प्रकाश जावडेकर
Prakash Javadekar

सत्यमेव जयते

मंत्री
मानव संसाधन विकास
भारत सरकार
MINISTER
HUMAN RESOURCE DEVELOPMENT
GOVERNMENT OF INDIA

MESSAGE

I am extremely pleased to note that AICTE has taken strong measures to improve quality of technical education in the country. AICTE prepared the model curriculum of various disciplines of Undergraduate & Postgraduate degree courses in Engineering & Technology which was released on 24th January, 2018. I am happy to note that this is being adopted by the Institutions / Universities in the country from the academic year 2018-19 onwards. As a step forward, it is commendable that AICTE has done an impressive task of compiling 'List of suggested books of Indian Authors' for Undergraduate & Postgraduate degree courses in Engineering & Technology for helping students and teachers.

I congratulate the Chairman and his team at AICTE for such a thoughtful initiative of promoting Indian books by our own Indian Authors. It is a much deserved recognition for our Indian Authors which will definitely accelerate and encourage Indian Authors to write quality books. Our students should take advantage of wealth of information about books.

Looking forward towards more such quality initiatives by AICTE and best wishes for future endeavours.

(PRAKASH JAVADEKAR)

Room No. 3, 'C' Wing, 3rd Floor, Shastri Bhavan, New Delhi-110 115
Phone : 91-11-23782387, 23782698, Fax : 91-11-23382365,
E-mail : minister.hrd@gov.in

AICTE RECOMMENDED

LIST OF SUGGESTED BOOKS OF INDIAN AUTHORS & PUBLISHERS

FOR

UNDERGRADUATE DEGREE COURSES IN

ENGINEERING & TECHNOLOGY

[FEBRUARY 2018]

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

FIRST YEAR UNDERGRADUATE DEGREE COURSES

BASIC SCIENCE COURSES

List of Recommended Books:

BSC101 – Physics

1. Engineering Physics, Malik and Singh, Tata Mc Graw Hill
2. Engineering Physics, Naidu, Pearson
3. Mechanics, Mathur, S.Chand Publishing
4. Classical Mechanics, Upadhyaya, Himalaya Publishing House
5. Classical Mechanics, G. Aruldhas, PHI
6. Engineering Physics, Gupta & Gaur, Dhanpat Rai
7. Quantum Mechanics, Ajay Ghatak S. Lokanathan, Trinity
8. Quantum Mechanics: A Text Book for undergraduates, Mahesh C Jain, TMH
9. Text Book of Ruantum Mechanics, M. Mathews &Venkatesan, TMH
10. Electromagnetic Theory, Prabir K. Basu & Hrishikesh Dhasmana, AneBooks
11. Fundamentals of Electromagnetic Theory, Khunita, PHI
12. A Text Book of Optics, Avadhanulu, S. Chand
13. Optics, Ajoy Ghatak, TMH
14. Modern Physics for Engineers, S.P. Taneja, R. Chand
15. The Physics of waves and Oscillations, N.K. Bajaj, TMH

BSC102 – Chemistry-I

1. Engineering Chemistry, Satyaprakash & Manisha Agrawal, Khanna Book Publishing, Delhi
2. A Text Book of Engg. Chemistry, Shashi Chawla, Dhanpat Rai & Co. (P) Ltd.
3. Essentials of Physical Chemistry, Bahl&Tuli, S.Chand Publishing
4. Applied Chemistry, Sunita Rattan, Kataria
5. Engineering Chemistry, Baskar, Wiley
6. Engineering Chemistry – I, D. GrourKrishana, Vikas Publishing
7. Laboratory Manual Engg. Chemistry, Anupma Rajput, Dhanpat Rai & Co.

BSC103 – Mathematics – I

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing Co. (P) Ltd., Delhi (ISBN: 9789386173522)
2. Engineering Mathematics for first year, Veerarajan T., Tata McGraw-Hill
3. Higher Engineering Mathematics, Ramana B.V., Tata McGraw
4. Differential Calculus Shanti Narayan & Dr. P.K. Mittal, S.Chand Publishing
5. A Course & Mathematical Analysis (ISBN: 9788121904728), Narayan &Mittal, S.Chand
6. Elements of Mathematical Analysis, R.Agor, (ISBN: 9789382609599)
7. Integral Calculus Shanti Narayan & Dr. P.K. Mittal, (ISBN: 9788121906814), S.Chand
8. A Textbook of Matrices, Narayan &Mittal, (ISBN: 9788121925969), S.Chand
9. Advanced Engineering Mathematics (ISBN: 9788120336094), Sashtry, PHI
10. Engineering Mathematics – I, Reena Garg, Khanna Book Publishing

BSC103 – Mathematics – II

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
3. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI

ENGINEERING SCIENCE COURSES

List of Recommended Books:

ESC101 – Basic Electrical Engineering

1. Basic Electrical Engineering, Ritu Sahdev, (ISBN: 9789386173492), Khanna Book Publishing
2. Basic Electric Engineering, DP Kothari & Nagrath, Tata McGraw Hill
3. Basic Electrical Engineering, Mittle & Mittal, Tata McGraw Hill
4. Basic Electric Engineering, DC Kulshrehtra, Tata McGraw Hill

ESC102 – Engineering Graphics and Design

1. Engineering Graphics & Design, Jain, Maheshwary, Gautam, Khanna Publishing House
2. Engineering Drawing, ND Bhat, Charotar Publishing House
3. Engineering Drawing and Computer Graphics, Shah, Pearson
4. Textbook on Engineering Drawing, Narayana, Scitech Publishers
5. Engineering Graphics, Agarwal & Agarwal, TMH

ESC103 – Programming for Problem Solving

1. Programming in ANSI in C, E Balaguruswamy, Tata McGraw Hill
2. Computer Concepts and Programming in C, R.S. Salaria, Khanna Publishing
3. Let us C, Yashavant P. Kanetkar, BBP Publications, Delhi

HUMANITIES & SOCIAL SCIENCES

List of Recommended Books:

ESC104- Workshop Manufacturing Practices

1. Basic Manufacturing Process, Mehta & Gaira, Viva Books
2. Elements of Workshop Technology, Hajra & Choudhary, Media Promotors
3. Workshop Practices, HS Bawa, Tata Mc Graw Hill
4. Manufacturing Technology, Vol.1,2 and 3, PN Rao, TMH

HSMC101 – English

1. Technical Communication, Meenakshi Raman & Sangeeta Sharma, Oxford University Press
2. Effective Communication Skills, Kulbushan Kumar, Khanna Publishing House, Delhi
3. Communication Skills, Pushplata, Sanjay Kumar, Oxford University Press

