PHI
		2.	A. Chandra, Non-Conventional Energy Resources, Khanna Book Publishing
		3.	D. Mukherjee, Fundamentals of Renewable Energy, New Age International Publishers
19	Engineering Optimization	1.	S.S. Rao, Engineering Optimization, New Age International (P) Ltd.
		2.	A.Ravindran, Engineering Optimization: Methods & Applications, Wiley
20	Power System Dynamics	1.	P.Kundur, Power System Stability and Control, McGraw Hill India
		2.	A.Chakrbarti, Power System Dynamics and Simulation, PHI
21	High Voltage Engineering	1.	M. S. Naidu, V. Kamaraju, High Voltage Engineering, McGraw-Hill India
		2.	Wadhwa C L., High Voltage Engineering, Wiley Eastern Limited, NewDelhi
22	Switched Mode Power Control	1.	Ned Mohan, Undeland and Robbins, Power Electronics Converters, Applications and Design, Wiley
		2.	S.Manikantla, Switching Power Supply Design and Optimization, McGrawHill Indian Edition

Semester-II			
23	Power Electronic Converters	1.	Ned Mohan, Undeland and Robbin, Power Electronics: converters, Application and design, Wiley
		2.	M.H.Rashid, Power Electronics, Prentice Hall of India
		3.	L.Umanand, Power Electronics: Essentials & Applications, Wiley India
24	Digital Control of Power Electronic and Drive Systems	1.	D.P.Kothari, R.S.Lodhi, Electric Drives, I.K. International Publishing
		2.	Dubey, Doradla, Joshi, Thyristorized Power Controllers, Newage International Publisher
25	Switched Mode and Resonant Converters	1.	Ned Mohan, Power Electronics, John Wiley and Sons
		2.	V.Jagganatham, Power Electronics: Devices and Circuits, PHI
26	Industrial Load Modeling and Control	1.	I.J.Nagarath and D.P.Kothari, Modern Power System Engineering, Tata McGraw Hill
		2.	S.R. Paranjothi, Modern Power Systems, Newage Publishers
27	Advanced Digital Signal Processing	1.	Sanjit K Mitra, Digital Signal Processing: A computer-based approach, Tata McGraw
		2.	Shailaja Apte, Advanced Digital Signal Processing, Wiley India
28	Advanced Microcontroller based Systems	1.	B.P. Singh, Advanced Microprocessors and Microcontrollers, NewAge International Publishers.
		2.	D.P.Kothari, S.K.Vasudevan, Analysis of Microcontrollers, Medtech
		3.	A.K. Gautam, Advanced Microprocessors, Khanna Book Publishing
29	Distributed Generation	1.	K. Sukhatme, Solar Energy: Principles of Thermal Collection and Storage, Tata McGraw Hill
		2.	Rakesh Ranjan, Kothari, D.P.Singal, Renewable Energy Sources and Emerging Technologies, PHI
30	Smart Grids	1.	A.G.Phadke, Synchronized Phasor Measurement and their Applications, Springer
		2.	A.B.M Shawakat Ali, Smart Grids: Opportunities, Developments, and Trends, Springer
31	Stochastic Filtering and Identification	1.	Papoulis & Pillai, Probability, Random Variable and Stochastic Processes, McGraw Hill
		2.	D.Roy, G.Vishveshwara Rao, Stochastic Dynamics, Filtering and Optimization, Cambridge University Press
32	Advance Control System	1.	M. Gopal, Modern Control System Theory, New Age International (P) Limited
		2.	B.N. Sarkar, Advance Control Systems, PHI
33	Advanced Robotics	1.	Mittel & Nagrath, Robotics and Control, TMH
		2.	S. Mukherjee, Robotics and Automation, Khanna Book Publishing

