

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

ELECTRICAL AND ELECTRONICS ENGINEERING

SL. No	Course	Course Code	Course Type	Duration	Offering Platform	B.Tech Regulation	Course Institution	Remarks
BASKET-I DRIVES AND POWER ELECTRONICS								
1	Fundamentals of power electronics	EEM100	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IISC	
2	E-Mobility and Charging Infrastructure	EEM101	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Guwahati	
3	Introduction to Embedded System Design	EEM102	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Jammu	
4	Semiconductor Devices and Circuits	EEM103	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IISC	
5	Fuzzy Sets, Logic and Systems & Applications	EEM104	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Kanpur	
6	Industrial Automation and Control	EEM105	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Kharagpur	
7	Introduction to Industry 4.0 and Industrial Internet of Things	EEM106	MINOR MOOC	12 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Kharagpur	
8	Advance power electronics and Control	EEM107	MINOR MOOC	8 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Roorkee	
9	Fundamentals of Electric vehicles: Technology & Economics	EEM108	MINOR MOOC	8 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Madras	
10	Fundamentals of Electric Drives	EEM109	MINOR MOOC	8 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Kanpur	
11	Fundamentals of Electric vehicles: Technology & Economics	EEM110	MINOR MOOC	8 weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT Madras	
BASKET-II POWER ENGINEERING								
1	Power System Engineering	EEM200	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT KGP	
2	Power System Dynamics, Control and Monitoring	EEM201	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IIT KGP	

3	Energy Resources, Economics and Environment	EEM202	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITB	
4	Power Management Integrated Circuits	EEM203	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITM	
5	Elements of Solar Energy Conversion	EEM204	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITK	
6	Non-Conventional Energy Resources	EEM205	MINOR MOOC	12 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITM	
7	Waste to Energy Conversion	EEM206	MINOR MOOC	8 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITR	
8	Solar Photovoltaics: Principles, Technologies & Materials	EEM207	MINOR MOOC	8 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITK	
9	Power Quality Improvement Technique	EEM208	MINOR MOOC	8 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITR	
10	Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems	EEM209	MINOR MOOC	8 Weeks	NPTEL/ SWAYAM	B.Tech Regulation 2019	IITG	
BASKET-III CONTROL ENGINEERING								
1	Control engineering	EEM300	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	IITM	(In lieu of EET385 Control Systems)
2	Power System Dynamics, Control and Monitoring	EEM301	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	IIT KGP	
3	Sensors and Actuators	EEM302	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	IISc	
4	Nonlinear System Analysis	EEM303	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	IITM	
5	Linear Dynamical Systems	EEM304	MINOR MOOC	8 Weeks	NPTEL	B.Tech Regulation 2019	IIT Mandi	
6	Modelling and Simulation of Dynamic Systems	EEM305	MINOR MOOC	8 Weeks	NPTEL	B.Tech Regulation 2019	IITR	

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INFORMATION TECHNOLOGY

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BASKET-I WEB AND ANDROID DEVELOPMENT								
1	Data Base Management System	ITM102	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	IIT Kharagpur	
BASKET-III SOFTWARE ENGINEERING								
1	Software Engineering	ITM302	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulation 2019	University of Madras	

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MECHANICAL ENGINEERING

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BASKET-I MECHANISMS AND MACHINES ENGINEERING								
1	Mechanics of material	MEM100	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulations 2019	IITM	
2	Mechanics of Solids	MEM101	MINOR MOOC	12 weeks	NPTEL	B.Tech Regulations 2019	IIT Kanpur	
3	Kinematics of mechanisms and machines	MEM102	MINOR MOOC	8 weeks	NPTEL	B.Tech Regulations 2019	IIT Kharagpur	
BASKET - II FLUID AND THERMAL ENGINEERING								
1	Concept of Thermodynamics	MEM200	MINOR MOOC	12 Weeks	NPTEL	B.Tech Regulations 2019	IIT KGP	
2	Heat Transfer	MEM201	MINOR MOOC	12 weeks	NPTEL	B.Tech Regulations 2019	IITKGP	
BASKET-III MATERIALS AND MANUFACTURING ENGINEERING								
1	Basics of Material Engineering	MEM306	MINOR MOOC	13 Weeks	NPTEL	B.Tech Regulations 2019	IIT M	
2	Mechanics of Machining	MEM307	MINOR MOOC	8 weeks	NPTEL	B.Tech Regulations 2019	IIT Guwahati	