

Notice

24th January, 2020

MOOCs for B.Tech Honours
(Applicable from the session Jan-June, 2019-2020)

MOOC for First Year, Engineering and Technology

Sl.No.	Module	Course	Provider	Duration	Credits	Name of University / Institute	Status
1	Ethics	Ethics in Engineering Practice	NPTEL	8 weeks	3	IIT Kharagpur	Active
2		Ethics, Technology and Engineering	Coursera	8 weeks	3	Technische University & Eindhoven University of Technology	Active
3		Ethics and Law in Data and Analytics	edX	Self Paced	4	Microsoft	Active
4		A Life of Happiness and Fulfillment	Coursera	6 weeks	2	Indian School of Business	Active
5		Introduction to Philosophy: God, Knowledge, and Consciousness	edX	12 weeks	4	MIT	Active
6		Ethical Leadership Through Giving Voice	Coursera	4 weeks	2	University of Virginia	Active
7	Soft Skills	Better Spoken English	NPTEL	12 week	4	IIT Madras	Active
8		English language for Competitive exams	NPTEL	12 week	4	IIT Madras	Active
9		Enhancing Soft Skills and Personality	NPTEL	8 weeks	3	IIT Kanpur	Active
10		Problem solving through Programming In C	NPTEL	8 weeks	3	IIT Kharagpur	Active
11		Speak English Professionally: In Person, Online & On the Phone	Course era	4 weeks	1	Georgia Tech	Active
12		Communication in the 21 st Century Workplace	Coursera	4 weeks	1	University of California	Active
13		Successful Career Development	Coursera	7 weeks	2	University System of Georgia	Active
14		Working in Teams: A Practical Guide	edX	4 weeks	1	University of Queensland	Active
15		Communication theory: bridging academia and practice	Coursera	9 weeks	3	Higher School of Economics	Active
16		Speaking Effectively	NPTEL	8 weeks	3	Indian Institute of Technology, Kharagpur	Active

17		Write Professional Emails in English	Coursera	5 weeks	2	Georgia Institute of Technology	Active
18		Technical Writing	Coursera	5 weeks	1	Moscow Institute of Physics and Technology	Active
19		Creating Innovation	Coursera	6 weeks	2	Macquarie University	Active
20		Interpersonal Communication for Engineering Leaders	Coursera	4 weeks	1	Rice University	Active
21		Creating Innovation	Coursera	6 weeks	2	Macquarie University	Active
22		Take Your English Communication Skills to the Next Level	Coursera	4 weeks	1	Georgia Institute of Technology	Active
23		Grammar and Punctuation	Coursera	4 weeks	1	University of California	Active
24		How to Write an Essay	edx	5 weeks	1	University of California, Berkeley	Active
25		Advanced Writing	Coursera	4 weeks	1	University of California, Irvine	Active
26		English for Science, Technology, Engineering, and Mathematics	Coursera	5 weeks	1	University of Pennsylvania	Active
27		English Composition	edX	8 weeks	3	Arizona State University	Active
28		Soft skills	NPTEL	12 Weeks	4	IIT Roorkee	Active
29		Presentation Skills: Designing Presentation Slides	Coursera	4 weeks	1	Tomsk State University	Active
30		Employment Communication A Lab based course	NPTEL	8 weeks	3	IIT KGP	Active
31	Program ming skills	Introduction to Programming with MATLAB	Courseera	9 weeks	3	Vanderbilt University	Active
32		Programming In C++	NPTEL	8 weeks	3	IIT Kharagpur	Active
33		Learn to Program: The Fundamentals	Coursera	7 weeks	2	University of Toronto	Active
34		Introduction to computer Science	edx	4-5 weeks	2	Microsoft	Active
35		Introduction to Computer Science and Programming Using Python	edX	Self Paced	4	MIT, USA	Active
36		Introduction to Programming in C	Coursera	4 weeks	4	Duke University	Active
37		Java Programming: Solving Problems with Software	Coursera	4 weeks	4	Duke University	Active
38		Java For Android	Coursera	4 weeks	4	Vanderbilt University	Active

