File Ref.No.KTU/ASST(ACADEMIC)/4117/2017

## APJ Abdul Kalam Technological University Thiruvananthapuram

## <u>Abstract</u>

APJAKTU- NPTEL MOOC Courses for B.Tech(Honours) - 47 MOOC courses offered by different IITs- sanctioned-Orders issued.

ACADEMIC SECTION				
U.O.No. 419/2019/KTU	Thiruvananthapuram, Dated: 24.10.2019			

Read:-1. Minutes of the 5th Academic council held on 16/08/2019, item no.005.3.01.

## <u>ORDER</u>

Vide item under reference , a list of 47 NPTEL MOOC courses , sent by certain colleges which are offered by different IITs, was placed in the Academic Council for approval .

As per rule 8 of the rules of B.Tech(Honours) degree programme, students registering for the B.Tech (Honours ) programme can earn credits by undergoing massive open online courses (MOOC) offered by reputed institutions/organisation with the approval of the University.

The Academic Council after discussion had approved all the NPTEL MOOC Courses, which was placed for approval.

The list of NPTEL MOOC courses is attached.

Orders are here by issued that this additional 47 NPTEL MOOC courses can be registered by the students for the B.Tech(Honours) Programme. The final list of MOOC courses is accordingly updated.

Sd/-

Dr. J. SREEKUMAR \* Dean (Academic)

Copy to:-

- 1. JD(IT) to be published in the website and updation of the portal.
- 2. The Principals of all engineering colleges.

\* This is a computer system (Digital File) generated letter. Hence there is no need for a physical signature.



No.	Discipline	Course Name	Institute	Duration
-	1 ME	Industrial Safety Engineering	IIT Kharagpur	12 weeks
-	2 Civil	Geo Environmental Engineering	IIT Guwahati	12 weeks
	3 Civil	Glass in Buildings-Design and Applications	IIT Madras	12 weeks
2	4 Civil	Higher Surveying	IIT Guwahati	12 weeks
[	5 Civil	Integrated waste management for a smart city	IIT Kharagpur	12 weeks
6	6 Civil	Modern construction materials	IIT Madras	12 weeks
-	7 Civil	Geosynthetics and Reinforced soil structures	IIT Madras	12 weeks
8	BCSE	Foundations to Computer systems design	IIT Madras	12 weeks
ç	9 EEE/ECE	Programming in Java	IIT Kharagpur	12 weeks
10	OCSE	Joy of computing using Python	IIT Ropar	12 weeks
11	1 EEE/ECE	Machine learning for Engineering & Science applications	IIT Madras	12 weeks
12	2 CSE	AI:Knowledge representation and reasoning	IIT Madras	12 weeks
13	3 CSE	Blockchain architecture and use cases	IIT Kharagpur	12 weeks
14	4 CSE	Cryptography and network security	IIT Kharagpur	12 weeks
15	5 CSE	Social networks	IIT Ropar	12 weeks
16	6 CSE	Introduction to internet of things	IIT Kharagpur	12 weeks
17	7 CSE	Introduction to industry 4.0 and Industrial internet of things	IIT Kharagpur	12 weeks
18	BEEE	Modern digital communication techniques	IIT Kharagpur	12 weeks
19	9 EEE	Introduction to photonics	IIT Madras	12 weeks
20	DEEE/ECE	Biomedical signal processing	IIT Kharagpur	12 weeks
21	1 EEE/ECE	Multirate DSP	IIT Madras	12 weeks
	2 EEE	Mathematical methods and Techniques in signal processing	llSc	12 weeks
23	BEEE/ECE	Electronic systems for cancer diagnosis	llSc	12 weeks
	4 ME	Principles of mechanical measurement	IIT Guwahati	12 weeks
25	5 ME	Conduction and convection heat transfer	IIT Kharagpur	12 weeks
	6 ME	IC Engines and Gas turbines	IIT Guwahati	12 weeks
27	7 ME	Product design and manufacturing	IIT Kanpur	12 weeks
28	B ME	Rapid manufacturing	IIT Kanpur	12 weeks
29	9 ME	Introduction to mechanical micro machining	IIT Kharagpur	12 weeks

Srl.No.	Discipline	Course Name	Institute	Duration
3	OME	Machinery fault diagnosis and signal processing	IIT Kharagpur	12 weeks
3	1 ME	Spray theory	IIT Madras	12 weeks
3	2 MD	Non-conventional Energy resources	IIT Madras	12 weeks
3	3 EEE	Fiber-optic communication systems and techniques	IIT Kanpur	12 weeks
3	4 EEE	Heat exchangers: Fundamentals and design analysis	IIT Kharagpur	12 weeks
3	5 ME	Energy conservation and waste heat recovery	IIT Kharagpur	12 weeks
3	6 ME	Computational fluid mechanics	IIT Kharagpur	12 weeks
3	7 ME	Fundamentals of manufacturing processes	IIT Roorkey	12 weeks
3	8 ME	Manufacturing systems technology iⅈ	IIT Kanpur	12 weeks
3	9 ME	Mechanics of human movement	IIT Madras	12 weeks
4	0 ME	Advanced composites	IIT Kanpur	12 weeks
4	1 ME	Engineering metrology	IIT Kanpur	12 weeks
4	2 ME	Noise management and control	IIT Kanpur	12 weeks
4	3 ME	Fundamentals of surface engineering: Mechanisms,processes and characterisations	IIT Roorkey	12 weeks
4	4 ME	Work system design	IIT Roorkey	12 weeks
4	5 ME	Engineering Fracture Mechanics	IIT Madras	12 weeks
4	6 EEE	Coding Information theory and Cryptography	IIT Delhi	12 weeks
4	7 EEE	Design of photovoltaic system.	IISc Banglore	12 weeks

