

Recommended Books

• 1st Semester

1. Applied Mathematics-1

Text:

- [T1] B. S. Grewal, "Higher Engineering Mathematics" Khanna Publications.
[T2] R. K. Jain and S.R.K. Iyengar, "Advanced Engineering Mathematics" Narosa Publications.

References:

- [R1] E. kresyzig, "Advance Engineering Mathematics", Wiley publications
[R2] G.Hadley, "Linear Algebra" Narosa Publication
[R3] N.M. Kapoor, "A Text Book of Differential Equations", Pitambar publication.
[R4] Wylie R, "Advance Engineering mathematics", McGraw-Hill
[R5] Schaum's Outline on Linear Algebra, Tata McGraw-Hill
[R6] Polking and Arnold, "Ordinary Differential Equation using MatLab" Pearson.

2. Applied Physics-1

You won't find the whole syllabus in one book try to attend the classes and take notes if possible !!

Text Books:

- [T1] Arthur Beiser, 'Concepts of Modern Physics', [McGraw-Hill], 6th Edition 2009
[T2] A. S.Vasudeva, 'Modern Engineering Physics', S. Chand, 6th Edition, 2013.

Reference Books

- [R1] A. Ghatak 'Optics', TMH, 5th Edition, 2013
[R2] G. Aruldas 'Engineering Physics' PHI 1st Edition, 2010.
[R3] Fundamentals of Optics : Jenkins and White , Latest Edition
[R4] C. Kittle, "Mechanics", Berkeley Physics Course, Vol.-I.
[R5] Feynman "The Feynman lectures on Physics Pearson Volume 3 Millennium Edition, 2013
[R6] Uma Mukhrji 'Engineering Physics' Narosa, 3rd Edition, 2010.
[R7] H.K. Malik & A. K. Singh 'Engineering Physics' [McGraw-Hill], 1st Edition, 2009.

3. Manufacturing Processes

Text Books:

- [T1] Manufacturing Process by Raghuvanshi.(Dhanpat Rai and Co.)
[T2] Manufacturing Technology by P.N.Rao (TMH publications)

Reference Books:

- [R1] **Workshop Technology by Hazra-Chowdhary** (Most Recommended)
[R2] Production Engineering by R.K.Jain (Khanna Publishers)
[R3] Workshop Technology by Chapman (Elsevier Butterworth-Heinemann)
[R4] Fundamentals of Modern Manufacturing by Mikell P. Groover (Wiley India Edition)
[R5] Manufacturing Processes for Engineering Materials by Kalpakjian and Schmid (Pearson)

4. Electrical Technology

Text Books:

- [T1] J.B. Gupta (Recommended by seniors)
[T2] S.N Singh, "Basic Electrical Engineering" PHI India Ed 2012
[T3] Chakrabarti, Chanda, Nath "Basic Electrical Engineering" TMH India", Ed 2012.

Reference Books:

- [R1] William Hayt "Engineering Circuit Analysis" TMH India Ed 2012
[R2] Giorgio Rizzoni "Principles and Application of Electrical Engineering" Fifth Edition TMH India.

5. Human Values and Professional Ethics

Text Books:

- [T1] Professional Ethics, R. Subramanian, Oxford University Press.
- [T2] Professional Ethics & Human Values: S.B. Srivastha, SciTech Publications (India) Pvt. Ltd. New Delhi.
- [T3] Professional Ethics & Human Values: Prof. D.R. Kiran, TATA Mc Graw Hill Education.

References:

- [R1] Success Secrets for Engineering Students: Prof. K.V. SubbaRaju, Ph.D., Published by SMARTstudent. (Do read if you have time!).
- [R2] Ethics in Engineering Mike W. Martin, Department of Philosophy, Chapman University and Roland Schinzinger, School of Engineering, University of California, Irvine.
- [R3] Human Values: A. N. Tripathy (2003, New Age International Publishers)
- [R4] Value Education website, <http://www.universalhumanvalues.info>[16]
- [R5] Fundamentals of Ethics, Edmond G. Seebauer & Robert L. Barry, Oxford University Press.
- [R6] Human Values and Professional Ethics: R. R. Gaur, R. Sangal and G. P. Bagaria, Eecel Books (2010, New Delhi). Also, the Teachers' Manual by the same author.