CIVIL ENGINEERING

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

ESC202 – Basic Electronics

1. Basic Electronics, Santiram Kal, Prentice Hall
2. Basic Electronics, BL Thareja, S.Chand Publishing
3. All-in-One Electronics Simplified, A.K. Maini, Khanna Book Publishing

ESC109 – Biology for Engineers

1. Biology for Engineers (ISBN: 9781121439931), TMH

ESC203 – Computer Aided Civil Engineering Drawing

1. Civil Engineering Drawing, Sharma & Gurucharan Singh, Standard Publishers
2. A Course in Civil Engineering Drawing, Sikka, S.K. Kataria & Sons
3. Engineering Drawing, Dhanarajay A Jolhe, Tata McGraw Hill

ESC205 – Engineering Mechanics

1. Engineering Mechanics, D.S. Bedi, Khanna Book Publishing Co. (P) Ltd., Delhi
2. Engineering Mechanics, R. S. Khurmi, S.Chand Publishing
3. A Textbook of Engineering Mechanics, R.K. Bansal, Laxmi Publications
4. Engineering Mechanics, Sharma, Pearson

ESC212 – Energy Science & Engineering

1. Energy Technology, OP Gupta, Khanna Book Publishing Co. (P) Ltd., Delhi
2. Energy Engineering & Management, Chakrabarti A, PHI

BSC225 – Life Science

1. Life Sciences, Vol-I, II, Pranav Kumar, Pathfinder Publication

BSC201 – Mathematics – III

1. Advanced Engineering Mathematics, Chandrika Prasasd & Reena Garg, Khanna Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
3. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI
4. Discrete Mathematics and Its Applications, S. Chakraborty & B.K. Sarkar, Oxford

HSMC251 – Introduction to Civil Engineering

1. Basic Civil Engineering, Palanichamy, McGraw Hill
2. Basic Civil Engineering, Satheesh Gopi, Pearson Publishers

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

ESC209 – Mechanical Engineering

1. Basic Mechanical Engineering, M.P. Poonia, S.C. Sharma & T.R. Banga, Khanna Publishing House
2. Basic Mechanical Engineering, G. Shanmugam &S Ravindran, Mc Graw Hill
3. Basic Mechanical Engineering, Pravin Kumar, Pearson

PCC-CE201 – Instrumentation & Sensor Technologies for Civil Engineering Applications

1. Electronics Measurements & Instrumentation, J.G. Joshi, Khanna Publishing House
2. A Course in Electronics Measurements and Instrumentation, A.K. Sahwney, Dhanpat Rai

PCC-CE202 – Engineering Geology

1. Text Book of Engineering Geology, N. Chenna Kesavulu, Macmillan Publishers
2. Engineering Geology for Civil Engineers, Varghese P.C, PHI
3. Engineering and General Geology, Parbin Singh, SK Kataria & Sons
4. Engineering Geology, Subinoy Gangopadhyay, Oxford University

PCC-CE203 – Disaster Preparedness & Planning

1. Disaster Management, S.C. Sharma, Khanna Publishing House
2. Disaster Management, Ghosh G.K., APH Publishing Corporation
3. Handbook of Disaster Management, Singh B.K., Rajat Publication
4. Disaster Management in India, A.K. Singh, New Royal Book Company

PCC-CE204 – Introduction to Fluid Mechanics

1. Fluid Mechanics, Sadhu Singh, Khanna Books, Delhi
2. Fluid Mechanics, RK Bansal, Laxmi Publications
3. Fluid Mechanics, Modi & Seth, Standard Publishers
4. Fluid Mechanics, Hydraulics and Hydraulic Machines, KR Arora, Standard Publishers Distributors

PCC-CE205 – Introduction to Solid Mechanics

1. Strength of Materials, D.S. Bedi, Khanna Publishing House
2. Strength of Materials, R Subramanian, Oxford University Press
3. Strength of Materials, RK Bansal, Laxmi Publications

PCC-CE206 – Surveying & Geomatics

1. Advanced Surveying, Madhu & Gobi, Pearson India
2. Geomatics Engineering, Arora & Badjatia, Nem Chand & Co.
3. Surveying Vol.-I, II, III, BC Punamia, Laxmi Publications
4. Surveying, Vol.-I, II, III, K.R. Arora, Standard Book House

PCC-CE206 – Materials, Testing & Evaluation

1. Highway Materials and Pavement, Khanna & Justo, Nemchand & Bros.

MC-CE207– Management – I (Organizational Behaviour)

1. A Textbook of Organizational Behaviour, CB Gupta, S.Chand Publications
2. Organizational Behaviour, LM Prasad, Sutan Chand and Sons

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

PCC-CE301 – Mechanics of Materials

1. Structural Analysis, R. Agor, Khanna Publishing House
2. Mechanics of Materials, BC Punmia & A.K. Jain, Laxmi Publications

PCC-CE302 – Hydraulic Engineering

1. Fluid Mechanics & Hydraulic Machines, SS Rattan, Khanna Publishing House
2. Hydraulic and Fluid Mechanics, PN Modi & SM Seth, Standard Book House
3. Fluid Mechanics, Dr K Subramanya, TMH
4. Fluid Mechanics and Machinery, CSP Ojha, R Berndtsson & P.N. Chandramouli, Oxford University
5. Fluid Machinery, Sadhu Singh, Khanna Publishing House, Delhi

PCC-CE303 – Structural Engineering

1. Advanced Structural Analysis, A.K. Jain, Nem Chand Bros.
2. Prestressed Concerte, Srikant B. Vanakudre, Khanna Publishing House
3. Design of Prestressed Concrete, Krishnan Raju, Tata McGraw Hill
4. Design of Steel Structures, N. Subramanian, Oxford University Press
5. Reinforced Concrete Vol. II, H.J. Shah, Charotar Publications
6. Structural Analysis, R. Agor, Khanna Publishing House

PCC-CE304 – Geotechnical Engineering

1. Principles of Geotechnical Engineering, Braja Das, Cengage
2. Basic and applied Soil Mechanics, Rajan & Rao, New Age International Publishers
3. Soil Mechanics & Foundation Engineering, Arora KR, Standard Publishers