39		Responsive Website Basics: Code with HTML, CSS, and JavaScript	Courseera	4 weeks	1	University of London Microsoft	Active
40		Introduction to HTML5	Courseera	3 weeks	1	University of Michigan	Active
41		HTML5 Coding Essentials and Best Practices	edX	6 weeks	2	W3C	Active
42		Problem solving through Programming In C	NPTEL	12 Weeks	4	IIT Kharagpur	Active
43		Joy of computing using Python	NPTEL	12 Weeks	4	IIT Ropar	Active
44		Learn to Program: The Fundamentals	Coursera	7 weeks	3	University of Toronto	Active
45		Web Design for Everybody (Basics of Web Development and Coding) Specialization	Coursera	15weeks	4	University of Michigan	Active
46	Statistics	Inferential Statistics	Coursera	7 weeks	2	Duke University	Active
47		Data Science :Linear Regression	Coursera	8 weeks	3	Havard University	Active
48		Introduction to Data Analysis	Coursera	4 weeks	1	Rice University	Active
49	Environmental Studies	The Science of Well Being	Coursera	6 weeks	2	Yale University	Active
50		Ecology: Ecosystem Dynamics and Conservation	Coursera	5 weeks	1	American Museum of Natural History, Howard Hughes Medical Institute	Active
51	Others	Effective Problem-Solving and Decision- Making	Coursera	4 weeks	1	University of California	Active
53		Critical Thinking & Problem Solving	edX	3 weeks	3	Rochester Institute of Technology	Active
54		Moralities of Everyday Life	Coursera	6 weeks	2	Yale University	Active
55		Introduction to Logic	Coursera	10 weeks	3	Stanford University	Active
56		The Science of Everyday Thinking	edX	12 weeks	4	University of Queensland	Active
57		Digital Security and Human Rights	edx	3 weeks	1	Amnesty International X	Active
58		Emotional Intelligence	NPTEL	8 weeks	3	IIT KGP	Active
Archived Courses for the Session(January-June, 2020)							

59	Developing Soft Skills and Personality	NPTEL	8 weeks	3	IIT Kanpur	Archived
60	Indian Fiction in English	NPTEL	12 weeks	4	IIT Madras	Archived
61	Development of Sociology in India	NPTEL	4 Weeks	1	IIT Kanpur	Archived
62	Introduction to Logic	NPTEL	12 weeks	4	IIT Kanpur	Archived
63	Developing Soft Skills and Personality	NPTEL	8 weeks	3	IIT Kanpur	Archived
64	Introduction to Problem Solving and Programming	NPTEL	12 weeks	4	IIT Kanpur	Archived
65	Ethics	NPTEL	12 weeks	4	IIT Kgp	Archived
66	Science, Technology and Society	NPTEL	12 weeks	4	IIT Guahati	Archived
67	Environmental Studies: A Global Perspective	edX	Self Paced	4	Curtin University	Archived
68	Linear Regression and Modelling	Coursera	4 weeks	1	Duke University	Archived
69	Essential Statistics for Data Analysis using Excel	edX	Self Paced	3	Microsoft	Archived
70	Programming Basics	edX	9 weeks	3	IIT Bombay	Archived
71	Foundation of Data Structures	edX	6 weeks	2	IIT Bombay	Archived
72	Conversational English Skills	edX	10 weeks	3	Tsinghua University	Archived
73	Android App Development for Beginners	edX	6 weeks	2	GalileoX	Archived
74	Introduction to Philosophy	Coursera	5 weeks	1	University of Edinburgh	Archived
75	Employment Communication A Lab based course	NPTEL	12 week	4	IIT Kharagpur	Archived
76	Psychology at Work Has different topic related to it	Coursera	6 weeks	2	University of Western Australia	Archived
77	Speak English Professionally: In Person, Online & On the Phone	Coursera	5 weeks	1	Georgia Institute of Technology	Archived
78	Statistics and R	edX	Self Paced	4	Harvard University	Archived
79	Java Fundamentals for Android Development	edX	6 weeks	2	GalileoX	Archived

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL
List of Online Courses for 2nd Year,3rd Year and 4th Year B.Tech Courses of IT and CSE for
Additional Credit Earning

2nd Year					
Module	Basket of Courses	Duration	Credit	Offered by	Status
Programming Skills	Programming in Java	12 Weeks	4	NPTEL	Active
	AP Computer Science A: Java Programming Polymorphism and Advanced Data Structures	6 weeks	3	edX	Active
	Build your very first iOS app	8 weeks	3	edX	Active
	Gameplay Programming for Video Game Designers	5 weeks	3	edX	Active
	An Introduction To Programming Through C++	12weeks	4	NPTEL	Active
	Introduction to Computer Science & Programming Specialization	8 weeks	3	Courseer a	Active
	Introduction to scripting in Python	8 weeks	3	Courseer a	Active
Data Structure & Algorithm					
	Foundation of Data Structures	6 weeks	3	edX	Active
Statistical / Mathematical s Methods	Bayesian Statistics:Techniq ues and Models	5 weeks	3	Courseer a	Active
	Mathematical Modelling Basics	9 weeks	4	edX	Active
Multimedia & Web Applications	Animation and CGI Motion	12 weeks	4	edX	Active
	Web Application Development	6 weeks	3	Courseer a	Active
	Web Design for Everybody Specialization	12 weeks	4	Courseer a	Active

