

**APJ Abdul Kalam Technological University  
Thiruvananthapuram**

**Abstract**

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

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*ACADEMIC SECTION*

U.O.No. 2009/2021/KTU

Thiruvananthapuram, Dated: 01.12.2021

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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. Minutes of the Board of Studies Electronics and Communication meeting held on 19.11.2021

**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 Order read as (2) above, 163 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 (3) above, Board of Studies Electronics and Communication Engineering, after verifying the syllabus content and duration of the courses, has recommended to approve **24 Massive Online Open Courses.**

Considering the urgency, sanction has been accorded by the Vice Chancellor to approve the list of 24 MOOC Courses offered by agencies namely AICTE/ NPTEL/ SWAYAM/ NITTTR that can be registered by the students of **B.Tech Minor in Electronics and Communication 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 Honours / Minor.

Orders are issued accordingly.

*Sd/-*

Dr. Sadiq A. \*

Dean (Academic)

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**

**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 Circuits	ECM100	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
2	Digital Circuits and Systems	ECM101	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	
3	Digital System Design	ECM102	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Ropar	
4	Electronic Systems for Cancer Diagnosis	ECM103	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IISc Bangalore	
5	Fabrication Techniques for MEMs-based sensors: Clinical Perspective	ECM104	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IISc Bangalore	
6	Integrated Circuits, MOSFETS, OP-Amps and Their Applications	ECM105	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IISc Bangalore	
7	Microelectronics: Devices To Circuits	ECM106	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Roorkee	
<b>BASKET II - COMMUNICATION SYSTEMS</b>								
1	Advanced Topics in Probability and Random Processes	ECM200	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Guwahati	
2	Applied Linear Algebra	ECM201	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	
3	Applied Linear Algebra for Signal Processing, Data Analytics and Machine Learning	ECM202	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kanpur	
4	Introduction to Wireless and Cellular Communications	ECM203	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	
5	Peer To Peer Networks	ECM204	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kanpur	
6	Principles of Communication Systems Part II	ECM205	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
7	Probability Foundations for Electrical Engineers	ECM206	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	
8	Satellite Communication Systems	ECM207	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
<b>BASKET-III - SIGNAL PROCESSING</b>								
1	Biomedical Signal Processing	ECM300	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	

2	Digital Speech Processing	ECM301	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
3	Foundations of Wavelets and Multirate Digital Signal Processing	ECM302	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Bombay	
4	Medical Image Analysis	ECM303	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
5	Advanced Topics in Probability and Random Processes	ECM304	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Guwahati	
6	Applied Linear Algebra for signal Processing, Data Analytics and Machine Learning	ECM305	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kanpur	
7	Fundamentals of Wavelets, Filter banks and Time Frequency Analysis	ECM306	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Bombay	
8	Image Signal Processing	ECM307	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	
9	Introduction to Biomedical Image Systems	ECM308	MINOR MOOC	8/12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Madras	