PCC-CE305 – Hydrology & Water Resources Engineering

1. Engineering Hydrology, Subramanayan, McGraw Hill
2. Applied Hydrology, KN Muthreja, McGraw Hill

PCC-CE306 – Environmental Engineering

1. Environmental Engineering, S.C. Sharma, Khanna Publishing House
2. Basic Environmental Engineering, R.C. Gaur, Newage Publications
3. Water Resources Engineering, PN Modi, Standard Publishers
4. Environmental Engineering, Dr. AK Jain (ISBN: 978-93-86173560), Khanna Publishers
5. Irrigation Water Power & Water Resource Engineering, Arora, Standard Publishers

PCC-CE307 – Transportation Engineering

1. Transportation Engineering, L.R. Kadiyali, (ISBN: 978-93-82609-85-8), Khanna Publishing
2. Principles of Transportation Engineering, Chakrobarty, PHI Learning
3. Highway Engineering, Khanna & Justo, Nemchand & Bros.
4. Principles of Transportation Engineering, Partha Chakraborty, PHI Learning

HSMC255 – Professional Practice, Law & Ethics

1. A Foundation Course in Human Values and Professional Ethics, R.R. Gaur, R. Sangal, G.P. Bagaria, Excel Books, Delhi
2. Professional Ethics and Human Values, Premvir Kapoor, Khanna Book Publishing

MC-1 – Constitution of India

1. Introduction to Constitution of India, D.D. Basu, Lexis Nexus
2. The Constitution of India, PM Bhakshi, Universal Law

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

PCC-CE308 – Construction Engineering & Management

1. Construction Engineering & Management, S.C. Sharma & S.V. Deodhar, Khanna Book Publishing
2. Construction Project Management, Jha, Pearson
3. Building Construction, Varghese PC, Prentice Hall India

PCC-CE309 – Engineering Economics, Estimation & Costing

1. Estimating and Costing in Civil Engineering, BN Dutta, UBS Publishers
2. Estimating, Costing Specifications & Valuation, M Chakraborty
3. Handbook of Construction Management, Joy PK, , Macmillan

List of Some Other Useful Books:

1. Concrete: Microstructure, Properties & Materials, PK Mehta, Tata McGraw
2. Air Pollution Control Engineering, Keshav Kant, Khanna Publishing House
3. Design of Bridge Structures, T.R. Jagadeesh & M.A. Jayaram, Phi
4. Project Management with CPM /PERT, Punmia, Laxmi Publications
5. Introductory Methods of Numerical Analysis, Sashtry, PHI
6. Basics of Remote Sensing & GIS, S. Kumar, University Sc. Press
7. Theory of Structures, Punmia, Laxmi Publications
8. Civil Engineering Construction Materials, S.K. Sharma, KBP House
9. Ground Improvement Techniques, Purushottam Raj, Tata McGraw Hill
10. Elements of Land/Soil Pollution, O.P. Gupta, Khanna Publishing House
11. Water Supply and Sanitary Engineering, Rangwala, Charotar Publications
12. Harbour, Dock and Tunnel Engineering, Srinivasan, Charotar Publications
13. Airport Engineering, Rangwala, Charotar Publications

ELECTRICAL ENGINEERING

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

PCC-EE01 – Electrical Circuit Analysis

1. Networks and Systems, Asfaq Hussain, Khanna Publishing House, Delhi
2. Networks and systems, D. Roy Choudhary, New Age International Publishers
3. Problems and Solutions of Electrical Circuit Analysis, R.K. Mehta & A.K. Mal, CBS Publishers

PCC-EE02 – Analog Electronics

1. Analog Electronics, L.K.Maheshwari, Laxmi Publications
2. Analog Electronics, A.K. Maini, Khanna Publishing House
3. Analog Electronics, I.G.Nagrath, PHI

PCC-EE04 – Electrical Machines - I

1. Electrical Machines-I, GC Garg, (ISBN: 978-93-86173-447), Khanna Book Publishing, Delhi
2. Electrical Machines, Kothari & Nagrath, TMH
3. Electrical Machines, Mehta & Mehta, S.Chand Publications

ESC201 – Engineering Mechanics

1. Engineering Mechanics, D.S. Bedi, Khanna Book Publishing Co. (P) Ltd.
2. Engineering Mechanics, R.S. Khurmi, S.Chand Publishing
3. A Textbook of Engineering Mechanics, R.K. Bansal, Laxmi Publications
4. Engineering Mechanics, Sharma, Pearson

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

PCC-EE07 – Digital Electronics

1. Digital Electronics, A. Anand Kumar, PHI
2. Modern Digital Electronics, R.P. Jain, TMH
3. Digital Electronics, R.Anand Khanna Publishing House

PCC-EE09 – Electrical Machines - II

1. Electrical Machines - II, GC Garg, (ISBN: 978-93-86173-60-7), Khanna Book Publishing, Delhi
2. The Performance & Design of Alternating Current Machines, Say, CBS Publishers
3. Principle of Electrical Machine Design with Computer Programs, S.K. Sen, Oxford & IBH

PCC-EE11 – Power Electronics

1. Modern Power Electronics, P.C. Sen., Chand & Co.
2. Power Electronics, V.R.Moorthi, Oxford University Press
3. Power Electronics, Muhammad H. Rashid, Pearson

PCC-EE13 – Signals and Systems

1. Signals and Systems, A. Anand Kumar, Phi
2. Signals and Systems, Rishabh Anand, Khanna Book Publishing Co., Delhi
3. Signals and Systems, Tarun Rawat, Oxford University Press
4. Signal Processing and Linear Systems, B.P. Lathi, Oxford University Press
5. Signals and Systems, J. Nagrath, S. N. Sharan, R. Ranjan, S. Kumar, TMH

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BSC201 – Mathematics - III

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing Co. (P) Ltd., Delhi
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
3. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI
4. Discrete Mathematics and Its Applications, S. Chakraborty & B.K. Sarkar, Oxford

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

PCC-EE14 – Power Systems – I

1. Modern Power System Analysis, Kothari Nagrath, McGraw Hill Education
2. Power System Operation and Control, S. Sivanagaraju & G. Sreenivasan, Pearson
3. Electrical Power Systems, C.L. Wadhwa, Newage Publishers

PCC-EE16 – Control Systems

1. Control System Engineering, Nagrath & Gopal, Newage Publishers
2. Control Systems, Ambikapathy, Khanna Book Publishing Co. (P) Ltd., Delhi

PCC-EE17 – Microprocessors

1. Microprocessors, Ramesh Gaonkar, Penram Publications
2. Advanced Microprocessors and Peripherals, Burchandi, TMH
3. Advanced Microprocessors, AK Gautam, Khanna Publishing House

