# 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 BCA (Hons)**

2<sup>nd</sup> to 3<sup>rd</sup> Year

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

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

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88. Data Science with Python	10	3	edX
89. Artificial Intelligence	12	3	NPTEL
90. Foundations of Data Science: Prediction and Machine Learning	6	2	edX
91. Robotics: Vision Intelligence & Machine Learning	12	3	edX
92. Deep Learning Specialization	12	3	Cousera
93. Machine learning with Tensor Flow on Google Cloud Platform	4	1	Cousera
Specialization			
94. Convolution Neural Network	4	1	Cousera
95. Sequence Model	2	1	Cousera
96. Deep Learning	6	2	edX
97. Deep Learning	12	3	NPTEL
98. Reinforcement Learning	12	3	Edx
99. Neural Networks for Machine Learning	16	4	Coursera
100. Cloud Computing for Enterprises	8	2	edX
101. Cloud Computing Management	8	2	edX
102. Cloud Computing Infrastructure	8	2	edX
103. Security in Google Cloud Platform Specialization	9	3	Coursera
104. AWS Fundamental: Going Cloud Native	5	2	Coursera
105. Google cloud Platform Big data and Machine Learning	2	1	Coursera
Fundamentals			
106. Remote Sensing Essentials	12	3	NPTEL
107. Leadership Essentials for Engineers	Self-paced	2	edX
108. Computer Forensics	8	2	edX
109. Compliance in Office 365: Data Governance	4	1	edX
110. Human Computer Interactions	Self-paced	2	edx
111. Social Networks	12	3	NPTEL
112. Fuzzy Sets, Logic and Systems & Applications	12	3	NPTEL
113. Electronic Systems for Cancer Diagnostics	12	3	NPTEL
114. Data Analytics with Python	12	3	NPTEL
115. Optical Engineering	12	3	NPTEL
116. Machine Learning, ML	8	2	NPTEL
117. Introduction to Machine Learning	12	3	NPTEL
118. An Introduction to Artificial Intelligence	12	3	NPTEL
119. Artificial Intelligence: Knowledge Representation and Reasoning	12	3	NPTEL
120. Deep Learning	12	3	NPTEL
121. Data Science for Engineers	8	2	NPTEL
122. Embedded Systems Design	12	3	NPTEL
123. Introduction to Internet of Things	12	3	NPTEL
124. Introduction to Industry 4.0 and Industrial Internet of Things	12	3	NPTEL
125. Introduction to Block Chain Technology and Applications	8	2	NPTEL
126. User-Centric Computing for Human-Computer Interaction	8	2	NPTEL
127. Reinforcement Learning	12	3	NPTEL
128. VLSI Physical Design	12	3	NPTEL
129. Randomized Algorithms	12	3	NPTEL
130. Embedded System Design with ARM	8	2	NPTEL