6. **Fundamentals of Computing**

Text:

- [T1] **Peter Norton, Introduction to computers, Sixth Edition Tata McGraw Hill (2007).**
- [T2] Andrews Jean, A+Guide to Managing & Maintaining Your PC, Cengage Publication 6/e

References:

- [R1] Anita Goel, Computer Fundamentals, Pearson Education.
- [R2] Joiner Associates Staff, Flowcharts: Plain & Simple: Learning & Application Guide , Oriel Inc
- [R3] <http://www.openoffice.org/why/> [R4] <http://www.libreoffice.org/get-help/documentation/>

7. **Applied Chemistry**

Text Books:

- [T1] **P. C. Jain & Monika Jain, Engineering Chemistry, Latest edition, Dhanpat Rai Publishing Co., 2002.(More than enough)**
- [T2] P. Mathew, Advance Chemistry, 1 & 2 Combined Editions, Cambridge University Press, 2003.

Reference Books:

- [R1] P. W. Atkins and J. De Paula, Atkins' Physical Chemistry, Oxford, 2010.
- [R2] T. Engel and P. Reid, Physical Chemistry, Pearson Education, 2013.
- [R3] K. Qanungo, Engineering Chemistry, PHI Learning Private Limited, New Delhi, 2009.
- [R4] O. G. Palanna, Engineering Chemistry, Tata McGraw Hill Education Private Limited, 2012.
- [R5] D. A. Jones, Principles and Prevention of Corrosion, Prentice Hall, 2nd Edition, 1996.
- [R6] H. K. Chopra and A. Parmar, Engineering Chemistry-A Text Book, Narosa Publishing House, 2012.
- [R7] S. Chawla, Engineering Chemistry-All India Edition, Dhanpat Rai & Co., 2003.
- [R8] R. Gadi, S. Rattan and S. Mohapatra, Environmental Studies, S.K. Kataria & Sons, 2nd Edition 2009.

• **2nd Semester**

1. **Applied Mathematics-2**

Text:

- [T1] B.S. Grewal
- [T2] E. kresyzig, "Advance Engineering Mathematics", Wiley publications
- [T3] Michael Greenberg, "Advance Engineering mathematics", Pearson.

References:

- [R1] R.K. Jain and S.R.K. Iyengar, "Advanced Engineering Mathematics "Narosa Publications
- [R2] B. S. Grewal, "Higher Engineering Mathematics" Khanna Publications.

- [R3] S. Ponnusamy, "Foundation of Complex Analysis" Narosa Publication
 [R4] G.B. Thomas and R. N. Finny "Calculus and Analytic Geometry" Addison Wesley/ Narosa
 [R5] Wylie R, "Advance Engineering mathematics", McGraw-Hill
 [R6] M. Spiegel, "Schaum's Outline on Laplace Transform, Tata McGraw-Hill

2. **Applied Physics-2**

Text Books:

- [T1]. Arthur Beiser 'Concepts of Modern Physics', [McGraw-Hill], 6th Edition 2009.
 [T2]. A. S. Vasudeva, 'Modern Engineering Physics', S. Chand, 6th Edition, 2013.

Reference Books

- [R1]. Richard Wolfson 'Essential University Physics' Pearson, 1st edition, 2009.
 [R2]. H.K. Malik & A. K. Singh 'Engineering Physics' [McGraw-Hill], 1st Edition, 2009.
 [R3]. C. Kittel, 'Mechanics', Berkeley Physics Course, Vol.-I. Latest Edition.
 [R4]. Irving Kaplan 'Nuclear Physics' Latest Edition.
 [R5]. John R. Taylor, Chris D. Zafirator and Michael A. Dubson, 'Modern Physics For Scientists and Engineers', PHI, 2nd Edition.
 [R6]. D.J. Griffith, 'Introduction to Electrodynamics', Prentice Hall, Latest Edition.

