

**Maulana Abul Kalam Azad University of Technology, West Bengal**  
(Formerly known as West Bengal University of Technology)  
**Effective for Even Semester of 2019-20(REVISED)**

**MOOCs For B.TECH (Hons.) CSE/IT**

**2<sup>nd</sup> to 4<sup>th</sup> Year JAN 2020**

No	Basket of Courses	Duration	Credit	Offered by
1.	AP Computer Science A: Java Programming Polymorphism and Advanced Data Structures	6 weeks	2	edX
2.	Build your very first iOS app	8 weeks	3	edX
3.	Gameplay Programming for Video Game Designers	5 weeks	2	edX
4.	Introduction to Computer Science & Programming Specialization	8 weeks	3	Coursera
5.	Introduction to scripting in Python	8 weeks	3	Coursera
6.	Foundation of Data Structures	6 weeks	2	edX
7.	Synthesis of Digital Systems	12 weeks	3	MIT online course
8.	Bayesian Statistics: Techniques and Models	5 weeks	2	Coursera
9.	Mathematical Modelling Basics	9 weeks	3	edX
10.	Animation and CGI Motion	12 weeks	3	edX
11.	Web Application Development	6 weeks	2	Coursera
12.	Web Design for Everybody Specialization	12 weeks	3	Coursera
13.	The Bits and Bytes of Computer Networking	4 weeks	1	Coursera
14.	Introduction to Cisco Networking	4 weeks	1	Coursera
15.	Introduction to Computing for Data Analysis with Python	6 weeks	2	edX
16.	Introduction to data science in python	3 weeks	1	Coursera
17.	What is Data Science?	3 weeks	1	Coursera
18.	Introduction to Big Data	3 weeks	1	Cousera
19.	The Data Science Tool Box	2 weeks	1	Cousera
20.	Data Driven Decision Making	2weeks	1	Cousera
21.	A Crash Course in Data Science	1weeks	1	Cousera
22.	Digital Security and Human Rights	3 weeks	1	edX
23.	Data Analysis and Presentation Skills : the PWC approach Specialization	12 weeks	3	Cousera
24.	Introduction to Design Thinking	5 weeks	2	edx
25.	Introduction to Soft Computing	8 weeks	2	SWAYAM
26.	Introduction to Data Modelling	4 weeks	1	edX
27.	Java Fundamentals for Android Development	6 weeks	2	edX
28.	Using Databases with Python	5 weeks	2	Coursera
29.	Data Base Management System	8 weeks	2	NPTEL
30.	Discrete Mathematics	12 Weeks	3	NPTEL
31.	Programming, Data Structures and Algorithms using Python	8 weeks	2	NPTEL
32.	Design and Analysis of Algorithms	8 weeks	2	NPTEL
33.	Algorithm Specialization	16 weeks	4	Coursera
34.	Divide and conquer ,Sorting, Searching and Randomized Algorithm	4weeks	1	Coursera
35.	Cloud Computing	8 weeks	2	NPTEL
36.	Cloud Computing	5 weeks	2	Coursera
37.	Bitcoin and Cryptocurrency Technologies	11 weeks	3	Coursera
38.	Ethical Hacking	8 weeks	2	Udemy
39.	Cybersecurity and its 10 domains	7 weeks	2	Coursera
40.	Introduction to Internet of Things	12Weeks	3	NPTEL

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41.	Introduction to the Internet of Things	6 weeks	2	edX
42.	IoT Programming and Big Data	5 weeks	2	edX
43.	Data Communications and Network Services	4 weeks	1	Coursera
44.	UML Class Diagrams for Software Engineering	3 weeks	1	edX
45.	Formal Software Verification	8 weeks	2	edX
46.	Software testing	12 weeks	3	Coursera
47.	Software Project Management	12 weeks	3	
48.	Software Engineering	12 weeks	3	edx
49.	Software Product Management Specialization	16 weeks	4	Coursera
50.	Entrepreneurship in Emerging Economies	6 weeks	2	edX
51.	Patent Drafting for Beginners	4 weeks	1	
52.	Patent Law for Engineers and Scientists	12 weeks	3	
53.	Introduction to Computational Thinking and Data Science	10 weeks	3	edX
54.	Data Mining: Theories and Algorithms for Big Data	14 weeks	4	edX
55.	Big Data Fundamentals	10 weeks	3	edX
56.	Big Data Analytics	10 weeks	3	edX
57.	Foundations of Data Science: Computational Thinking with Python	5 weeks	2	edX
58.	How to win a Datascience Competition : Learn from Top Kagglers	5weeks	2	Coursera
59.	Virtual Reality	4 weeks	1	Coursera
60.	Principles of Machine Learning	6 weeks	2	edX
61.	Machine Learning	12 weeks	4	Coursera
62.	AI For Everyone	4 weeks	1	Coursera
63.	Robotics: Aerial Robotics	6 weeks	2	Coursera
64.	Deep learning in Computer Vision	5weeks	2	Coursera
65.	Deep Learning – Part 1	12 weeks	3	Coursera
66.	Artificial Intelligence Search Methods For Problem Solving	12 weeks	3	Coursera
67.	Machine Learning for Engineering and Science Applications	12 weeks	3	
68.	Computer Vision	12 weeks	3	Edx
69.	Introduction to Machine Learning	12 weeks	3	Coursera
70.	Introduction to Machine Learning	8 weeks	2	Coursera
71.	Functional Programming in Scala	6 weeks	2	Coursera
72.	Using python to access web data	6 weeks	2	Coursera
73.	Python Data Structures	2weeks	1	Coursera
74.	Object oriented analysis and design	8 weeks	2	coursera
75.	Python 3 Programming Specialization	8 weeks	2	Cousera
76.	Natural Language Processing	5 weeks	2	Coursera
77.	Applied Natural Language Processing	12 weeks	3	Edx
78.	Natural Language Processing	12 weeks	3	Edx
79.	Embedded Systems	12 weeks	3	NPTEL
80.	Introduction to Industry 4.0 and Industrial Internet of Things	12Weeks	3	NPTEL
81.	A System View of Communications: From Signals to Packets (Part 2)	6 weeks	2	edX
82.	Software Testing fundamentals	8	2	edX
83.	Software Testing and Management	8	2	edX
84.	Neural Network & Deep Learning	4	1	Coursera
85.	Teamwork and Collaboration	3	1	edX
86.	Demystifying Networking	4	1	
87.	Cyber security and Privacy in the IoT	5	2	

