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
	Java Fundamentals for Android Development	6 weeks	3	edX	Active
Data Structure & Algorithm					
	Foundation of Data Structures	6 weeks	3	edX	Active
Automata Theory & Compiler Design	Introduction to Automata, Languages and Computation	12 Weeks	4	NPTEL	Active
Statistical / Mathematicals Methods	Bayesian Statistics:Techniques and Models	5 weeks	3	Courseera	Active
	Mathematical Modelling Basics	9 weeks	4	edX	Active
Soft Computing	Introduction to Soft Computing	8 Weeks	3	NPTEL	Active
Multimedia & Web Applications	Animation and CGI Motion	12 weeks	4	edX	Active
	Web Application Development	6 weeks	3	Courseera	Active
Networking	The Bits and Bytes of Computer Networking	4 weeks	2	Courseera	Active
	Introduction to Cisco Networking	4 weeks	2	Courseera	Active
Data Science	Introduction to Computing for Data Analysis with Python	6 weeks	3	edX	Active
	Introduction to Data Modelling	4 weeks	2	edX	Active
Cyber Security	Digital Security and Human Rights	3 weeks	2	edX	Active
Other	Introduction to Design Thinking	5 weeks	3	edX	Active

3rd Year					
Module	**Basket of Courses**	**Duration**	**Credit**	**Offered by**	**Status**
Computer Organization & Architecture	Computer Architecture and Organisation	12 Weeks	4	NPTEL	Active
	Computer Organization and Architecture: A Pedagogical Aspect	12 weeks	4	NPTEL	Active
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
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
	Parallel Algorithms	12 weeks	4	NPTEL	Active
Cloud Computing	Cloud Computing	8 weeks	3	NPTEL	Active
	Cloud Computing	5 weeks	3	Courseera	Active
Cyber Security	Cryptography and Network Security	12 Weeks	4	NPTEL	Active
	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
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
	A System View of Communications: From Signals to Packets (Part 2)	6 weeks	3	edX	Active
	IoT Programming and Big Data	5 weeks	3	edX	Active
	Data Communications and Network Services	4 weeks	2	Courseera	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 Fundamentals	8 weeks	3	edX	Active
	Software Testing Management	8 weeks	3	edX	Active
Industrial Management	Entrepreneurship in Emerging Economies	6 weeks	3	edX	Active
	Quality Design and Control	12 weeks	4	NPTEL	Active
	Six Sigma	12 weeks	4	NPTEL	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
	Data Mining: Theories and Algorithms for Big Data	14 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
Multimedia & Web Applications	Virtual Reality	4 weeks	2	Courseera	Active

AI & Machine Learning	AI:Knowledge Representation and Reasoning	12 weeks	4	NPTEL	Active
	Principles of Machine Learning	6 weeks	3	edX	Active
	Machine Learning	12 weeks	4	NPTEL	Active
Programming Skills	Functional Programming in Scala	6 weeks	3	Courseera	Active
Others					
	Embedded Systems	12 weeks	4	NPTEL	Archived
	Design and Analysis of Experiments	12 weeks	4	NPTEL	Archived
	Neural Networks	14 weeks	4	Courseera	Archived
	Pattern Recognition	12 weeks	4	NPTEL	Archived
	Teamwork and Collaboration	3 weeks	2	edX	Archived
	Crytography and Network Security	12	4	NPTEL	Archived
	Matlab Programming for Numerical Computation	8 weeks	3	NPTEL	Archived

4th Year					
Automata Theory & Compiler Design	Compiler Design	12 Weeks	4	NPTEL	Active
Computer Organization & Architecture	Foundations to Computer Systems Design	12 weeks	4	NPTEL	Active
Operating System	Real Time Operating System	4 weeks	1	NPTEL	Active
Embedded Systems	Embedded System Design with ARM	8 Weeks	3	NPTEL	Active
Cyber Security	Hardware Security	12 Weeks	4	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
	Cybersecurity and Privacy in the IoT	5 weeks	3	edX	Active
	Block chain Architecture Design and Use Cases	12 weeks	4	NPTEL	Active
	Blockchain Technology	6 weeks	3	edX	Active
	IoT System Design: Software and Hardware Integration	4 weeks	2	edX	Active
	Blockchain and FinTech: Basics, Applications, and Limitations	6 weeks	3	edX	Active

	A System View of Communications: From Signals to Packets (Part 3)	5 weeks	3	edX	Active
	Internet of Things	12 weeks	4	NPTEL	Active
Mathematics	Computational Thinking for Modeling and Simulation	6 weeks	3	edX	Active
	Graph Theory	12 weeks	4	NPTEL	Active
Industrial Management	Becoming an Entrepreneur	6 weeks	3	edX	Active
	Marketing Fundamentals	4 weeks	2	edX	Active
	Business Analytics for Management Decision	12 weeks	4	NPTEL	Active
	Consumer Behaviour	8 weeks	3	NPTEL	Active
	Soft Skills for Business Negotiations and Marketing Strategies	12 weeks	4	NPTEL	Active
Data Science	Big Data Computing	8Weeks	3	NPTEL	Active
	Data Science with Python	10 weeks	4	edX	Active
AI & Machine Learning	Deep Learning – Part 2	8 Weeks	3	NPTEL	Active
	Foundations of Data Science: Prediction and Machine Learning	6 weeks	3	edX	Active
	Robotics: Vision Intelligence & Machine Learning	12 weeks	4	edX	Active
Cloud Computing	Cloud Computing for Enterprises	8 weeks	3	edX	Active
	Cloud Computing Security	8 weeks	3	edX	Active
	Cloud Computing Management	8 weeks	3	edX	Active
	Cloud Computing Infrastructure	8 weeks	3	edX	Active
Remote Sensing	Remote Sensing	12 weeks	4	NPTEL	Active

Archived for the Present Session(January-June, 2019)

Biometrics	8 weeks	3	NPTEL	Archived
Strategic Performance Management	8 weeks	3	NPTEL	Archived
Services Management- A practical approach	4 weeks	2	NPTEL	Archived

Systems Engineering: Theory and Practice	8 weeks	3	NPTEL	Archived
Leadership for Engineers	6 weeks	3	edX	Archived
Computer Forensics	8 weeks	3	edX	Archived
Artificial Intelligence	12 weeks	4	NPTEL	Archived
Neural Networks for Machine Learning	16 weeks	4	Courseera	Archived
Deep Learning	6 weeks	3	edX	Archived
Data Science for Engineers with R	8 weeks	3	NPTEL	Archived
Big Data Analytics	10 weeks	4	edX	Archived
Chaos, Fractals and Dynamic Systems	12 weeks	4	NPTEL	Archived
Compliance in Office 365: Data Governance	4 weeks	2	edX	Archived