Networking	The Bits and Bytes of Computer Networking	4 weeks	2	Coursera	Active
	Introduction to Cisco Networking	4 weeks	2	Coursera	Active
Data Science					
	Introduction to data science in python	3 weeks	1	Coursera	Active
	What is Data Science?	3 weeks	1	Coursera	Active
	Introduction to Big Data	3 weeks	1	Coursera	Active
	The Data Science Tool Box	2 weeks	1	Coursera	Active
	Data Driven Decision Making	2 weeks	1	Coursera	Active
	A Crash Course in Data Science	1 weeks	1	Coursera	Active
Cyber Security	Digital Security and Human Rights	3 weeks	2	edX	Active
Other	Data Analysis and Presentation Skills : the PWC approach Specialization	12 weeks	4	Coursera	Active
	Introduction to Soft Computing	8 Weeks	3	NPTEL	Active

Archived for the Present Session(January -June, 2020)

Introduction to Design Thinking	5 weeks	3	edx	Archived
Introduction to Automata, Languages and Computation	12 Weeks	4	NPTEL	Archived
	8 weeks	3	NPTEL	Archived
Theory of Computation				
Introduction to Data Modelling	4 weeks	2	edX	Archived
Java Fundamentals for Android Development	6 weeks	3	edX	Archived
Switching Circuits and Logic Design	12 weeks	4	NPTEL	Archived
Synthesis of Digital Systems	12 weeks	4	NPTEL	Archived
Introduction to Computing for Data Analysis with Python	6 weeks	3	edX	Archived

3 rd Year					
Module	Basket of Courses	Duration	Credit	Offered by	Status
Computer Organization & Architecture					
DBMS	Using Databases with Python	5 weeks	3	Courseera	Active
	Data Base Management System	8 weeks	3	NPTEL	Active
Mathematics	Discrete Mathematics	12 Weeks	4	NPTEL	Active
Operating System					
Data Structure & Algorithm	Programming, Data Structures and Algorithms using Python	8 weeks	3	NPTEL	Active
	Design and Analysis of Algorithms	8 weeks	3	NPTEL	Active
	Algorithm Specialization	16 weeks	4	Courseera	Active
	Divide and conquer ,Sorting, Searching and Randomized Algorithm	4weeks	2	Courseera	Active
Cloud Computing	Cloud Computing	8 weeks	3	NPTEL	Active
	Cloud Computing	5 weeks	3	Courseera	Active
Cyber Security					
	Bitcoin and Cryptocurrency Technologies	11 weeks	4	Courseera	Active
	Ethical Hacking	8 weeks	3	Udemy	Active
	Cybersecurity and its 10 domains	7 weeks	3	Courseera	Active
	Cryptography and Network Security	12 Weeks	4	NPTEL	Active
Networking	Introduction to Internet of Things	12 Weeks	4	NPTEL	Active

	Introduction to Industry 4.0 and Industrial Internet of Things	12 Weeks	4	NPTEL	Active
	Introduction to the Internet of Things	6 weeks	3	edX	Active
	IoT Programming and Big Data	5 weeks	3	edX	Active
	Data Communications and Network Services	4 weeks	2	Coursera	Active
UML Designing	UML Class Diagrams for Software Engineering	3 weeks	2	edX	Active
Software Engineering	Formal Software Verification	8 weeks	3	edX	Active
	Software testing	12 weeks	4	NPTEL	Active
	Software Testing Fundamentals	8 weeks	3	edX	Active
	Software Testing Management	8 weeks	3	edX	Active
	Quality Design and Control	12 weeks	4	NPTEL	Active
	Six Sigma	12 weeks	4	NPTEL	Active
	Software Product Management Specialization	16 weeks	4	Coursera	Active
	Software Product Management Specialization	16 weeks	4	Coursera	Active
Industrial Management	Entrepreneurship in Emerging Economies	6 weeks	3	edX	Active
	Patent Drafting for Beginners	4 weeks	2	NPTEL	Active
	Patent Law for Engineers and Scientists	12 weeks	4	NPTEL	Active
Data Science	Introduction to Computational Thinking and Data Science	10 weeks	4	edX	Active
	Big Data Fundamentals	10 weeks	4	edX	Active