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

PCC-EE20 – Power Systems – II

1. Modern Power System Analysis, Kothari & Nagrath, McGraw Hill Education
2. Power System Operation and Control, Sivanagaraju & Sreenivasan, Pearson
3. Electrical Power Systems, C.L. Wadhwa, Newage Publishers

List of Recommended Books for Elective Courses:

1. Electromagnetic Waves, Shevgaonkar, R, McGraw Hill
2. Electrical Power Generation, Transmission and distribution, Singh, PHI
3. Electrical Power Generation, Tanmoy Deb, Khanna Publishers
4. HVDC Power Transmission System, K. R. Padiyar, Wiley
5. Introduction to Fuzzy Logic using MATLAB, S. N. Sivanandam, S. Sumati & S. N. Deepa, Springer
6. High Voltage Engineering, C.L. Wadhwa, Newage Publishers
7. Introduction to Neural Networks using MATLAB, Sivanandam, TMH
8. Electric Drives, N.K. De & P.K. Sen, PHI
9. Fundamentals of Electrical Drives, Dubey, Narosa Publishing House

MECHANICAL ENGINEERING

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

BSC201 – Physics -II

1. Engineering Physics, Garg & Singh
2. Mechanics, Mathur, S.Chand Publishing
3. Classical Mechanics, Upadhyaya, Himalaya Publishing House
4. Classical Mechanics, G. Aruldhas, PHI
5. Engineering Physics, Gupta & Gaur, Dhanpat Rai
6. Quantum Mechanics, Ajay Ghatak S. Lokanathan, Trinity
7. Quantum Mechanics: A Text Book for undergraduates, Mahesh C Jain, TMH
8. A text Book of Ruantum Mechanics, M. Mathews & K. Venkatesan, TMH
9. Electromagnetic Theory, Prabir K. Basu & Hrishikesh Dhasmana, Ane Books
10. Fundamentals of Electromagnetic Theory, Khunita, PHI
11. A Text Book of Optics, Avadhanulu, S. Chand
12. Optics, Ajoy Ghatak, TMH
13. Modern Physics for Engineers, S.P. Taneja, R. Chand
14. The Physics of waves and Oscillations, N.K. Bajaj, TMH

BSC202 – Mathematics - III

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
3. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI
4. Discrete Mathematics and Its Applications, S. Chakraborty & B.K. Sarkar, Oxford

ESC201 – Basic Electronics Engineering

1. Basic Electronics, Santiram Kal, Printice Hall
2. Basic Electronics, B.L. Thareja, S.Chand Publishing
3. Basic Electronics, S. Biswas, Khanna Publications

ESC202 – Engineering Mechanics

1. Engineering Mechanics, D.S. Bedi, Khanna Book Publishing Co. (P) Ltd.
2. Engineering Mechanics, R.S. Khurmi, S.Chand Publishing
3. A Textbook of Engineering Mechanics, R.K. Bansal, Laxmi Publications
4. Engineering Mechanics, DP Sharma, Pearson

PCC-ME201– Thermodynamics

1. Engineering Thermodynamics, P.K. Nag, Tata McGraw Hill
2. Basic and Applied Thermodynamics, P.K. Nag, Tata McGraw Hill

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

PCC-ME202– Applied Thermodynamics
1. Engineering Thermodynamics, Nag P.K, Tata McGraw Hill
2. Basic and Applied Thermodynamics, PK Nag, Tata McGraw Hill

PCC-ME203– Fluid Mechanics and Fluid Machines
1. Fluid Mechanics, Sadhu Singh, Khanna Publishing House, Delhi
2. Fluid Mechanics, Modi & Seth, Standard Publishers

PCC-ME204– Strength of Materials
1. Strength of Materials, D.S. Bedi, Khanna Publishing, Delhi
2. Strength of Materials, R.K. Rajput, Laxmi Publications
3. Strength of Materials, R. Subramanian, Oxford Publications

PCC-ME205– Materials Engineering
1. Engineering Materials Properties and Selection, Budinski and Budinski, PHI
2. Material Science & Engineering, R. Balasubhramanium, Wiley India

MC - II– Environmental Science
1. Textbook of Environmental Studies, Erach Bharucha, University Press
2. Environmental Studies, MP Poonia & SC Sharma, Khanna Publishing House
3. Environmental Studies, Rajagopalan, Oxford University Press

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

PCC-ME301– Heat Transfer
1. Fundamental of Heat and Mass Transfer, M.Thirumaleshwar, Pearson
2. Computational Heat Transfer and Fluid Flow, Murlidhar & Sunder Rajan, Narosa
3. Thermal Engineering, M.L. Mathur & F.S. Mehta, Jain Publications
4. A Course in Heat & Mass Transfer, V.M. Domkundwar, Dhanpat Rai & Co.

PCC-ME302– Solid Mechanics
1. Strength of Materials, D.S. Bedi, Khanna Publishing House
2. Strength of Materials, R Subramanian, Oxford University Press
3. Strength of Materials, RK Bansal, Laxmi Publications
4. Mechanics of Materials, Punmia, Jain and Jain, Laxmi Publications

PCC-ME304– Kinematics & Theory of Machines
1. Theory of Machines, SS Rattan, Tata McGraw Hill
2. Kinematics & Theory of Machines, Sadhu Singh, Pearson

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

PCC-ME307– Manufacturing Technology

1. Manufacturing Technology, Vol. 1, 2, 3, PN Rao, TMH
2. Manufacturing Technology, RK Rajput, Laxmi Publications
3. Production and Operations Management, S.N.Chary, TMH

PCC-ME308– Design of Machine Elements

1. Machine Design (ISBN: 9789382609575), Sadhu Singh, Khanna Publishing House, Delhi
2. Machine Design Data Book, Sadhu Singh, Khanna Publishing House
3. Design Data Book, Mahadevan, CBS Publishers & Distributors
4. Introduction to Machine Design, V.B. Bhandhari, McGraw Hill
5. A Textbook of Machine Design, RS Khurmi, S.Chand Publications

SEMESTER – VII (FOURTH YEAR)

List of Recommended Books:

PCC-ME401– Automation in Manufacturing

1. Modern Machining Process, Pandey and Shan, TMH
2. Manufacturing Automation Metal Cutting Mechanics, Machine Tool Vibrations, CNC Design, Yusuf, Cambridge University Press

List of Recommended Books for Other Courses:

Mechatronics

1. A Textbook of Mechatronics, RK Raput, S.Chand Publishing
2. Mechatronics: Principles, Concepts and applications, Mahalik N.P, Tata McGraw Hill
3. Introduction to Mechnotronics, Kuttan, Oxford University