3. **Electronic Devices**

TEXT BOOKS

1. S. Salivahanan, N. Suresh Kr. & A. Vallavaraj, "Electronic Devices & Circuit", Tata McGraw Hill, 2008
2. Millman, Halkias and Jit, "Electronic devices and circuits" McGraw Hill
3. Boylestad & Nashelsky, "Electronic Devices & Circuits", Pearson Education, 10TH Edition.

REFERENCE BOOKS

1. Sedra & Smith, "Micro Electronic Circuits" Oxford University Press, VI Edition
2. Robert T. Paynter, "Introducing Electronic Devices & Circuits", Pearson Education, VII Edition, 2006

4. **Introduction to Programming**

Text Books:

- [T1] Herbert Schildt, "C: The Complete Reference", OsbourneMcgraw Hill, 4th Edition, 2002.
 [T2] Forouzan Behrouz A. "Computer Science: A Structured Programming Approach Using C, Cengage Learning 2/e

Reference Books:

- [R1] Kernighan & Ritchie, "C Programming Language", The (Ansi C version), PHI, 2/e
 [R2] K.R Venugopal, "Mastering C", TMH
 [R3] R.S. Salaria "Application Programming in C" Khanna Publishers 4/e
 [R4] Yashwant Kanetkar "Test your C Skills", BPB Publications
 [R5] <http://www.codeblocks.org/> [R6] <http://gcc.gnu.org/>
 [R7] Programming in ANSI C, E. Balagurusamy; Mc Graw Hill, 6th Edition.

5. **Engineering Mechanics**

Text Books:

- T1. Engg Mechanics by A.K. Tayal (Umesh Publications).
 T2. Engg Mechanics by Basudeb Bhattacharya (Oxford university Press)

Reference Books:

- R1. Engg Mechanics by Irving H. Shames (Pearson publications).
 R2. Engg Mechanics by U.C. Jindal (Galgotia Publications).
 R3. Engg Mechanics by Beer & Johnston (TMH).
 R4. Engg Mechanics by K.L. Kumar (TMH).
 R5. Engg Mechanics by Sadhu Singh (Khanna Publishers).

6. Communication Skills

TEXT BOOKS

[T1] Technical Communication: Principles and practice (OUP), (Meenakshi Raman and Sangeeta Sharma) OXFORD UNIVERSITY PRESS

[T2] Communication Skills for Engineers, Murli Krishna, Pearson.

[T3] Wren and Martin: High School English Grammar and Composition; S. Chand

[T4] Exploration of Ideas; An Anthology of Prose: Orient Blackswan.

REFERENCE BOOKS:

[R1] Professional Communication: Aruna Koneru, MCGRAW HILLS EDUCATION PVT. LTD

[R2] Wren and Martin: High School English Grammar and Composition; S. Chand

[R3] Advanced English Grammar and Composition: Gurudas Mukherjee & Inidbar Mukherjee; (ANE BOOKS PVT. LTD.)

7. Environmental Studies

Text Books:

[T1] E. Barucha, Textbook of Environmental Studies for Undergraduate Courses, Universities Press (India) Pvt. Ltd., 2005.

[T2] S. Chawla, A Textbook of Environmental Studies, McGraw Hill Education Private Limited, 2012

References Books:

[R1] G. T. Miller, Environmental Science, Thomas Learning, 2012

[R2] W. Cunningham and M. A. Cunningham, Principles of Environment Science: Enquiry and Applications, Tata McGraw Hill Publication, N. Delhi, 2003.

[R3] R. Rajagopalan, Environmental Studies: From Crisis to Cure, 2nd Edition, Oxford University Press, 2011.

