

## Notice

18<sup>th</sup> May, 2019

### **MOOCs for B.Tech Honours** (Applicable from the session 2019-2020)

#### **Preamble**

All India Council for Technical Education (AICTE) has introduced Model Curriculum for Bachelor of Technology programme with 160 credits in the entire programme of 4 years, and additional 20 credits will be required to be done for the degree of Bachelor of Technology with Honours. These additional 20 credits will have to be acquired with online courses (MOOCs) as per AICTE. So students will have to complete additional 20 credits through MOOCs within 4 years of time. This creates an excellent opportunity for students to acquire the necessary skill set for employability through massive online courses where the rare expertise of world famous experts from academics and industry are available. Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT, WB) has thus decided to introduce AICTE model curriculum for its B.Tech Programmes and suggest baskets for MOOCs available year wise for the four-year long B.Tech programme from the sessions 2019-2020. The basket for MOOCs will be a dynamic one, as courses keep on updating with time.

The total of 20 credits that is required to be attained for B.Tech Honours degree is distributed over four years in the following way:

For first year: 8 credits  
For second year: 4 credits  
For third year: 4 credits  
For fourth year: 4 credits

A student of first year has to cover courses from at least three skills:

1. Computer Programing with Python /R
2. Soft skill
3. Ethics

If a student is unable to cover the credits assigned for the first year, he/she can do these courses in either of the subsequent years, but he/she has to choose the courses from the basket of MOOCs announced by MAKAUT, WB from time to time. The same rule will be applicable for the other years of the programme.

The updated basket for MOOCs for the 1st year B. Tech for the session 2019-2020 is made available herewith.

## MOOC for First Year, Engineering and Technology

Module	Course	Provider	Duration	Credits	Name of University / Institute	Status
Ethics	Ethics in Engineering Practice	NPTEL	8 weeks	3	IIT Kharagpur	Active
	Ethics and Law in Data and Analytics	edX	Self Paced	4	Microsoft	Active
	A Life of Happiness and Fulfillment	Coursera	6 weeks	2	Indian School of Business	Active
	Introduction to Philosophy	Coursera	5 weeks	1	University of Edinburgh	Active
	Ethical Leadership Through Giving Voice	Coursera	4 weeks	2	University of Virginia	Active
	Ethics in Engineering Practice	NPTEL	8 Weeks	3	IIT Kharagpur	Active
Soft Skills	Technical English for engineers	NPTEL	8 Weeks	3	IIT Madras	Active
	Body Language :Key to Professional Success	NPTEL	4 Weeks	1	IIT Ropar	Active
	Interpersonal Skills	NPTEL	4 Weeks	1	IIT Ropar	Active
	Enhancing Soft Skills and Personality	NPTEL	8 weeks	3	IIT Kanpur	Active
	Psychology at Work	Coursera	6 weeks	2	University of Western Australia	Active
	Communication in the 21st Century Workplace	Coursera	4 weeks	1	University of California	Active
	Successful Career Development	Coursera	7 weeks	2	University System of Georgia	Active
	Working in Teams: A Practical Guide	edX	4 weeks	1	University of Queensland	Active
	Communication theory: bridging academia and practice	Coursera	9 weeks	3	Higher School of Economics	Active
	Write Professional Emails in English	Coursera	5 weeks	2	Georgia Institute of Technology	Active
	Technical Writing	Coursera	5 weeks	1	Moscow Institute of Physics and Technology	Active
Interpersonal Communication for Engineering Leaders	Coursera	4 weeks	1	Rice University	Active	

