

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY
DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH
DEPARTMENT OF COMPUTER ENGINEERING
BOOK LIST FOR 4TH AND 6TH SEMESTER
ACADEMIC YEAR 2020-21

Semester	Subject		Title
4	DATA STRUCTURE AND ALGORITHMS	Text Books	1. An Introduction to Data Structures with Applications, Jean-Paul Tremblay, Paul G. Sorenson, McGraw-Hill.
			2. Data structure with C, Lipschutz, TMH
			3. Introduction to Algorithms: Cormen, Leiserson, Rivest and Stein: Prentice Hall of India
		Reference Books	4. Data Structures and Algorithms: Aho, Hopcroft and Ullmann: Addison Wesley.
			Classic Data structures, D.Samanta, Prentice-Hall International.
			1. Data Structures using C & C++, Ten Baum, Prentice-Hall International.
	Database Management System	Text Books	2. Data Structures: A Pseudo-code approach with C, Gilberg & Forouzan, Thomson Learning.
			3. Fundamentals of Data Structures in C++, Ellis Horowitz, Sartaj Sahni, Dinesh Mehta, W. H. Freeman.
			4. "A Practical Introduction to Data Structures and Algorithm Analysis" by Clifford A. Shaffer
		Reference Books	5. Data Structures and Algorithm in Java: Goodrich and Tamassia: John Wiley and Sons.
			1. Database System Concepts, Abraham Silberschatz, Henry F. Korth & S. Sudarshan, McGraw Hill.
			2. An introduction to Database Systems, C J Date, Addison-Wesley
6	Microprocessor and Computer Organization	Text Books	1. "Fundamentals of Database Systems", R. Elmasri and S.B. Navathe, the Benjamin / Cumming Pub. Co
			2. SQL,PL/SQL the Programming Language of oracle, Ivan Bayross, BPB Publications
			3. Oracle: The Complete Reference, George Koch, Kevin Loney, TMH/oracle press
		Reference Books	1. Computer System Architecture, Morris Mano (3rd Edition) Prentice Hall.
			2. 80386 Programmer's Reference Manual from MIT.
			3. Microprocessors and Interfacing: Experiments Manual: Programming and Hardware by Douglas V. Hall.
	PROGRAMMING IN PYTHON	Text Books	1. William Stallings, Computer Organization & Architecture-Designing for Performance, Pearson Prentice Hall (8th Edition).
			2. A.S. Tananbun, Structured Computer Organization, Pearson Publisher.
			3. The Essentials of Computer Organization and Architecture Linda Null, Julia Lobur.
		Reference Books	4. John P Hayes, Computer Architecture & Organization, McGraw-Hill.
			5. Computer Architecture: Pipelined and Parallel Processor Design Michael J. Flynn (4th edition).
			1. Magnus Lie Hetland, "Beginning Python From Novice to Professional", Third Edition, Apress, 2017
	INTERNALS OF OPERATING SYSTEM	Text Books	2. Nigel George, "Mastering Django: Core" Packt Publishing, 2016
			1. David Beazley, Brian K. Jones, "Python Cookbook", 3rd edition, O'REILLY 2016
			2. Brett Slatkin, "Effective Python: 59 Specific Ways to Write Better Python", Novatec, 2016
		Reference Books	3. Allen Downey, "Think Python: How to Think Like a Computer Scientist", Green Tea Press, 2015
			4. Mark Lutz "Learning Python", 4th Edition, O'REILLY, 2016
			5. Arun Ravindran, Aidas Bendoraitis, Samuel Dauzon, "Django: Web Development with Python", Packt Publishing, 2016
6	INFORMATION SECURITY	Text Books	1. J. Maurice Bach, "The Design of the Unix Operating System", Third Edition, Pearson Education, 2015
			2. Uresh Vahalia, "Unix Internals: The New Frontiers", Pearson Education, 2008
			3. Michael Beck, Mirko Dziadzka, Claus Schroter, Dirk Verwornen "Linux Kernel Programming" 3rd Edition, Pearson Education
		Reference Books	1. Robert Love, "Linux Kernel Development", 3rd Edition, Addison Wesley
			2. David Reilly and Michael Reilly "Java Network Programming and Distributed Computing", Addison-Wesley
			1. Cryptography and Network Security, Behrouz A. Forouzan, McGraw-Hill Companies.
	THEORY OF COMPUTATION	Text Books	1. Cryptography And Network Principles And Practice, William Stallings, Prentice Hall, Pearson Education Asia.