[R4] A.K. De, Environmental Chemistry, New Age Int. Publ. 2012,,

[R5] A. Kaushik and C.P. Kaushik, Perspectives in Environment Studies, 4th Edition, New Age International Publishers, 2013 .

[R6] Environmental Engineering by Gerard Kiely, Tata McGraw-Hill Publishing Company Ltd., New Delhi, 2010.

• 3rd Semester

1. Applied Mathematics-3

Text Books:

[T1] R.K. Jain and S.R.K. Iyengar, "Numerical methods for Scientific and Engineering Computation", New Age Publishing Delhi-2014.

[T2] B. S. Grewal, "Higher Engineering Mathematics" Khanna Publications, 2014 Edition.

Reference Books:

[R1] E. kresyzig, "Advance Engineering Mathematics", Wiley publications

[R2] P. B. Patil and U. P. Verma, "Numerical Computational Methods", Narosa

[R3]. Partial Differential Equations" Schaum's Outline Series, McGraw Hill.

[R4] Michael Greenberg, "Advance Engineering mathematics", Pearson.

[R5] Schaum's Outline on Fourier Analysis with Applications to Boundary Value Problem, Tata McGrawHill.

2. Foundation of Computer Science

Text Books:

[T1] Norman L. Biggs, "Discrete Mathematics", Oxford, second edition.

[T2] **Keneth H. Rosen, "Discrete Mathematics and Its Applications", TMH, seventh edition.**

(You can rely on it totally !!)

Reference Books:

[R1] Kolman, Busby & Ross, "Discrete Mathematical Structures", PHI, 1996.

- [R2] C.L. Liu, "Elements of Discrete Mathematics", TMH, 2000.
[R3] J. P. Trembly & P. Manohar, "Discrete Mathematical Structures with Applications to Computer Science", McGraw Hill, 1997.

3. Switching Theory and Logic Design

Text Book:

- [T1] Zvi Kohavi, "Switching & Finite Automata Theory", TMH, 2nd Edition
[T2] Morris Mano, "Digital Logic and Computer Design", Pearson
[T3] R.P. Jain, "Modern Digital Electronics", TMH, 2nd Ed,

Reference Books:

- [R1] A Anand Kumar, "Fundamentals of Digital Logic Circuits", PHI
[R2] Taub, Helbert and Schilling, "Digital Integrated Electronics", TMH

4. Circuits and Systems

Text Books:

- [T1] W H Hayt "Engineering Circuit Analysis" TMH Eighth Edition
[T2] D. R. Choudhary, "Networks and Systems" New Age International, 1999.

Reference Books

- [R1] S Salivahanan "Circuit Theory" Vikas Publishing House 1st Edition 2014
[R2] Valkenburg, "Network analysis" PHI, 2000. [R3] Bhise, Chadda, Kulshreshtha, "Engineering network analysis and filter design" Umesh publication, 2000.
[R4] Kuo, "Network analysis and synthesis" John Wiley and Sons, 2nd Edition.
[R5] Allan H Robbins, W.C. Miller "Circuit Analysis theory and Practice" Cengage Learning Pub 5th Edition 2013
[R6] Bell "Electric Circuit" Oxford Publications 7th Edition

5. Data Structures

Schaum's Series and Reema Thareja can be used for last night study.

Do give a try to this nptel link...

Text Books:

- [T1] R. F. Gilberg, and B. A. Forouzan, "Data structures: A Pseudocode approach with C", Thomson Learning.
[T2] A.V. Aho, J. E. Hopcroft, J. D. Ulman "Data Structures and Algorithm", Pearson Education. (A Standard Textbook, read it if interested in core concepts).

Reference Books:

- [R1] S. Sahni and E. Horowitz, "Data Structures", Galgotia Publications.
[R2] Tanenbaum: "Data Structures using C", Pearson/PHI.
[R3] T.H. Cormen, C.E. Leiserson, R.L. Rivest "Introduction to Algorithms", PHI/Pearson.
[R4] A.K. Sharma, "Data Structures", Pearson
[R5] Ellis Horowitz and Sartaz Sahani "Fundamentals of Computer Algorithms", Computer Science Press.