	Big Data Analytics	10 weeks	4	edX	Active
	Text Mining in Python	4 weeks	2	Courseera	Active
	Foundations of Data Science: Computational Thinking with Python	5 weeks	3	edX	Active
	Data Science for Engineers	8 weeks	3	NPTEL	Active
	Python for Data Science	4 weeks	2	NPTEL	Active
	How to win a Datascience Competition : Learn from Top Kagglers	5weeks	2	Courseera	Active
Multimedia & Web Applications	Virtual Reality	4 weeks	2	Courseera	Active
AI & Machine Learning	Principles of Machine Learning	6 weeks	3	edX	Active
	Machine Learning	12 weeks	4	NPTEL	Active
	AI For Everyone	4 weeks	2	Courseera	Active
	Robotics :Aerial Robotics	6 weeks	3	Courseera	Active
	Deep learning in Computer Vision	5weeks	2	Courseera	Active
	Deep Learning – Part 1	12 weeks	4	NPTEL	Active
	AI:Knowledge Representation and Reasoning	12 weeks	4	NPTEL	Active
	Neural Network	14 weeks	4	Courseera	Active
	Introduction to Machine Learning	12 weeks	4	NPTEL	Active
Programming Skills	Functional Programming in Scala	6 weeks	3	Courseera	Active

	Using python to access web data	6 weeks	3	Coursee ra	Active
	Python Data Structures	2weeks	1	Coursee ra	Active
	Programming in C++	8 weeks	3	NPTEL	Active
	Matlab Programming for Numerical Computation	8 weeks	3	NPTEL	Active
	Python 3 Programming Specialization	8 weeks	3	Couseer a	Active
Natural Language Processing Other	Natural Language Processing	5 weeks	3	Coursee ra	Active
	Embedded Systems and Design	12 weeks	4	NPTEL	Active
	A System View of Communications: From Signals to Packets (Part 2)	6 weeks	3	edX	Active
	Teamwork and collaboration	3 weeks	2	edx	Active
Archived for the Present Session(January -June, 2020)					
	Modern Algebra	8 weeks	3	NPTEL	Archived
	Ethical Hacking	12 Weeks	4	NPTEL	Archived
	Artificial Intelligence Search Methods For Problem Solving	12 weeks	4	NPTEL	Archived
	Machine Learning for Engineering and Science Applications	12 weeks	4	NPTEL	Archived
	Computer Vision	12 weeks	4	NPTEL	Archived
	Introduction to parallel Programming in Open MP	4 weeks	2	NPTEL	Archived
	Scalable Data Science	8 weeks	3	NPTEL	Archived
	Software Project Management	12 weeks	4	NPTEL	Archived
	Software Engineering	12 weeks	4	NPTEL	Archived
	Design and Analysis of Experiments	12 weeks	4	NPTEL	Archived
	Pattern Recognition	12 weeks	4	NPTEL	Archived

	Cryptography and Network Security	12	4	NPTEL	Archived
	Object oriented analysis and design	8 weeks	3	NPTEL	Archived
	Data Mining: Theories and Algorithms for Big Data	14 weeks	4	edX	Archived
	Applied Natural Language Processing	12 weeks	4	NPTEL	Archived
	Natural Language Processing	12 weeks	4	NPTEL	Archived
	Operating System Fundamentals	12 Weeks	4	NPTEL	Archived
	Introduction to Operating Systems	8 weeks	3	NPTEL	Archived
	Computer Architecture and Organization	12 Weeks	4	NPTEL	Archived
	Computer Organization and Architecture: A Pedagogical Aspect	12 weeks	4	NPTEL	Archived
	Introduction to Machine Learning	8 weeks	3	NPTEL	Archived
	Parallel Algorithms	12 weeks	4	NPTEL	Archived

4th Year					
Cyber Security					
	Cyber security and Privacy in the IoT	5 weeks	3	edX	Active
	IoT System Design: Software and Hardware Integration	4 weeks	2	edX	Active
	Blockchain and Fin Tech: Basics, Applications, and Limitations	6 weeks	3	edX	Active
	Block Chain Specialization	8 weeks	3	Course era	Active
	A System View of Communications: From Signals to Packets (Part 3)	5 weeks	3	edX	Active
	Introduction to Internet of Things	12 weeks	4	NPTEL	Active
Mathematics					
	Mathematics For Machine Learning: Multivariate Calculas	6 weeks	3	Courseer a	Active
Industrial Management	Marketing Fundamentals	4 weeks	2	edX	Active
Data Science	IBM Data Science Professional Certificate	8 weeks	3	Couseera	Active
	Data Science with Python	10 weeks	4	edX	Active
AI & Machine Learning	Introduction to Artificial Intelligence	12 weeks	4	NPTEL	Active
	Foundations of Data Science: Prediction and Machine Learning	6 weeks	3	edX	Active
	Deep Learning Specialization	12 weeks	4	Couseera	Active
	Machine learning with Tensor Flow on Google Cloud Platform Specialization	4 weeks	1	Couseera	Active
	Applied Machine Learning with Python	3weeks	1	Couseera	Active
	Convolution Neural Network	4weeks	1	Couseera	Active
	Sequence Model	2weeks	1	Couseera	Active