Finite Element Analysis

1. A Text Book of Finite Element Analysis, Seshu, Phi
2. The Finite Element Methods in Engineering, SS Rao, Butterworth
3. An Introduction to Finite Element Methods, J Reddy, Tata McGraw Hill

Power Plant Engineering

1. Power Plant Engineering, P.K. Nag, TMH
2. Power Plant Engineering, S.C. Sharma, Khanna Publications

Refrigeration and Air Conditioning

1. Refrigeration and Air Conditioning, C.P. Arora, TMH
2. Refrigeration and Air Conditioning, Sadhu Singh, Khanna Publishing House
3. A Course in Refrigeration & Air Conditioning, Domkundwar, Dhanpat Rai

Machine Drawing

1. Machine Drawing, PS Gill, Katsons
2. Machine Drawing, O.P Jahkar, Amit Mathur, Khanna Publishing House

Gas Turbines

1. Gas Turbines, Ganeshan, Tata McGraw Hill
2. Internal Combustion Engines, Mathur & Sharma, Dhanpat Rai
3. Steam, Gas Turbine and Power Plant Engineering, Yadav, CPH, Allahabad

Total Quality Management

1. Total Quality Management, Poonia & Sharma, Khanna Publishing House
2. Total Quality Management, Gopal, PHI

Engineering Management

1. Engineering Management: Industrial Engineering & Management, SC Sharma, Khanna Publishing House, Delhi
2. Industrial Engineering & Operations Management, SK Sharma

Automobile Engineering

1. Automotive Engineering, Kirpal Singh, Standard Publishers
2. Automobile Mechanics, A.K. Babu & S.C. Sharma, T.R. Banga, Khanna Book Publishing
3. Automotive Electricals and Electronics, A.K. Babu, Khanna Publishing House
4. A Textbook of Automobile Engineering, R.K. Rajput, Laxmi Publications

Reliability Engineering

1. Reliability Engineering, E. Balaguruswamy, Tata McGaw Hill
2. Reliability Engineering, L.S. Srinath, Affliated East-West Press
3. Industrial Maintenance Management, S.K. Srivastava, S.Chand & Co.

List of Some Other Useful Books:

1. Robotics and Control, Mittal & Nagrath, Tata McGraw Hill
2. Robotics Technology, Satyarajan Deb, TMH
3. Practical Non-Destructive Testing, Baldev Raj, T. Jay Kumar, M. Thavasimuthu, Narosa
4. Mechanical Vibrations, S.S. Rao, Addison Wesley Longman
5. Principles and Practice of Management, Prasad, L.M, Sultan Chand
6. Mechanical Vibrations, SS Rao, Pearson
7. Mechanical Vibrations, GK Grover, Nem Chand Bros.
8. Transducers and Instrumentation, V.S. Murthy, PHI
9. Transducers and Instrumentation, Nakra & C.Houdhary, TMH
10. Fundamentals of Industrial Drives, Sarkar, PHI
11. Automotive Engines, A.K. Babu, Khanna Publications
12. Modern Machining Process, Pandey & Shan, Tata McGraw Hill

COMPUTER SCIENCE ENGINEERING

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

ESC201 – Analog Electronic Circuits

1. Analog Electronics, L.K. Maheshwari, Laxmi Publications
2. Analog Electronics, A.K. Maini, Khanna Publishing House
3. Analog Electronics, I.G. Nagrath, PHI

PCC-CS301 – Data Structures & Algorithms

1. Fundamentals of Data Structures, Sartaj Sahni, University Press
2. Data Structures, RS Salaria, Khanna Publishing House
3. Data Structures through C, Yashwant Kanetkar, BPB Publications
4. Expert Data Structures with C++, RB Patel, Khanna Publications

ESC302– Digital Electronics

1. Digital Electronics, A. Anand Kumar, PHI
2. Modern Digital Electronics, R.P. Jain, TMH
3. Digital Electronics, Rishabh Anand, Khanna Publishing House

BSC301 – Mathematics – III

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw
3. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
4. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

PCC-CS401 – Discrete Mathematics

1. Discrete Mathematics and Its Applications, Chakraborty & Sarkar, Oxford
2. Discrete Structures, S.B. Singh, Khanna Book Publishing, Delhi
3. Discrete Mathematics, T. Veerarajan, Tata McGraw-Hill

PCC-CS402– Computer Organization & Architecture

1. Computer Fundamentals Architecture and Organization, B. Ram, New Age International
2. Computer Organization & Architecture, Rajaraman, PHI Learning

PCC-CS403 – Operating Systems

1. Operating Systems, Ekta Walia, Khanna Publishing House, Delhi
2. Operating Systems A Concept-Based Approach, Dhananjay M. Dhamdhere, McGraw Hill

PCC-CS404– Design & Analysis of Algorithms

1. Design & Analysis of Algorithms, S. Sridhar, Oxford
2. Design & Analysis of Algorithms, Sharma, Khanna Publishing House, N.Delhi

HSMC401 – Management – I

1. A Textbook of Organizational Behaviour, CB Gupta, S.Chand Publications
2. Organizational Behaviour, LM Prasad, Sultan Chand and Sons

MC – Environmental Sciences

1. Textbook of Environmental Studies, Erach Bharucha, University Press
2. Environmental Studies, MP Poonia & SC Sharma, Khanna Publishing House
3. Environmental Studies, Rajagopalan, Oxford University Press

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

ESC501 – Signals and Systems

1. Signals and Systems, A. Anand Kumar, Phi
2. Signals and Systems, Tarun Rawat, Oxford University Press
3. Signals and Systems, Rishabh Anand, Khanna Book Publishing Co., Delhi
4. Signal Processing and Linear Systems, B.P. Lathi, Oxford University Press
5. Signals and Systems, J. Nagrath, S. N. Sharan, R. Ranjan, S. Kumar, TMH

PCC-CS501- Database Management Systems

1. Fundamental of Database Systems, E. Ramez and Navathe, Pearson
2. Database Management Systems, R.P. Mahapatra & Govind Verma, Khanna Publishing House
3. Database Management Systems, Raghurama Krishan, McGraw Hill

PCC-CS502 - Formal Language & Automata Theory

1. Theory of Computer Science: Automata, Languages and Computation, Mishra, Phi
2. Theory of Computation, RB Patel & Prem Nath, Khanna Publications