6. Computer Graphics and Multimedia

Text Books:

- [T1] Donald Hearn and M. Pauline Baker, "Computer Graphics C version", Second Edition, Pearson Education. (Best One!!)
[T2] Ralf Steinmetz & Klara Nahrstedt, "Multimedia Computing Communication & Applications", Pearson Education.

Reference Books:

- [R1] C, Foley, VanDam, Feiner and Hughes, “Computer Graphics Principles & practice”, 2nd Edition
 [R2] R. Plastock and G. Kalley, Schaum’s Series, “Theory and Problems of Computer Graphics”, McGraw Hill, 2nd edition.
 [R3] Fred Halsall, “Multimedia Communications Applications, Networks, Protocols & Standards”, Pearson Education.
 [R4] David F. Rogers, “Procedural elements for computer graphics”, McGraw- Hill.

• **4th Semester**

1. **Applied Mathematics-4**

Study MATLAB with uttermost concentration as according to a survey people who know MATLAB get the most high paid jobs .

Text Books:

- [T1] B. S. Grewal, “Higher Engineering Mathematics” Khanna Publications.
 [T2] N.M. Kapoor, “Fundamentals of Mathematical Statistics”, Pitambar Publications

References Books:

- [R1] E. kresyzig, “Advance Engineering Mathematics”, Wiley publications
 [R2] Miller and Freund, “ Probability and statistics for Engineers” , PHI
 [R3] Gupta and Kapoor, “ Fundamentals of Mathematical Statistics” Sultan Chand and Sons
 [R4] G. Hadley, “Linear Programming”, Narosa.
 [R5] Schaum’s Outline on Probability and Statistics” Tata McGraw-Hill
 [R6] Gupta and Manmohan, “ Problems in Operations Research”, Sultan Chand and Sons.
 [R7] R.K. Jain and S.R.K. Iyengar, “Advanced Engineering Mathematics “Narosa Publications.

2. **Computer Organization and Architecture**

Morris Manno is good ,go for nptel links for some topics which you won’t find in the book.

Text Books:

- [T1] J. D. Carpinelli, “Computer Systems Organization and Architecture”, Pearson Education, 2006.
 [T2] J. P. Hayes, “Computer Architecture and Organization”, McGraw Hill, 1988.

Reference Books:

- [R1] J. L Hennessy and D. A. Patterson, “Computer Architecture: A quantitative approach”, Morgan Kaufman, 1992. [R2] W. Stallings, “Computer organization and Architecture”, PHI, 7th ed, 2005.
 [R3] B. Parhami, “Computer Architecture: From Microprocessors to Supercomputers”, Oxford University press, 2006.

3. **Theory of Computation**

Peter Linz (provided in book bank) is good concept wise ,but go for K.L.P Mishra (for examples and solutions).

- [T1] Hopcroft, John E.; Motwani, Rajeev; Ullman, Jeffrey D “Introduction to Automata Theory, Languages, and Computation”, Third Edition, Pearson.
 [T2] Sipser, Michael, ”Introduction to the theory of Computation”, Third Edition, Cengage.

References Books:

- [R1] Martin J. C., “Introduction to Languages and Theory of Computations”, Third Edition, TMH.
 [R2] Papadimitrou, C. and Lewis, C.L., “Elements of the Theory of Computation”, PHI.
 [R3] Daniel I.A. Cohen, ”Introduction to Computer Theory”, Second Edition, John Wiley.

4. **Database Management Systems**

Study from NPTEL links if you are really interested into a career related to Database.