Programming Skills	Introduction to Programming with MATLAB	Coursera	9 weeks	3	Vanderbilt University	Active
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	Programming In C++	NPTEL	8 weeks	3	IIT Kharagpur	Active
	An Introduction to Programming Through C++	NPTEL	12weeks	4	IIT Bombay	Active
	Learn to Program: The Fundamentals	Coursera	7 weeks	2	University of Toronto	Active
	Introduction to computer Science	edx	4-5 weeks	2	Microsoft	Active
	Introduction to Computer Science and Programming Using Python	edX	Self Paced	4	MIT, USA	Active
	Statistics and R	edX	Self Paced	4	Harvard University	Active
	Introduction to Programming in C	Coursera	4 weeks	4	Duke University	Active
	Java Programming: Solving Problems with Software	Coursera	4 weeks	4	Duke University	Active
	Responsive Website Basics: Code with HTML, CSS, and JavaScript	Courseera	4 weeks	1	University of London Microsoft	Active
	Introduction to HTML5	Courseera	3 weeks	1	University of Michigan	Active
	HTML5 Coding Essentials and Best Practices	edX	6 weeks	2	W3C	Active
	Android App Development for Beginners	edX	6 weeks	2	<u>GalileoX</u>	Active
	Problem solving through Programming In C	NPTEL	12 Weeks	4	IIT Kharagpur	Active
	Joy of computing using Python	NPTEL	12 Weeks	4	IIT Ropar	Active
	Programming , Data Structures and Algorithm Using Python	NPTEL	8 Weeks	3	CMI	Active
	Foundation of Data Structures	edX	6 weeks	2	IIT Bombay	Active
	Learn to Program: The Fundamentals	Coursera	7 weeks	3	University of Toronto	Active
	Web Design for Everybody (Basics of Web Development and Coding)Specialization	Coursera	15weeks	4	University of Michigan	Active
	Programming Basics	edX	9 weeks	3	IIT Bombay	Active
Statistics	Inferential Statistics	Coursera	7 weeks	2	University of Amsterdam	Active
	Linear Regression and Modelling	Coursera	4 weeks	1	Duke University	Active
	Essential Statistics for Data Analysis using Excel	edX	SelfPaced	3	Microsoft	Active
Environmental Studies	The Science of Well Being	Coursera	6 weeks	2	Yale University	Active

Ecology: Ecosystem Dynamics and Conservation	Coursera	5 weeks	1	American Museum of Natural History, Howard Hughes Medical Institute	Active
Effective Problem-Solving and Decision-Making	Coursera	4 weeks	1	University of California	Active
Moralities of Everyday Life	Coursera	6 weeks	2	Yale University	Active
Introduction to Logic	Coursera	10 weeks	3	Stanford University	Active
The Science of Everyday Thinking	edX	12 weeks	4	University of Queensland	Active
Digital Security and Human Rights	edx	3 weeks	1	<u>Amnesty International X</u>	Active

#### Archived Courses for the Session(July-December, 2019)

Ethics	NPTEL	12 weeks	4		Active
Introduction to Philosophy: God, Knowledge, And Consciousness	edX	12 weeks	4	MIT	Active
Development of Sociology in India	NPTEL	4 Weeks	1	IIT Kanpur	Archived
Introduction to Logic	NPTEL	12 weeks	4	IIT Kanpur	Archived
Introduction to Problem Solving and Programming	NPTEL	12 weeks	4	IIT Kanpur	Archived
Better Spoken English	NPTEL	12 week	4	IIT Madras	Active
English language for Competitive exams	NPTEL	12 week	4	IIT Madras	Active
Employment Communication A Lab based course	NPTEL	12 week	4	IIT Kharagpur	Active
Developing Soft Skills and Personality	NPTEL	8 weeks	3	IIT Kanpur	Active
Speak English Professionally : In Person, Online & On the Phone	Course era	4 weeks	1	Georgia Tech	Active
Speaking Effectively	NPTEL	8 weeks	3	Indian Institute Of Technology, Kharagpur	Active
Java Fundamentals for Android Development	edX	6 weeks	2	<u>GalileoX</u>	Active
Environmental Studies: A Global Perspective	edX	Self Paced	4	Curtin University	Active
Science, Technology And Society	NPTEL	12 weeks	4		
Critical Thinking & Problem Solving	edX	3 weeks	3	Rochester Institute of Technology	Active