PCC-CS503 - Object Oriented Programming

1. Object Oriented Programming with C++, Balaguruswamy, TMH
2. Mastering Object-Oriented Programming with C++, R.S. Salaria, Khanna Book Publishing, N.Delhi
3. Programming with Java, Balaguruswamy, TMH
4. Object Oriented Programming in C++ and Java, D.Samantha, PHI
5. Internet and Java Programming, Tanweer Alam, Khanna Publishing House

MC- Constitution of India

1. Introduction to Constitution of India, D.D. Basu, Lexis Nexus
2. The Constitution of India, PM Bhakshi, Universal Law

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

PCC-CS602 - Computer Networks

1. Computer Networks, M. Dave, Cengage
2. An Engineering Approach to Computer Networking, Keshav, Pearson
3. An Integrated Approach to Computer Networks, Bhavneet Sidhu, Khanna Publications
4. Telecommunication Switching System and Networks, Viswanathan, PHI

List of Recommended books for Additional Courses:

Graph Theory

1. Graph Theory, Deo and Narsingh, PHI Publications
2. Combinatorics & Graph Theory, Singh, Khanna Publishing House

Software Engineering

1. A concise introduction to software Engineering, Pankaj Jalote, Springer
2. Software Engineering, Nasib Singh Gill, Khanna Publishing House
3. Software Engineering, K.K. Aggarwal & Yogesh Singh, New Age International

Python Programming

1. Taming Python by Programming, Jeeva Jose, Khanna Publishing House
2. Introduction to Computing and Problem Solving with Python, J. Jose, Khanna Publications
3. Python Programming, Seema Thareja, Pearson

Artificial Intelligence

1. A classical approach to Artificial Intelligence, Munesh Chandra Trivedi, Khanna Publications
2. Artificial Intelligence and Machine Learning, Chandra S.S. & H.S. Anand, PHI Publications
3. Machine Learning, Rajiv Chopra, Khanna Publishing House

Cryptography & Network Security

1. Cryptography & Network Security, Atul Kahate, McGraw Hill
2. Cryptography & Network Security, V.K. Jain, Khanna Publishing House

Internet of Things

1. Internet of Things, Jeeva Jose, (ISBN: 978-93-86173-591), Khanna Publishing House
2. Internet of Things, Arsheep Bahga and Vijay Madisetti

Software Testing

1. Software Testing, Yogesh Singh, University Press
2. Fundamentals of Software Testing, AB Mathur, Pearson
3. Software Testing Principles and Practices, Chauhan, Oxford University Press

Data Analytics

1. Big Data & Hadoop, V.K. Jain, Khanna Publishing House
2. Big Data Black Book, DT Editorial Services, Wiley India
3. Data Science & Analytics, V.K. Jain, Khanna Publishing House
4. Beginner's Guide for Data Analysis using R Programming, Jeeva Jose, ISBN: 978-93-86173454

Numerical Methods

1. Numerical Methods, E.Balaguruswamy, TMH
2. Introductory Methods of Numerical Analysis, S.S.Sastry, PHI
3. Computer Oriented Numerical Methods, R.S. Salaria, Khanna Publishing House

List of Some Other Useful Books:

1. Information Systems Security, Nina Godbole, Wiley
2. Introduction to Embedded Systems, K.V. Shibu, McGraw Hill
3. Introduction to Embedded Systems, Raj Kamal, Tata McGraw Hill
4. Fundamentals of Computers, Ravichandran, Tata McGraw Hill
5. Fundamentals of Computers, Rajaraman, PHI
6. Computer Fundamentals and Programming in C, Nasib Singh Gill, KBP
7. Hacking, Harsh Bothra, Khanna Publishing House
8. Cryptography and Information Security, V. K. Pachghare, PHI Learning
9. Information Security & Cyber Laws, Gupta, Khanna Publishing House
10. Ad hoc Wireless Networks Architectures, C.Siva Ram Murthy, Pearson
11. Multimedia Systems Concepts Standards and Practices, Ramesh, PHI
12. Multimedia and Animation, V.K. Jain
13. Information Theory, R Ash, Dover Science Publications
14. Essentials of Cloud Computing, K. Chandrasekaran
15. Cloud Computing, Pandey & Choudhary

ELECTRONICS & COMMUNICATION ENGINEERING

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

EC01 – Electronic Devices

1. Solid State Electronic Devices, G. Streetman, and S. K. Banerjee, Pearson
2. Semiconductor Physics and Devices, D. Neamen, D. Biswas, McGraw Hill
3. All-in-One Electronic Simplified, A.K. Maini, Khanna Publishing House

EC03 – Digital System Design

1. Modern Digital Electronics, RP Jain, TMH
2. Digital System Design using VHDL, R. Anand, Khanna Publishing House
3. A VHDL Primer, Bhaskar, Pearson
4. A VHDL Synthesis, Bhaskar, Pearson

EC05 – Signals and Systems

1. Signals and Systems, A. Anand Kumar, Phi
2. Signals and Systems, Tarun Rawat, Oxford University Press
3. Signals and Systems, Rishabh Anand, Khanna Book Publishing Co., Delhi
4. Signal Processing and Linear Systems, B.P. Lathi, Oxford University Press
5. Signals and Systems, J. Nagrath, S. N. Sharan, R. Ranjan, S. Kumar, TMH

EC05 – Network Theory

1. Networks and Systems, Asfaq Hussain, Khanna Publishing House, Delhi
2. Circuits and Network, Sudhakar & Shyammohan, Tata McGraw-Hill
3. Networks and systems, D. Roy Choudhary, New Age International Publishers

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

EC07 – Analog & Digital Communication

1. Analog & Digital Communication, B.P. Lathi, Gupta, Oxford University Press
2. Analog & Digital Communications, Debajani Mitra, TMH
3. Digital Design, Natrajan Ananda, PHI Publications

EC09 – Analog Circuits

1. Analog Electronics, L.K. Maheshwari, Laxmi Publications
2. Analog Electronics, A.K. Maini, Khanna Publishing House
3. Analog Electronics, I.G. Nagrath, PHI

EC11 – Microcontrollers

1. R. S. Gaonkar, Microprocessor Architecture: Programming and Applications with the 8085/8080A, Penram International Publishing
2. Microprossers and Microcontrollers, Krishna Kant, PHI
3. 8051 Microcontrollers, Rajakamal, TMH

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

EC13 – Electromagnetic Waves

1. Electromagnetic Fields & Waves, R.L. Yadava, Khanna Publishing House
2. Electromagnetic Waves, R.K. Shevgaonkar, Tata McGraw Hill India
3. Engineering Electromagnetics, Narayana Rao, PHI