Text Books:

- [T1] Abraham Silberschatz, Henry F. Korth, S. Sudharshan, “Database System Concepts”, 5th Edition, Tata McGraw Hill, 2006 (**Best one to follow**)
 [T2] Elmsari and Navathe, “Fundamentals of Database Systems”, 6th Ed., Pearson, 2013

References Books:

[R1] C.J.Date, A.Kannan, S.Swamynathan, “An Introduction to Database Systems”, 8th Edition, Pearson Education, 2006.

[R2] J. D. Ullman, “Principles of Database Systems”, 2nd Ed., Galgotia Publications, 1999.

[R3] Vipin C. Desai, “An Introduction to Database Systems”, West Publishing Co.

5. Object Oriented Programming

Text Books:

[T1] Rumbaugh et. al. “Object Oriented Modelling & Design”, Prentice Hall

[T2] A.R.Venugopal, Rajkumar, T. Ravishanker “Mastering C++”, TMH (**Most Recommended**)

Reference Books:

[R1] A.K. Sharma, “Object Oriented Programming using C++”, Pearson

[R2] G . Booch “Object Oriented Design & Applications”, Benjamin,Cummings.

[R3] E.Balaguruswamy, “Objected Oriented Programming with C++”, TMH

[R4] S. B. Lippman & J. Lajoie, “C++ Primer”, 3rd Edition, Addison Wesley, 2000.

[R4] R. Lafore, “Object Oriented Programming using C++”, Galgotia.

[R5] D . Parsons, “Object Oriented Programming with C++”,BPB Publication.

[R6] Steven C. Lawlor, “The Art of Programming Computer Science with C++”, Vikas Publication.

6. Communication Systems

Just Follow Communication Systems by Dr.Sanjay Sharma (local author) as its not our core branch subject .

Text Books:

[T1] Taub & Schilling, “Principles of Communication Systems”, TMH, 1998.

[T2] Simon Haykins, “Communication Systems”, John Wiley, 1998.

Reference Books:

[R1] Kennedy, G., “Electronic Communication Systems”, McGraw-Hill, 2008, 4th ed.

[R2] V. Chandra Sekar “Analog Communication”, Oxford University Press, Incorporated, 2010

[R3] John G Proakis, M.Salehi and G.Bauch “Modern Communication System Using MATLAB” Cengage Learning, 3rd edition, 2013

[R3] J. C. Hancock, “An Introduction to the Principles of Communication Theory”, TMH, 1998.

• 6th Semester

1. Algorithms Design and Analysis

Text Books:

[T1] T. H. Cormen, C. E. Leiserson, R. L. Rivest, Clifford Stein, “Introduction to Algorithms”, 3rd Ed., PHI, 2013.(Best One ,if you want to go into concepts and interested in competitive exams)

[T2] Jon Klenberg,Eva Tardos,”Algorithm Design”, Pearson Publications,2014

Reference Books:

[R1] Sara Basse, “introduction to Design & analysis”,Pearson

[R2] Ellis Horowitz, Sartaj Sahni, Sanguthevar Rajasekaran, “Computer Algorithms/C++ “Second Edition, Universities Press.

[R3] A. V. Aho, J. E. Hopcroft, J. D. Ullman, “The Design and Analysis of Computer Algorithms”, Pearson Publication, 2013. (Good one to follow)

[R4] Richard Neapolitan, “Foundations of Algorithms” , Fifth Edition, Jones & Bartlett Learning

2. Software Engineering

TEXT BOOKS:

[T1] R. S. Pressman, “Software Engineering – A practitioner’s approach”, 3rd ed., McGraw Hill Int. Ed., 1992. (For consistent readers)

[T2] K.K. Aggarwal & Yogesh Singh, “Software Engineering”, New Age International, 2001 (Simple language ,recommended for last night readers).

Reference:

[R1] R. Fairley, “Software Engineering Concepts”, Tata McGraw Hill, 1997.

[R2] P. Jalote, “An Integrated approach to Software Engineering”, Narosa, 1991.

[R3] Stephen R. Schach, “Classical & Object Oriented Software Engineering”, IRWIN, 1996.

