

National Institute of Technology Calicut, Calicut 673 601 – CL

M.Tech. Degree in Engineering/ Technology in the appropriate branch of study with first class or minimum 60% marks (CGPA 6.5/10). [For SC/ST candidates, the minimum mark is 55% (CGPA 6.0/10)].

Candidates shall be required to have passed the **four-year regular full time** B.E./B. Tech. Degree in an appropriate branch with minimum 60% marks (CGPA 6.5/10) in the qualifying examination. [For SC/ST candidates 55% marks (CGPA 6.0/10)].

Candidates under lateral entry should have passed the three-year diploma in engineering with minimum 60% marks (CGPA 6.5/10) [For SC/ST candidates 55% marks (CGPA 6.0/10)].

Code	Department	Fields of Specialization	Minimum Qualification
CLCE01	Civil Engineering	Structural Engineering	Structural Engineering
		Offshore Structures	Offshore Structures/ Structural Engineering/ Ocean Engineering/ Coastal Engineering
		Traffic & Transportation Planning	Transportation Engineering/ Highway Engineering/ Traffic & Transportation Planning/ Urban Engineering
		Geotechnical Engineering	Geotechnical Engineering/ Environmental Geotechnology
		Water Resources Engineering	Water Resources Engineering/ Hydraulic Engineering/ Hydraulics and Water Resources Engineering/ Irrigation Engineering/ Coastal Engineering/ Environmental Geotechnology/ Environmental Engineering / Remote Sensing and GIS/ Geoinformatics
		Environmental Engineering	Environmental Engineering/ Environmental Geotechnology
		Building Technology and Construction Management.	Building (Construction) Technology/ Construction Management/ Structural Engineering/ Architecture
		Town Planning	Town Planning / Urban Design/ Architecture
CLEE01	Electrical Engineering	Instrumentation and Control Systems.	Electrical Engineering/ Power Systems/ Energy Systems/ Energetic/ Industrial Power/ Industrial Power & Automation/ Power Electronics/ Power Electronics& Drives/ Control Systems/ Instrumentation and Control Systems/ Instrumentation Engineering/ Applied Electronics and Instrumentation/ Biomedical Engineering/ Computer Controlled Industrial Power/ Avionics Engineering/ Guidance and Navigation Control/ High Voltage Engineering/ Control and Automation.
		Power and Energy Systems.	
		Power Electronics & Machines.	
		Industrial Power & Automation.	
		Biomedical Instrumentation and Signal Processing.	
		High Voltage Engineering.	
CLEC01	Electronics and Communication Engineering	Electronics Design and Technology (Embedded System Design, EMI/ EMC, Control System Design, Biomedical System Design, System Design for Signal Processing and Communication)	Post Graduate Degree in relevant streams of Electrical & Electronics Engineering/ Electronics Engineering/ Electronics & Communication Engineering/ Computer Science Engineering

		<p>Microelectronics and VLSI Design (Power Management in IC Design, Analog & Mixed-signal IC design, Semiconductor Device modeling, Micro fabrication Technology, Micro/Nano Electro Mechanical System MEMS/NEMS, VLSI architectures for Signal Processing and Communication)</p>	
		<p>Telecommunication (Wireless Communications and Networks, OFDM/MIMO and Massive MIMO, 5G Wireless Communications, Cryptography and Secure Communication, RF/Microwave)</p>	
		<p>Signal Processing (Speech/Audio/Image/Video Processing, Signal Theory, Compressed Sensing/Sparse Signal Processing, Multi-rate Signal Processing and Filter banks, Biomedical Signal Processing, Machine Learning, VLSI architectures for Signal Processing)</p>	
CLME01	Mechanical Engineering	<p>Industrial Engineering and Management. (Ergonomics and Product Design, Supply Chain Management, Marketing Management, Human Resource Management, Data Science Applications in Operations Management)</p>	Post Graduate Degree in Mechanical Engineering in the relevant fields of specialization.
		<p>Machine Design. (Computational Mechanics, Robotics, Tribology, Machine Dynamics and Vibrations, Nano- and Micro-mechanics, Product Design)</p>	
		<p>Materials and Manufacturing. (Macro and Micro Machining, Modern Machining, Metrology, CAD/CAM, Composite Materials, Ferrous and Non-Ferrous Metallurgy, Materials for Electronics Application, Additive Manufacturing/3D printing, Digital Manufacturing and Design, Automation of Manufacturing Functions)</p>	
		<p>Thermal and Energy Engineering. (Renewal Energy Technologies, Energy Conservation, Fuel Cells and Hydrogen Technology, Computational Fluid Dynamics, Heat Pipes, Cryogenics, Jets and Flow Acoustics, Combustion and Fire Safety, Fluid-Structure Interactions, Multi-phase Flows, High Performance Computing, Lattice Boltzmann Modeling, High Speed Flows, Turbomachinery, Internal Combustion Engines, Convection and Radiation Heat Transfer)</p>	