EC15 – Computer Architecture

1. Computer Fundamentals Architecture and Organization, B. Ram, New Age
2. Computer Organization & Architecture, Rajaraman, PHI Learning

EC17 – Digital Signal Processing

1. Digital Signal Processing, S. Salivahanan, McGraw Hill
2. Digital Signal Processing, S.K. Mitra, TMH
3. Digital Signal Processing, Ashok Ambardar, Cengage
4. Digital Signal Processing, A. Anand Kumar, PHI

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

EC19 – Control Systems

1. Control Systems, Gopal, Tata McGraw-Hill
2. Modern Control Engineering, Nagrath & Gopal, New Age International
3. Control Systems, A. Ambikapathy, Khanna Publishing House

EC20 - Computer Networks

1. Computer Networks, M. Dave, Cengage
2. An Integrated Approach to Computer Networks, Bhavneet Sidhu, Khanna Publications
3. Telecommunication Switching System and Networks, Viswanathan, PHI
4. An Engineering Approach to Computer Networking, Keshav, Pearson

List of Recommended books for Additional Courses:

ECEL02 – Fiber Optic Communication

1. Integrated Optics, T. Tamir, Springer-Verlag,
2. Nonlinear Fiber Optics, G. Agrawal, Academic Press
3. Fiber optic Communication Systems, G. Agrawal, Wiley India

ECEL05 – Introduction to MEMS

1. Micro and Smart Systems, Ananthasuresh & Gopalkrishnan, Wiley India
2. Microsystem Design, S. D. Senturia, Kluwer Academic Publishers

ECEL07 – Antennas and Propagation

1. Micro Strip Antennas, J. Bahl and P. Bhartia, Artech House
2. Electromagnetic Waves, R.K. Shevgaonkar, Tata McGraw Hill
3. Electromagnetic Waves, R.L. Yadav, Khanna Publishing House

ECEL14 – Power Electronics

1. Modern Power Electronics, P.C. Sen, Chand & Co.
2. Power Electronics, V.R.Moorthi, Oxford University Press.
3. Power Electronics, Muhammad H. Rashid, Pearson
4. Power Electronics, Joseph Vithyalthil, TMH

List of Some Other Useful Books:

1. Microwave Circuits, K.C. Gupta, Newage Publishers
2. Fundamentals of Digital Image Processing, Anil Kumar Jain, PHI
3. Fundamentals of Digital Processing, Tamal Bose, Wiley
4. Electronic Product Design, G. Kaduskar and V.B. Baru, Wiley India
5. Information Theory, R.B. Ash, PHI
6. Telecommunication Switching Systems and Networks, T. Viswanathan, PHI
7. Elements of Electronic Navigation Systems, N.S. Nagaraja, Tata McGraw Hill
8. Control in Robotics and Automation, Ghosh, Allied Publishers
9. Robotics Technology, Deb, Wiley India
10. Switchgear & Protection, Haroon Asfaq, Khanna Book Publishing

CHEMICAL ENGINEERING

SEMESTER – II (FIRST YEAR)

List of Recommended Books:

BS105 – Mathematics – II

1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw
3. Advanced Engineering Mathematics (978-81-203-3609-4), Sashtry, PHI
4. Advanced Engineering Mathematics, Jain & Iyer, Narosa Publications

ESC-GES102 – Thermodynamics - I

1. An Introduction to Thermodynamics, Rao, John Wiley
2. Chemical Technology Volume – I, Pandey, Lion Press

PCC-GES103 – Electrical & Electronics Engineering

1. Basic Electrical and Electronics Engineering, Sukhija and Nagsarkar, Oxford
2. Basic Electrical and Electronics Engineering, Kothari & Nagrath, TMH
3. All-in-One Electronics Simplified, A.K. Maini, Khanna Book Publishing Co., Delhi

PCC-CS101 – Material & Energy Balance Computation

1. Basic Principles and Calculations in Chemical Engineering, Himmelblau, Phi
2. Stoichiometry, Bhatt & Vora, TMH
3. Stoichiometry and Process Calculations, Narayanan & Lakshmikutty, PHI

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

ESC-GES105 – Engineering and Solid Mechanics

1. Mechanics of Materials, Punmia & Jain, Laxmi Publications
2. Strength of Materials, D.S. Bedi, Khanna Publishing House
3. Strength of Materials (Mechanics of Solid), R.S. Khurmi, S.Chand Publications

BS107 - Chemistry – II

1. Engineering Chemistry, Satyaprakash & Manisha Agrawal, Khanna Book Publishing, Delhi
2. A Text Book of Engg. Chemistry, Shashi Chawla, Dhanpat Rai & Co. (P) Ltd.
3. Essentials of Physical Chemistry, Bahl & Tuli, S.Chand Publishing
4. Applied Chemistry, Sunita Rattan, Kataria
5. Engineering Chemistry, Baskar, Wiley
6. Engineering Chemistry – I, D. Grour Krishana, Vikas Publishing
7. Laboratory Manual Engg. Chemistry, Anupma Rajput, Dhanpat Rai & Co.

PC-CS103 - Thermodynamics - II
1. Chemical Engineering Thermodynamics, YVC Rao, University Press

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

PCC-CS104 – Heat Transfer
1. Process Heat Transfer and Chemical Equipment Design, D.C.Sikdar, Khanna Publishing House
2. Heat Transfer: Principles and Applications, B.K. Dutta, PHI

PCC-CS105 - Mass Transfer – I
1. Principles of Mass Transfer and Separation Processes, B.K. Dutta, PHI

PCC-CS106 - Fluid Mechanics
2. Fluid Mechanics, Sadhu Singh, Khanna Book Publishing
3. Introduction to Fluid Mechanics and Fluid Machines, Som & Biswas, TMH

ESC-GES107 - Material Science
1. Materials Science and Engineering, Raghavan, V, PHI
2. Material Science & Engineering, Upadhyaya, Anshan Publications
3. Testing of Metallic Materials, Suryanarayanan, A.V.K., Tata McGraw

PCC-CS107 - Numerical Methods in Chemical Engineering
1. Numerical Methods for Engineers, Gupta, Newage Publishers
2. Numerical Methods for Engineers with Personal Computer Applications, S.C. Chapra, McGraw

MC - Environmental Sciences
1. Textbook of Environmental Studies, Erach Bharucha, University Press
2. Environmental Studies, MP Poonia & SC Sharma, Khanna Publishing House
3. Environmental Studies, Rajagopalan, Oxford University Press