[R4] James Peter, W Pedrycz, “Software Engineering”, John Wiley & Sons

[R5] I. Sommerville, “Software Engineering”, Addison Wesley, 1999.

3. Java Programming

Text Books:

[T1] Patrick Naughton and Herbertz Schidt, “Java-2 the complete Reference”,TMH(Most Recommended)

[T2] Sierra & bates, “Head First Java”, O’Reilly

Reference Books:

[R1] E. Balaguruswamy, “Programming with Java”, TMH

[R2] Horstmann, “Computing Concepts with Java 2 Essentials”, John Wiley.

[R3] Decker & Hirshfield, “Programming.Java”, Vikas Publication.

4. Industrial Management

Text Books:

[T1] Sinha, P.R.N., Sinha I.B. and Shekhar S.M.(2013), Industrial Relations, Trade Unions and Labour Legislation. Pearson Education

[T2] Chary, S.N. (2012), Production and Operations Management. Tata McGraw Hill Education.

Reference Books:

[R1] Srivastava, S.C. (2012), Industrial Relations and Labour Laws, Vikas Publishing

[R2] Shankar R (2012), Industrial Engineering and Management. Galgotia Publications

[R3] Telsang, M. (2006), Industrial Engineering and Production Management. S.Chand

[R4] Thukaram, Rao (2004), M.E. Industrial Management. Himalaya Publishing House.

5. Digital Communication

Again , go for the same book in Communication Systems i.e. Dr. Sanjay Sharma.

Text Books:

[T1] Simon Haykin, “Communication Systems” John Wiley & Sons, Inc 4th Edition.

[T2] Taub Schilling, “Principles of Communication Systems” TMH, 2nd Edition

Reference Books:

[R1] George Kennedy, “Communication System” TMH – 4th Edition

[R2] B. P. Lathi, “Modern Digital and Analog Communication System” Oxford University Press – 3rd Edition.

[R3] Digital Communications by John G.Proakis; McGraw Hill.

6. Communication Skills for Professionals

Text Books:

[T1] Anna Dept. Of English. Mindscapes: English for Technologists & Engineers PB. New Delhi: Orient Blackswan.

[T2] Farhathullah, T. M. Communication Skills for Technical Students. Orient Blackswan, 2002.

References Books:

[R1] Masters, Ann and Harold R. Wallace. Personal Development for Life and Work, 10th Edition.Cengage Learning India, 2012.

[R2] Institute of Electrical and Electronics Engineers. IEEE Editorial Style Manual. IEEE, n.d. Web. 9 Sept. 2009.

- [R3] Sethi and Dhamija. A Course in Phonetics and Spoken English. PHI Learning, 1999.
[R4] Khera, Shiv. You Can Win. New York: Macmillan, 2003.

• **6th Semester**

1. **Compiler Design**

Text Books:

- [T1] Alfred V. Aho & J.D. Ullman, "Compiler Principles ,Techniques& Tools", Pearson
[T2] Kenneth C. Louden, "Compiler Design",Cengage Publication

Reference Books:

- [R1] Kakde O.G., "Complier Design", Laxmi Publication
[R2] Trembley and Sorenson, "Theory and Practice of Compiler Writing", McGraw Hill
[R3] Vinu V. DAS, "Compiler Design Using FLEX and YACC , PHI
[R4] Jhon R. Levine, Tony Mason and Doug Brown, "Lex & Yacc", O'Reilly.pdf
[R5] Andrew W. Appel, Maia Ginsburg, "Modern Compiler Implementation in C", Cambridge University Press.

2. **Operating Systems**

Try and learn Linux side by side(can get great oppurtunities for knowing Linux in Industries).