	Deep Learning	6 weeks	3	edX	Active
	Deep Learning	12 weeks	4	NPTEL	Active
	Practical Machine Learning with Tensor flow	8 weeks	3	NPTEL	Active
	Reinforcement Learning	12 weeks	4	NPTEL	Active
Cloud Computing					
	Cloud Computing Management	8 weeks	3	edX	Active
	Cloud Computing Infrastructure	8 weeks	3	edX	Active

	Data Engineering on Google Cloud Platform Specialization	4 weeks	1	Courseera	Active
	Security in Google Cloud Platform Specialization	4 weeks	1	Courseera	Active
	AWS Fundamental: Going Cloud Native	5 weeks	2	Course era	Active
	Google cloud Platform Big data and Machine Learning Platform	2 weeks	1	Courseera	Active
Remote Sensing	Remote Sensing Essential	12 weeks	4	NPTEL	Active
Others	Leadership for Engineers	6 weeks	3	edX	Active
	Computer Forensics	8 weeks	3	edX	Active
	Social Networks	12 weeks	4	NPTEL	Active
	Strategic Performance Management	8 weeks	3	NPTEL	Active
	Compiler Design	12 Weeks	4	NPTEL	Active
	Foundations to Computer Systems Design	12 weeks	4	NPTEL	Active
	Real Time Operating System	4 weeks	1	NPTEL	Active
	Embedded System Design with ARM	8 Weeks	3	NPTEL	Active
	Information Security - 5 - Secure Systems Engineering	8 weeks	3	NPTEL	Active
	Privacy and Security in Online Social Media	8 weeks	3	NPTEL	Active
	Introduction to Blockchain Technology and application	6 weeks	3	edX	Active
	Graph Theory	12 weeks	4	NPTEL	Active
	Business Analytics for Management Decision	12 weeks	4	NPTEL	Active
	Consumer Behaviour	8 weeks	3	NPTEL	Active
	Cloud Computing Security	8 weeks	3	edX	Active
Archived for the Present Session(January -June, 2020)					
	Biometrics	8 weeks	3	NPTEL	Archived
	Services Management- A practical approach	4 weeks	2	NPTEL	Archived
	Systems Engineering: Theory and Practice	8 weeks	3	NPTEL	Archive d
	Data Science for Engineers with R	8 weeks	3	NPTEL	Archive d

	Chaos, Fractals and Dynamic Systems	12 weeks	4	NPTEL	Archived
	Computational Thinking for Modeling and Simulation	6 weeks	3	edX	Archived
	Remote Sensing and Digital Image Processing of Satellite Data	8 weeks	3	NPTEL	Archived
	Fuzzy Systems and Applications	12 weeks	4	NPTEL	Archived
	Blockchain Architecture Design and Use Cases	12 weeks	4	NPTEL	Archived
	Robotics: Vision Intelligence & Machine Learning	12 weeks	4	edX	Archived
	Becoming an Entrepreneur	6 weeks	3	edX	Archived
	Hardware Security	12 Weeks	4	NPTEL	Archived
	Advanced Computer Architecture	8 weeks	3	NPTEL	Archived
	Neural Networks for Machine Learning	16 weeks	4	Courseer a	Archived
	Compliance in Office 365: Data Governance	4 weeks	2	edX	Archived
	Human Computer Interactions	8 weeks	3	NPTEL	Archived
	Cloud Computing for Enterprises	8 weeks	3	edX	Archived
	Introduction To Haskell Programming	8 weeks	3	NPTEL	Archived
	Spatial Informatics	8 weeks	3	NPTEL	Archived
	Block chain Architecture Design and Use Cases	12 weeks	4	NPTEL	Archived
	Soft Skills for Business Negotiations and Marketing Strategies	12 weeks	4	NPTEL	Archived
	Big Data Computing	8Weeks	3	NPTEL	Archived
	Deep Learning – Part 2	8 Weeks	3	NPTEL	Archived