

**APJ Abdul Kalam Technological University**  
**Thiruvananthapuram**

**Abstract**

APJAKTU-Academics-List of Approved MOOC Courses for B.Tech Minor in Engineering (B.Tech 2019 Regulations)-  
Orders issued-Reg.

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ACADEMIC SECTION

U.O.No. 460/2022/KTU

Thiruvananthapuram, Dated: 07.03.2022

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*Read:-*1. Rule R.11.5 of B.Tech 2019 Regulations.

2. U.O.No.1988/2021/KTU Dated: 27.11.2021

3. U.O.No.2009/2021/KTU Dated 01.12.2021

4. U.O.No.2034/2021/KTU Dated 04.12.2021

5. U.O.No.2097/2021/KTU Dated 15.12.2021

6. U.O.No.143/2022/KTU Dated 25.01.2022

7. List of Minor MOOC Courses recommended by the various Board of Studies

**ORDER**

Vide paper read as (1) above, students registering for the B. Tech Degree with **Minor** programme can earn 8 credits by undergoing 2 Massive Open Online Courses (MOOC) relevant to the concerned subjects in the respective minor basket offered by agencies namely AICTE/ NPTEL/ SWAYAM/ NITTTR with the recommendation by the Board of studies and approval of the Academic Council.

Vide University Orders read as (2) to (6) above, 256 nos. of MOOCs that can be registered by the students of B.Tech (2019 Scheme), to earn credits for **Minor** Programme, were approved.

Vide paper read as (7) above, Various Board of Studies, after verifying the syllabus content and duration of the courses, has recommended to approve **11 Massive Online Open Courses**.

Considering the urgency, sanction has been accorded by the Vice Chancellor to approve the list of 11 MOOC Courses offered by agencies namely AICTE/ NPTEL/ SWAYAM/ NITTTR that can be registered by the students of **B.Tech Minor in Engineering** Programme to earn credits, as appended herewith (*refer attachment*), subject to reporting and ratification of the matter in the Academic Council .

Students will not be permitted to register for MOOCs other than those approved and published by the University, to earn credits for their Minor.

Orders are issued accordingly.

Sd/-

Dr. Sadiq A. \*  
Dean (Academic)

Copy to:-

1. All affiliated Institutions.
2. IT(section) for updating s/w and to publish in the website.
3. PS to VC & PVC, Dean (Acad)
4. JR(Acad) / JD(Acad) / Section



5.. SF / FC.

Forwarded / By Order

Section Officer

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





**List of Approved MOOC Courses for B.Tech Minor in Engineering**

**MECHANICAL ENGINEERING**

SL. No	Course	Course Code	Course Type	Duration	Offering Platform	B.Tech Regulation	Course Institution	Remarks
<b>BASKET-III MATERIALS AND MANUFACTURING ENGINEERING</b>								
1	Welding Metallurgy	MEM308	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITR	
2	Materials Science and Engineering	MEM309	MINOR MOOC	8 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITR	
3	Advanced Composites	MEM310	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITK	
4	Elements of metal cutting, Machine tools, gear cutting and CNC machining	MEM311	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITKGP	
5	Rapid Manufacturing	MEM312	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITK	



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**NAVAL ARCHITECTURE AND SHIP BUILDING**

SL. No	Course	Course Code	Course Type	Duration	Offering Platform	B.Tech Regulation	Course Institution	Remarks
<b>BASKET-1</b>								
1	Dynamics of Offshore Structures	SBM101	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IIT Madras	
2	Aqueous Corrosion and its control	SBM102	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IIT Bombay	
3	Stability and Hydrostatics	SBM103	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
4	Fluid Mechanics and its applications	SBM104	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IIT Delhi	
5	Finite Element Method	SBM105	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IIT Kharagpur	



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**ELECTRONICS AND COMMUNICATION ENGINEERING**

SL. No	Course	Course Code	Course Type	Duration	Offering Platform	B.Tech Regulation	Course Institution	Remarks
<b>BASKET-I VLSI AND EMBEDDED SYSTEMS</b>								
1	DIGITAL ELECTRONIC CIRCUITS	ECM107	MINOR MOOC	12 Weeks	SWAYAM/ NPTEL	B.Tech Regulation 2019	IITKGP	replacing S3 ECT281 Electronic Circuits