Text Books:

- [T1] Deitel & Dietel, "Operating System", Pearson, 3rd Ed., 2011
[T2] Silbersachatz and Galvin, "Operating System Concepts", Pearson, 5th Ed., 2001
[T3] Madnick & Donovan, "Operating System", TMH,1st Ed., 2001

Reference Books:

- [R1] Tannenbaum, "Operating Systems", PHI, 4th Edition, 2000
[R2] Godbole, "Operating Systems", Tata McGraw Hill, 3rd edition, 2014
[R3] Chauhan, "Principles of Operating Systems", Oxford Uni. Press, 2014
[R4] Dhamdhare, "Operating Systems", Tata McGraw Hill, 3rd edition, 2012
[R5] Loomis, "Data Management & File Structure", PHI, 2nd Ed.

3. **Computer Networks**

Text Books:

- [T1] Dimitri Bertsekas and Robert Gallager, "Data Networks", PHI.
[T2] Behrouz A.Forouzan, 'Data Communication and Networking', 5E, Tata McGraw Hill, 2013.

Reference Books:

- [R1] Uyless Black, "Computer Networks-Protocols, Standards and Interfaces", 2nd edition, PHI, 1996.
[R2] A. Tannenbaum,"Computer Networks", 5th edition, Pearson.

4. **Web Engineering**

Text Books:

- [T1] Web Technologies: A Computer Science Perspective, Jackson, Pearson Education India, 2007.
[T2] Web Engineering: A Practitioner's Approach by Roger S Pressman, David Lowe, TMH, 2008.

Reference Books:

- [R1] Achyut Godbole,Atul Kahate, "Web Technologies", McGraw-Hill Education, Third Edition.
[R2] Uttam K Roy, "Web Technologies", Oxford University Press, 2012.
[R3] Chris Bates, "Web Programming", Wiley
[R4] Web Engineering by Gertel Keppel, Birgit Proll, Siegfried Reich, Werner R., John Wiley.
[R5] Thinking on the Web: Berner's LEE, Godel and Turing, John Wiley & Sons Inc.

5. **Artificial Intelligence**

Text Book:

- [T1] Rich and Knight, "Artificial Intelligence", Tata McGraw Hill, 1992
[T2] S. Russel and P. Norvig, "Artificial Intelligence – A Modern Approach", Second Edition, Pearson Edu.

Reference Books:

- [R1] KM Fu, "Neural Networks in Computer Intelligence", McGraw Hill
[R2] Russel and Norvig, "Artificial Intelligence: A modern approach", Pearson Education

6. Microprocessors and Microcontrollers

Text Books:

- [T1] Muhammad Ali Mazidi, "Microprocessors and Microcontrollers", Pearson, 2006
[T2] Douglas V Hall, "Microprocessors and Interfacing, Programming and Hardware" Tata McGraw Hill, 2006.
[T3] Ramesh Gaonkar, "MicroProcessor Architecture, Programming and Applications with the 8085", PHI

References Books:

- [R1] Muhammad Ali Mazidi, Janice Gillispie Mazidi, Rolin D. MCKinlay "The 8051 Microcontroller and Embedded Systems", 2nd Edition, Pearson Education 2008.
[R2] Kenneth J. Ayala, "The 8086 Microprocessor: Programming & Interfacing The PC", Delmar Publishers, 2007.
[R3] A K Ray, K M Bhurchandi, "Advanced Microprocessors and Peripherals", Tata McGraw Hill, 2007.
[R4] Vaneet Singh, Gurmeet Singh, "Microprocessor and Interfacing", Satya Prakashan, 2007.

• 7th Semester

1. Information Security

Text Books:

- [T1] Godbole, "Information Systems Security", Wiley
[T2] Merkov, Breithaupt, "Information Security", Pearson Education

References:

- [R1] Yadav, "Foundations of Information Technology", New Age, Delhi
[R2] Schou, Shoemaker, "Information Assurance for the Enterprise", Tata McGraw Hill
[R3] Furnell, "Computer Insecurity", Springer
[R4] <http://www.iiitd.edu.in/~gauravg/>

2. Software Testing and Assurance Quality

Text Books:

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