

Maulana Abul Kalam Azad University of Technology

Recommended Learning Resources/ Books (2018-19)

BOOKS / Resources For Classroom Equivalent MOOCS For B.Tech - CSE and IT Courses from 2nd year to 4th Year

S.No.	COURSES	LIST OF SUGGESTED BOOKS
1	Values and Ethics in Profession	1. Professional Ethics and Human Values Premvir Kapoor
		2. A Foundation Course in Human Values and Professional Ethics, R.R. Gaur, R. Sangal, G.P. Bagaria
2	Environmental Sciences	1. M.P. Poonia & S.C. Sharma, Environmental Studies
		2. Erach Bharucha, Textbook of Environmental Studies
3	Biology	1. Tyagarajan , Biology for Engineers
4	Analog Electronic Circuits	1. A.K. Maini, Analog Electronics
		2. L.K.Maheshwari, Analog Electronics
5	Digital Electronics	1. Rishabh Anand, Digital Electronics
		2. R.P. Jain, Modern Digital Electronics
6	Data structure & Algorithms	1. R.S. Salaria, Data Structures and Algorithms using C
		2. Sartaj Sahni, Fundamentals of Data Structures
7	Numerical Methods	1. R.S. Salaria, Computer Oriented Numerical Methods
		2. E.Balaguruswamy , Numerical Methods
8	Formal Language & Automata Theory	1. Amit Gupta, Theory of Automata and Formal Languages
		2. Mishra, Theory of Computer Science: Automata, Languages and Computation
9	Computer Organization & Architecture	1. Ikvinderpal Singh, Computer Organization and Architecture
		2. Rajaraman, Organization & Architecture
10	Economics for Engineers	1. Premvir Kapoor, Sociology and Economics for Engineers
		2. H.L Bhatia, Economics for Engineers
11	Design & Analysis of Algorithms	1. Gajendra Sharma, Design & Analysis of Algorithms
		2. S. Sridhar, Design & Analysis of Algorithms

<u>12</u>	Microprocessors & Microcontrollers	<u>1.</u>	A.K. Gautam, Advance Microprocessor
		<u>2.</u>	Ramesh Gaonkar, Microprocessors
<u>13</u>	Discrete Mathematics	<u>1.</u>	Chakraborty & Sarkar, Discrete Mathematics and Its Applications
		<u>2.</u>	S.B. Singh Jai Kishore Ekta Gupta, Discrete Structures
<u>14</u>	Data Communication	<u>1.</u>	Sanjay Sharma, A course in Computer Networks, Katsons
		<u>2.</u>	Bhavneet Sidhu, An Integrated approach to Computer Networks
<u>15</u>	Digital Signal Processing	<u>1.</u>	Salivahanan, Digital Signal Processing
		<u>2.</u>	S. K. Mitra, Digital Signal Processing
<u>16</u>	Object Oriented Programming	<u>1.</u>	R.S. Salaria, Mastering Object Oriented Programming using C++
		<u>2.</u>	Balaguruswamy, Object Oriented Programming with C++
<u>17</u>	Principles of Management	<u>1.</u>	Premvir Kapoor, Principles and Practices of Management
		<u>2.</u>	C.B. Gupta, Principles of Management
<u>18</u>	Database Management System	<u>1.</u>	R.P. Mahapatra Govind Verma, Database Management System
		<u>2.</u>	Raghurama Krishan, Database Management Systems
<u>19</u>	Computer Networks	<u>1.</u>	Bhavneet Sidhu, An Integrated Approach to Computer Networks
		<u>2.</u>	Keshav, An Engineering Approach to Computer Networking
<u>20</u>	Operating Systems	<u>1.</u>	Ekta Walia, Operating System Concepts
		<u>2.</u>	Dhananjay M. Dhamdhare, Operating Systems A Concept-Based Approach
<u>21</u>	Information Theory Coding	<u>1.</u>	Monica Borda, Fundamentals in Information Theory and Coding
		<u>2.</u>	Bose, Information Theory, Coding and Cryptography
<u>22</u>	Computer Graphics	<u>1.</u>	Rishabh Anand, Computer Graphics
		<u>2.</u>	Shah, Engineering Drawing and Computer Graphics
<u>23</u>	Operations Research	<u>1.</u>	J.C. Pant, Introduction to Optimisation: Operations Research
		<u>2.</u>	Pannerselvam, Operations Research
<u>24</u>	Human Resource Management	<u>1.</u>	C.B. Gupta, Human Resource Management
		<u>2.</u>	Awasthapa, Human Resource Management & Case Studies
<u>25</u>	Multimedia	<u>1.</u>	V.K. Jain, Introduction to Multimedia and Its Applications
		<u>2.</u>	Multimedia and Animation by V.K. Jain
<u>26</u>	Software Engineering	<u>1.</u>	Nasib Singh Gill, Software Engineering
		<u>2.</u>	Pankaj Jalote, A concise introduction to software Engineering
<u>27</u>	Compiler Design	<u>1.</u>	Aho, Compiler Design
		<u>2.</u>	Shrikant, Compiler Design Handbook