			2. Cryptography & Network Security, Atul Kahate, The McGraw-Hill Companies.
			3. The DevOps Handbook: How to Create World-Class Agility, Reliability, and Security in Technology Organizations by Gene Kim, Jez Humble, Patrick Debois, and John Willis
		Reference Books	1. Introduction to Languages and Theory of Computation, John C. Martin, TMH
			1. An introduction to automata theory and formal languages, Adesh K. Pandey, S. K. Kataria & Sons
			2. Introduction to computer theory, Deniel I. Cohen, John Wiley & Sons Inc
6	DATAWAREHOUSING & DATA MINING	Text Books	3. Computation: Finite and Infinite, Marvin L. Minsky, Prentice-Hall
			4. "An introduction to Formal Languages and Automata", Peter Linz, 6th edition, Jones & Bartlett Learning
			5. "Introduction to the Theory of Computation", Michael Sipser, 3rd edition, Cengage Learning.
		Reference Books	1. "Data Mining Concepts and Techniques", J. Han, M. Kamber, Morgan Kaufmann
			2. "Data Warehousing Fundamentals", Paulraj Ponnian, John Wiley.
			1. "Data mining: Concepts, models, methods and algorithms, M. Kantardzic, John Wiley & Sons Inc.
	Service Oriented Computing (PE-II)	Text Books	2. "Data Mining: Introductory and Advanced Topics", M. Dunham, Pearson Education.
			3. "Data Mining", Pieter Adriaans, Dolf Zantinge, Pearson Education Asia
		Reference Books	1. Mike Rosen, Boris Lublinsky, Kevin T. Smith, Marc J. Balcer "Applied SOA: Service-Oriented Architecture and Design Strategies" Wiley Publishing, Inc, 2008
			2. Thomas Erl, "Service-Oriented Architecture: Concepts, Technology, and Design, Prentice Hall Publication, 2008
			1. Norbert Bieberstein, Sanjay Bose, Marc Fiammante, Keith Jones, Rawn Shah, "Service-Oriented Architecture Compass: Business Value, Planning, and Enterprise Roadmap", IBM Press Publication, 2005.
			2. Thomas Erl, "Service-Oriented Architecture: A Field Guide to Integrating XML and Web Services", Prentice Hall Publication, 2004.
6	DIGITAL IMAGE PROCESSING	Text Books	3. Sanjiva Weerawarana, Francisco Curbera, Frank Leymann, Tony Storey, Donald F. Ferguson, "Web Services Platform Architecture: SOAP, WSDL, WS-Policy, WS-Addressing, WS-BPEL, WS-Reliable Messaging, and More", Prentice Hall Publication, 2005.
			4. Eric Newcomer, Greg Lomow, "Understanding SOA with Web Services", Addison Wesley Publication, 2004.
			5. ERL, T.; Service-oriented architecture : a field guide to integrating XML and Web services, Prentice Hall PTR, 2004, ISBN- 0131428985.
		Reference Books	1. "Digital Image Processing", Rafael C Gonzalez, Richard E Woods, 2nd Edition, Pearson Education 2003.
			2. "Digital Image Processing", W. Pratt, Wiley Publication, Fourth Edition, 2013.
			1. "Fundamentals of Digital Image Processing", A.K. Jain, PHI, New Delhi (1995).
	PROGRAMMING IN PYTHON	Text Books	2. "Digital Image Processing Using MATLAB", Gonzalez/Woods/Eddins, 2nd edition
			3. "Digital Image Processing and Computer Vision". Milan Sonka, Thomson publication, Second Edition.
			4. "Digital Image Processing", S. Jayaraman, S. Esakkirajan and T. Veerakumar, McGraw Hill Education (India) Private Limited, New Delhi, 2009
		Reference Books	5. "Digital Image Processing", S. Sridhar, Oxford University Press, New Delhi, 2011.
			1. Magnus Lie Hetland, "Beginning Python From Novice to Professional", Third Edition, Apress, 2017
			2. Nigel George, "Mastering Django: Core" Packt Publishing, 2016
			1. David Beazley, Brian K. Jones, "Python Cookbook", 3rd edition, O'REILLY, 2016
			2. Brett Slatkin, "Effective Python: 59 Specific Ways to Write Better Python", Novatec, 2016
			3. Allen Downey, "Think Python: How to Think Like a Computer Scientist", Green Tea Press, 2015
			4. Mark Lutz "Learning Python", 4th Edition, O'REILLY, 2016
			5. Arun Ravindran, Aidas Bendoraitis, Samuel Dauzon, "Django: Web Development with Python", Packt Publishing, 2016