34	Adaptive Learning and Control	1.	H. K. Khalil, Nonlinear Systems, Prentice Hall
		2.	S. Sastry and M. Bodson, Adaptive Control, Prentice-Hall
		3.	K. S. Narendra and A. M. Annaswamy, Stable Adaptive Systems, PHI
35	Advanced DSP	1.	Venkatramani B., Bhaskar M., Digital Signal Processors: Architecture, Programming and Applications, McGraw India
36	Digital Power System Protection	1.	A.G. Phadke and J. S. Thorp, Computer Relaying for Power Systems, Wiley India
		2.	S.R. Bhide, Digital Power System Protection, PHI
37	Non-Conventional Electrical Energy Systems	1.	B.H.Khan, Non-Conventional Energy Sources, Tata Mc Graw Hill
		2.	R.K.Rajput, Non-Conventional Energy Sources and Utilisation, S.Chand
		3.	A.Chandra, Non-Conventional Energy Resources, Khanna Book Publishing, New Delhi
38	Artificial Intelligence Techniques	1.	M.C. Trivedi, Artificial Intelligence, Khanna Publishing House, Delhi
		2.	P.Joshi, P.Kulkarni, Artificial Intelligence: Building Intelligent Systems, PHI
		3.	R.B. Mishra, Articificial Intelligence, PHI Learning Pvt. Ltd
39	Energy Conversion Processes	1.	O.P. Gupta, Energy Technology, Khanna Publishing House
		2.	Amlan Chakrabarti, Energy Engineering and Management, PHI
		3.	V.Kadambi, An Introduction to Energy Conversion: Turbomachinery, Newage Publishers
40	Electric and Hybrid Vehicles	1.	A.K. Babu, Electric and Hybrid Vehicles, Khanna Book Publishing, Delhi
		2.	Iqbal Husain, Electric and Hybrid Vehicles, CRC Press
	Semester-III		
41	SCADA Systems and Applications	1.	Vikrant Vij, PLC & SCADA, Laxmi Publications
		2.	Tanuj Kumar Bisth, Scada and Energy Management System, SK Kataria & Sons
42	FACTS and Custom Power Devices	1.	R Mohan Mathur, Thyristor Based Facts Control System, Wiley India
		2.	K.R Padiyar, Facts Control in Power Transmission and Distribution system, Anshan
43	HVDC	1.	K. R. Padiyar, HVDC Power Transmission Systems, Wiley India
		2.	S Kamakshaiah, V. Kamaraju, HVDC Transmission, Tata McGraw Hill
44	Business Analytics	1.	U. Dinesh Kuamr, Business Analytics, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publishing
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House

45	Industrial Safety	1.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		2.	H. P. Garg, Maintenance Engineering, S. Chand and Company
		3.	A.K. Gupta, Industrial Safety and Environment, Laxmi Publications
46	Operations Research	1.	J.C. Pant, Introduction to Optimisation: Operations Research, Jain Brothers, Delhi
		2.	Pannerselvam, Operations Research, Prentice Hall of India
		3.	Iyer, Operation Research, TMH
47	Cost Management of Engineering Projects	1.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler Publisher
		2.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw Hill Book Co. Ltd.
		3.	Rangwala, Estimation, Costing and Valuation, Charotar Publishing House
48	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer India
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian edition
49	Waste to Energy	1.	O.P. Gupta, Energy Technology, Khanna Book Publishing Co., New Delhi
		2.	Khandelwal, K.C. Mahdi, S.S., Biogas Technology A Practical Hand Book-Vol. I & II, TMH
50	Stochastic Control	1.	P.R. Kumar, P. Varaiya, Stochastic Systems, PHI
		2.	G. Visweswara Rao, Stochastic Dynamics, Filtering and Optimization, Debasish Roy, Cambridge University Press
51	Computational Methods	1.	R. B. Bapat, Graphs and Matrices, TRIM Series, Hindustan Book Agency
		2.	S.P. Venkateshan , Prasanna Swaminathan , Computational Methods in Engineering, Ane Books
		3.	R.S. Salaria, Computer Oriented Numerical Methods, Khanna Publishing House
52	Power System Analysis	1.	L.P. Singh, Advanced Power System Analysis and Dynamics, New Age International
		2.	A.Ambikapathy, Power System Analysis, Khanna Book Publishing Co., New Delhi
		3.	Kothari, Modern Power System Analysis, TMH
53	Power System Transients	1.	Indulkar C.S, Power System Transients: A Statistical Approach, PHI
		2.	Prabha Kundur, Power System Stability and Control, McGraw Hill
54	Reliability Analysis and Protection	1.	S.C. Sharma, Reliability Engineering, Khanna Publishing House
		2.	A.K. Gupta, Reliability, Maintenance and Safety Engineering, Laxmi Publications
		3.	Manna Alakesh, A Textbook of Reliability and Maintenance Engineering, I K International

CHEMICAL ENGINNERING

SEMESTER-I

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
1	Mathematical and Statistical Methods in Chemical Engineering	1.	Gupta, S.K., Numerical Methods for Engineers, Wiley Eastern, N. Delhi
		2.	R.S. Salaria, Computer Oriented Numerical Methods, Khanna Publishing House
		3.	Das, Statistical Methods, Vol.-I, II, TMH
2	Advanced Separation Processes	1.	Mihir K. Purkait, Randeep Singh, Membrane Technology in Separation Science, CRC Press
		2.	Kaushik Nath, Membrane Separation Processes, PHI Publications
3	Chemical Reactor Analysis	1.	L.K. Doraiswamy, Chemical Reaction Engineering: Beyond the Fundamentals, CRC Press
4	Industrial Pollution Control	1.	O.P. Gupta, Elements of Environmental Pollution Control, Khanna Book Publishing
		2.	Rao C.S., Environmental Pollution Control Engineering, Newage Publishing House
		3.	Gaikwad & Sapkal, Environmental Engineering, Denett Nagpur
5	Application of Nanotechnology in Chemical Engineering	1.	H.D.Kumar, Material Science: Nanotechnology and Applications, I.K. International Publishing