<u>28</u>	Pattern Recognition	<u>1.</u>	Khandelwal, K. C., Mahdi, S. S., Biogas Technology - A Practical Hand Book-Vol. I & II
		<u>2.</u>	M. Narasimha Murty, V. Susheela Devi, Pattern Recognition
<u>29</u>	Soft Computing	<u>1.</u>	Ikvinderpal Singh, Soft Computing
		<u>2.</u>	Sivanandam & Deepa, Principles of Soft Computing
<u>30</u>	Artificial Intelligence	<u>1.</u>	Munesh Chandra Trivedi, A Classical Approach to Artificial Intelligence
		<u>2.</u>	Chandra S.S. & H.S. Anand, Artificial Intelligence and Machine Learning
<u>31</u>	Digital Image Processing	<u>1.</u>	Ikvinderpal Singh, Digital Image Processing
		<u>2.</u>	Anil Kumar Jain, Fundamentals of Digital Image Processing
<u>32</u>	Cloud Computing	<u>1.</u>	K. Chandrasekaran, Essentials of Cloud Computing
		<u>2.</u>	Pandey & Choudhary, Cloud Computing
<u>33</u>	Data Mining	<u>1.</u>	Krishnan, Bhambri & Chopra, Data Mining & Business Intelligence
		<u>2.</u>	Vipin Kumar, Introduction to Data Mining
<u>34</u>	Sensor Networks	<u>1.</u>	C.S. Raghavendra, K. M. Sivalingam, T. Znati, Editors, Wireless Sensor Networks
		<u>2.</u>	Misra, Wireless Communication and Networks
<u>35</u>	Mobile Computing	<u>1.</u>	Rishabh Anand, Mobile Computing
		<u>2.</u>	Talukdar, Mobile Computing
<u>36</u>	Internet Technology	<u>1.</u>	A. Ravichandhran, Fundamentals of Information Technology
		<u>2.</u>	Soma Dasgupta, Internet & Web Development
<u>37</u>	Microelectronics & VLSI Design	<u>1.</u>	P.P. Sahu, VLSI Design
		<u>2.</u>	N.A. Sherwani, Algorithms for VLSI Physical Design Automation
<u>38</u>	Control System	<u>1.</u>	A. Ambikapathy, Control Systems
		<u>2.</u>	Gopal, Control Systems
<u>39</u>	Organizational Behavior	<u>1.</u>	C.B. Gupta, Organizational Behavior
		<u>2.</u>	Vohra, Organizational Behavior
<u>40</u>	Project Management	<u>1.</u>	Jha, Project Management
		<u>2.</u>	Punmia, Project Management with CPM /PERT
<u>41</u>	Computer Architecture	<u>1.</u>	Ikvinderpal Singh, Computer Organization and Architectures
		<u>2.</u>	Rajiv Chopra, Advanced Computer Architecture
<u>42</u>	Natural Language Processing	<u>1.</u>	Rajesh Arumugam, Hands-on Natural Language Processing with Python
		<u>2.</u>	Taming Python by Programming, Jeeva Jose

43	Cryptography and Network Security	1.	V.K. Jain, Cryptography and Network Security
		2.	Atul Kahate, Cryptography & Network Security
44	Business Analytics	1.	Krishnan, Bhambri & Chopra, Business Analytics
		2.	U. Dinesh Kuamr, Business Analytics
45	Cyber Law and Security Policy	1.	Gupta & Gupta, Information Security & Cyber Laws
		2.	V.K. Jain, Cryptography and Network Security
46	Low Power Circuits	1.	Prasad, Low Power CMOS VLSI Circuit Design
47	E-Commerce	1.	Gupta & Gupta, E-Commerce
		2.	P.T. Joseph, E-Commerce
48	Robotics	1.	S. Mukerjee, Robotics Process Automation
		2.	K.Goyal and D.Bhandari, Industrial Automation and Robotics