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

PCC-CS108 - Chemical Reaction Engineering – I
1. Principles of Chemical Reaction Engineering, Dawande S.D, Central Techno Publications, Nagpur
2. Chemical Reaction Engineering - I, K A Gavhane, Nirali Prakahan

PCC-CS109 - Mass Transfer – II
1. Principles of Mass Transfer and Separation Processes, B.K. Dutta, PHI

PC-CS1111- Particle & Fluid Particle Processing
1. Unit Operations-I, Fluid Flow & Mechanical Operation, Gavhane, Nirali Prakashan
2. Unit Operations Vol.-I, K. A. Gavhane, Nirali Prakashan
3. Chemical Process Simulation, Husain, Wiley Eastern India

SEMESTER – VI (THIRD YEAR)

List of Recommended Books:

PCC-CS112 - Chemical Reaction Engineering – II

1. Principles of Chemical Reaction Engineering, Dawande S.D, Central Techno Publications, Nagpur
2. Chemical Reaction Engineering Vol. - II, K. A. Gavhane, Nirali Prakashan

PCC-CS113 – Process Technology & Economics

1. Dryden's Outlines of Chemical Technology, Rao, Affliated Press
2. Chemical Process Technology, O.P. Gupta, Khanna Publishing House
3. Chemical Project Economics, Mahajani, McMillan

PCC-CS114–Process Control

1. Instrumentation and Process Control, D.C. Sikdar, Khanna Publishing House
2. Instrumentation, Measurement and Analysis, Nakra, TMH

SEMESTER – VII (FOURTH YEAR)

List of Recommended books for Additional Courses:

Water Conservation & Management

1. Elements of Water Pollution Control Engineering, OP Gupta, Khanna Publishing House, Delhi
2. Water Supply and Sanitary Engineering, Rangwala, Charotar Publications

Advanced Separation Process

1. Process Design of Equipments, Dawande, S.D., Central Techno, Nagpur

Environmental Pollution and Control

1. Elements of Environmental Pollution Control, OP Gupta, Khanna Publishing House
2. Environmental Pollution Control Engineering, C.S. Rao, Newage Publications

Energy Resources (Conventional & Non-Conventional)

1. Elements of Fuels & Combustion Technology, Gupta, Khanna Publishing House
2. Energy Audit and Management, Teri Press
3. Energy Conservation, Diwan & Dwivedi, Pentagon Press
4. Non-Conventional Energy Resources, Chandra, Khanna Publishing House

Optimization Methods

1. Optimization Techniques, SS Rao, Wiley Eastern India

Petroleum Engineering

1. Elements of Petroleum Refinery Engineering, Gupta, (ISBN: 9789382609728)
2. Outlines of Chemical and Petroleum Engineering, Suryanaryana & Mahto, Khanna Publishing

METALLURICAL ENGINEERING & MATERIAL SCIENCE

SEMESTER – III (SECOND YEAR)

List of Recommended Books:

BS201 – Biology
1. Biology for Engineers (ISBN: 9781121439931), TMH

BS203 – Mathematics - III
1. Advanced Engineering Mathematics, Chandrika Prasad & Reena Garg, Khanna Book Publishing
2. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill
3. Advanced Engineering Mathematics (ISBN:9788120336094), Sashtry, PHI

PCC-MM201 – Introduction to Materials Engineering
1. Materials Science and Engineering, Raghavan, V, PHI
2. Material Science & Engineering, Upadhyaya, Anshan Publications
3. Testing of Metallic Materials, Suryanarayanan, A.V.K., Tata McGraw

PCC-MM203 – Phase Transformation
1. Solid State Phase Transformations, V. Raghavan, PHI

ESC201 – Materials Thermodynamics
1. Metallurgical Thermodynamics, S.K. Dutta, S.Chand Publications
2. Essentials of Metallurgical Thermodynamics, R.H. Tupkary, Khanna Publishing House

ESC201 – Engineering Mechanics
1. Engineering Mechanics, D.S. Bedi, Khanna Book Publishing Co. (P) Ltd.
2. Engineering Mechanics, R.S. Khurmi, S.Chand Publishing
3. A Textbook of Engineering Mechanics, R.K. Bansal, Laxmi Publications
4. Engineering Mechanics, Sharma, Pearson
5. Applied Mechanics and Strength of Materials, Jindal, Galgotias

MC – Environmental Sciences
1. Textbook of Environmental Studies, Erach Bharucha, University Press
2. Environmental Studies, MP Poonia & SC Sharma, Khanna Publishing House
3. Environmental Studies, Rajagopalan, Oxford University Press

SEMESTER – IV (SECOND YEAR)

List of Recommended Books:

PCC-MM202 - Mechanical Properties for Materials
1. Engineering Materials, Budinski & Narasimhulu, Pearson

PCC-MM206 - Physical Metallurgy
1. Physical Metallurgy: Principles and Practice, V. Raghavan, PHI Learning

PC-MM208 - Physics of Materials

1. Physics of Materials, Essential concepts of Solid State Physics, Prathap Haridoss, Wiley India

HSMC202 - Economics for Engineers

1. Sociology & Economics for Engineers, Premvir Kapoor, Khanna Publishing House, Delhi

SEMESTER – V (THIRD YEAR)

List of Recommended Books:

PCC-MM301 - Materials Characterization

1. Materials Characterization, P.K. Maitra, PHI

PCC-MM303 - Environmental Degradation of Materials

1. Elements of Environmental Pollution Control, OP Gupta, Khanna Publishing House
2. Environmental Pollution Control Engineering, C.S. Rao, Newage Publications

SEMESTER – VII (FOURTH YEAR)

List of Recommended Books:

ESC401 - Introduction to Instrumentation

1. Instrumentation and Process Control, DC Sikdar, Khanna Publishing House

List of Recommended books for Additional Courses:

Energy Materials

Energy Technology, O.P. Gupta, Khanna Book Publishing House, Delhi

Biomaterials

Introduction to Biomaterials, Agrawal & Gopinath, Cambridge University Press

Electronic Materials

Semiconductor Materials, Devices and Fabrication, Swaminathan, Wiley India

Fatigue and Fracture Mechanics

Fatigue of Materials, Suresh, Cambridge India

Failure Analysis

Failure Analysis of Engineering Materials, Ashok Choudhury, McGraw-Hill

Powder Metallurgy

Powder Metallurgy, Upadhyaya & Upadhyaya, Universities Press
Power Metallurgy, Subramanian, PHI