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88.	IoT System Design: Software and Hardware Integration	4	1	edX
89.	Blockchain and Fin Tech: Basics, Applications, and Limitations	6	2	edX
90.	Block Chain Specialization	8	2	
91.	A System View of Communications: From Signals to Packets (Part 3)	5	2	edX
92.	Internet of Things	12	3	NPTEL
93.	Computational Thinking for Modeling and Simulation	6	2	edX
94.	Mathematics For Machine Learning: Multivariate Calculas	6	2	Coursera
95.	Becoming an Entrepreneur	6	2	edX
96.	Marketing Fundamentals	4	1	edX
97.	IBM Data Science Professional Certificate	8	2	Cousera
98.	Data Science with Python	10	3	edX
99.	Artificial Intelligence	12	3	NPTEL
100.	Foundations of Data Science: Prediction and MachineLearning	6	2	edX
101.	Robotics: Vision Intelligence & Machine Learning	12	3	edX
102.	Deep Learning Specialization	12	3	Cousera
103.	Machine learning with Tensor Flow on Google Cloud Platform Specialization	4	1	Cousera
104.	Applied Machine Learning with Python	3	1	
105.	Convolution Neural Network	4	1	Cousera
106.	Sequence Model	2	1	Cousera
107.	Deep Learning	6	2	edX
108.	Deep Learning	12	3	NPTEL
109.	Reinforcement Learning	12	3	Edx
110.	Neural Networks for Machine Learning	16	4	Coursera
111.	Cloud Computing for Enterprises	8	2	edX
112.	Cloud Computing Management	8	2	edX
113.	Cloud Computing Infrastructure	8	2	edX
114.	Data Engineering on Google Cloud Platform Specialization	4	1	Coursera
115.	Security in Google Cloud Platform Specialization	4	1	Coursera
116.	AWS Fundamental: Going Cloud Native	5	2	Coursera
117.	Google cloud Platform Big data and Machine Learning Platform	2	1	Coursera
118.	Remote Sensing	12	3	
119.	Remote Sensing and Digital Image Processing of Satellite Data	8	2	NPTEL
120.	Leadership for Engineers	6	2	edX
121.	Computer Forensics	8	2	edX
122.	Compliance in Office 365: Data Governance	4	1	edX
123.	Human Computer Interactions	8	2	edx
124.	Social Networks	12	3	NPTEL
125.	Fuzzy Sets, Logic and System Application	12	3	NPTEL
126.	Electronic Systems for Cancer Diagnostics	12	3	NPTEL
127.	Data Analytics with Python	12	3	NPTEL
128.	Optical Engineering	12	3	NPTEL
129.	Machine Learning	8	2	NPTEL
130.	Introduction to Machine Learning	12	3	NPTEL
131.	An Introduction to Artificial Intelligence	12	3	NPTEL
132.	Artificial Intelligence: Knowledge Representation andReasoning	12	3	NPTEL

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133.	Deep Learning	12	3	NPTEL
134.	Data Science for Engineers	8	2	NPTEL
135.	Embedded Systems Design	12	3	NPTEL
136.	Introduction to Internet of Things	12	3	NPTEL
137.	Introduction to Industry 4.0 and Industrial Internet of Things	12	3	NPTEL
138.	Introduction to Block Chain Technology and Applications	8	2	NPTEL
139.	User-Centric Computing for Human-Computer Interaction	8	2	NPTEL
140.	Reinforcement Learning	12	3	NPTEL
141.	VLSI Physical Design	12	3	NPTEL
142.	Randomized Algorithms	12	3	NPTEL
143.	Embedded System Design with ARM	8	2	NPTEL