SEMESTER-II

S.No.	COURSES	S.No.	LIST OF SUGGESTED BOOKS/ PUBLICATIONS
6	Advances in Transport Phenomena	1.	P. A. Ramachandran, Advanced Transport Phenomena: Analysis, Modeling, and Computations, Cambridge University Press
		2.	Geankopolis, Transport Processes and Unit Operations, PHI
7	Advanced Reaction Engineering	1.	L.K. Doraiswamy, Chemical Reaction Engineering: Beyond the Fundamentals, CRC Press
		2.	K.A. Gavhane, Chemical Reaction Engineering, Vol.-I, II, Nirali Prakashan
8	Modern concepts in Catalysis and Surface Phenomenon	1.	D.K. Chakrabarty, Heterogeneous Catalysis, New Age Science
		2.	B. Viswanathan, S. Kannan, R. c. Deka, Catalysts and Surfaces Characterization Techniques, Narosa Publications
9	Advanced Downstream Processes	1.	Sivshankar, Bioseparations: Principles and Techniques, PHI Publications
		2.	Prasad, Downstream Process Technology: A New Horizon in Biotechnology, PHI

10	Computational Fluid Dynamics	1.	Ranade V.V., Computational Flow Modeling for Chemical Reactor Engineering, Process Engineering Science, Academic Press
		2.	Tapas Sen gupta, Computational Fluid Dynamics, Universities Press
11	Bioprocess Engineering	1.	Goutam Saha, Alok Barua, Satyabroto Sinha, Bioreactors: Animal Cell Culture Control for Bioprocess Engineering, CRC Press
		2.	D. Govardhan Rao, Introduction to Bio Chemical Engineering, Tata McGraw Hill (India)
12	Phase Transitions in Process Equipment	1.	Ragahavan V., Material Science and Engineering, PHI
13	Micro and Nano Fluidics	1.	T. Pradeep, A Textbook of Nanoscience and Nonotechnology, TMH
		2.	Sarit k.Das, Nanofluids, Wiley India

		SEMESTER-III	
14	Business Analytics	1.	U. Dinesh Kumar, Business Analytics, Wiley India
		2.	Krishnan, Bhambri & Chopra, Business Analytics, Khanna Publishing House
		3.	V.K. Jain, Data Science and Analytics, Khanna Publishing House
15	Industrial Safety	1.	L.M. Deshmukh, Industrial Safety Management, Tata McGraw Hill
		2.	S.C. Sharma, Industrial Safety, Khanna Book Publishing
		3.	H. P. Garg, Maintenance Engineering, S. Chand and Company
16	Operations Research	1.	P K Gupta, Operations Research, S.Chand, New Delhi
		2.	J K Sharma, Operation Research -Theory & Application, Laxmi Publications
		3.	Pannerselvam, Operations Research, Prentice Hall of India
17	Cost Management of Engineering Projects	1.	Ashish K. Bhattacharya, Principles & Practices of Cost Accounting, A. H. Wheeler publisher
		2.	N.D. Vohra, Quantitative Techniques in Management, Tata McGraw
		3.	Rangwala, Estimation Costing and Valuation, Charotar Publishing House
18	Composite Materials	1.	K.K. Chawla, Composite Materials, Springer
		2.	Balasubramaniam, Composite Materials, John Wiley & Sons, Indian edition
19	Computer Aided Design	1.	Anil Kumar, Chemical Process Synthesis and Engineering Design, TMH
		2.	Srinivasa Prakash Regalla, Computer Aided Analysis and Design, I.K International Publishing
		3.	Rao, Computer Aided Design, TMH
20	Disaster Management	1.	S.C. Sharma, Disaster Management, Khanna Publishing
		2	R. Nishith, Singh AK, Disaster Management in India, New Royal Co.
		3.	Mukesh Kapoor, Disaster Management, Saraubh Publishing House

21	Process Modelling and Simulation	1.	R W Gaikawad, Dhirendra Process Modelling and Simulation, Denett Publication, Nagpur
		2.	Amiya K. Jana, Chemical Process Modelling and Computer Simulation, PHI
22	Waste to Energy	1.	O.P. Gupta, Energy Technology, Khanna Publishing House
		2.	Khandelwal, K. C. and Mahdi, Biogas Technology - A Practical Hand Book, TMH
		3.	Waste to Resources, TERI Press, New Delhi

ADDITIONAL BOOKS SUGGESTED FOR AUDIT COURSES			
1	Stress Management by Yoga	1.	Madhusudhan Penna, Yoga-The Heart of Living, Kavi Kulguru Kalidas Sanskrit University, Ramkete, Nagpur
2	Sanskrit for Technical Knowledge	1.	Mohan Khedkar, Kalyani Kale Sanskrit for Technical Knowledge, Kavi Kulguru Kalidas Sanskrit University, Ramkete, Nagpur
3	Personality Development through Life Enlightment Skills	1.	Kalyani Kale, Masterstrokes for Life, Kavi Kulguru Kalidas Sanskrit University, Ramkete, Nagpur