

**The minimum essential qualifications with relevant fields and desirable areas of specialization in the departments which have vacancies for the post of Associate Professor**

**(For first round of rolling advertisement)**

Sr. No.	Name of Department	Minimum Essential Qualifications with relevant fields	Specializations
1.	Civil Engineering	<p><b>B.E./B.Tech.</b> or equivalent in Civil Engineering/planning or <b>B. Plan</b></p> <p><b>M.E./M.Tech.</b> or equivalent in Civil Engineering/Surveying/ Transportation Engineering/ Geotechnical Engineering/Earth Sciences / Structural Engineering/ Water Resources Engineering/ Environmental Engineering/ Remote Sensing and GIS/Civil Engineering Materials/ Construction &amp; Project Management or relevant discipline/ M.Plan/Master of Town &amp; Regional Planning / Master of City Planning/ /M.Tech. (Planning)</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Construction and Project Management, Building Information Modelling, Construction Law, Quality &amp; Safety Management, Digital Technology, Internet of Things, Equipment Management</li> <li>• Urban Planning/City Planning/ Regional Planning/Urban Design/M. Plan/Master of Town &amp; Regional Planning/Master of City Planning/ M. Tech. (Planning)</li> <li>• Any Specialisation in Environmental Engineering</li> <li>• Rock Mechanics/Geotechnical Engineering</li> <li>• Transportation Planning: Travel Demand Modelling, Transportation Network Analysis, Freight Transportation, Public Transportation Systems, Geospatial Technologies in Transportation Engineering, Highways Materials, Material Characterisation, Pavement Engineering</li> <li>• Water Resources Engineering, Hydraulic Engineering, Ocean Engineering, Coastal Engineering, Coastal Hydraulics</li> <li>• Structural Engineering/Earthquake Engineering</li> </ul>
2.	Chemical Engineering	<p><b>B.E. / B.Tech.</b> or equivalent in Chemical Engineering</p> <p><b>M.E. / M.Tech.</b> in Chemical Engineering/ Allied Branches</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Process Control</li> <li>• Chemical Product Design</li> <li>• Modelling and Simulation</li> <li>• Smart Materials</li> <li>• Biochemical Engineering</li> </ul>

3.	Computer Science and Engineering	<p><b>B.E./ B. Tech.</b> or equivalent in Computer Science &amp; Engineering/ Computer Engineering/ Information Technology/ Electronics &amp; Communication Engineering/Computer &amp; Communication Engineering/ Computer Technology/Information and Communications Technology/ Electrical &amp; Electronics Engineering/Electronics Engineering/Artificial Intelligence/ Data Science or any relevant discipline</p> <p><b>M.E./M.Tech.</b> or equivalent in Computer Science &amp; Engineering/ Computer Engineering/ Information Technology/ Electronics &amp; Communication Engineering/Computer &amp; Communication Engineering/ Computer Technology/Information and Communications Technology/ Electrical &amp; Electronics Engineering/Electronics Engineering/Artificial Intelligence/ Data Science or any relevant discipline</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Machine Learning</li> <li>• Natural Language Processing</li> <li>• Social Networks Analysis</li> <li>• Data Science</li> <li>• Deep Learning</li> <li>• Artificial Intelligence (Cognitive Computing)</li> <li>• Robotics</li> <li>• Advance Computer Architecture</li> <li>• High Performance Computing</li> <li>• Quantum Computing</li> <li>• Cloud Computing</li> <li>• Image Processing</li> <li>• Computer Vision</li> <li>• Internet of Things and Cyber Physical Systems</li> <li>• Unmanned Aircraft System (Drone and Related Technology)</li> <li>• Soft Computing</li> <li>• Software Engineering</li> <li>• Digital/Interactive Media</li> <li>• Digital Forensic</li> </ul>
4.	Electrical Engineering	<p><b>B.E./B. Tech.</b> or equivalent in Electrical Engineering /Electrical and Electronics Engineering/ Instrumentation and Control Engineering/Power Systems Engineering/Electrical Power Engineering/Electrical and Instrumentation Engineering/Power Electronics/Electrical Engineering and Industrial Control/Power Electronics and Instrumentation Engineering/ Applied Electronics and Instrumentation</p> <p><b>M.E./M. Tech.</b> or equivalent in Electrical Engineering/ Power System/ Power Electronics and Drives/ Control Systems/ Electric Drives and Control/ Instrumentation and Control/ Machines and Electrical Drives/ Energy Systems/ Signal Processing and Control/Microprocessor System Applications/Computer Controlled Industrial Power/Systems Engineering or relevant discipline</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Power Systems</li> <li>• Instrumentation and Control</li> <li>• Renewable Energy/Energy Systems Engineering</li> </ul>
5.	Electronics Engineering	<p><b>B.E./B.Tech.</b> or equivalent in Electronics &amp; Communication</p>	<ul style="list-style-type: none"> <li>• Artificial Intelligence/Machine Learning</li> <li>• Embedded Systems</li> </ul>

		<p>Engineering/ Electronics/ Communication/ Telecommunication Engineering/ Electrical Engineering/Computer Science &amp; Engineering</p> <p><b>M.E./M.Tech.</b> or equivalent in Electronics &amp; Communication Engineering/ Electronics/ Communication/ Telecommunication Engineering/ Electrical Engineering/Computer Science &amp; Engineering. or other relevant discipline</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Analog Mixed Signal VLSI Design</li> <li>• Robotics and Computer Vision</li> <li>• VLSI Design and Technology</li> <li>• 5G Technology</li> <li>• Signal Processing</li> <li>• RF IC Design and Microwave</li> <li>• High-Speed Interconnects</li> <li>• Process Integration</li> <li>• Nanomaterials and Nanoscience</li> <li>• Silicon Photonics</li> <li>• Quantum Biomimetic</li> <li>• Combinatorial Optimization</li> </ul>
6.	Mechanical Engineering	<p><b>B.E./B.Tech.</b> or equivalent in Mechanical Engineering/ Production Engineering/ Mechanical &amp; Production Engineering/ Design Engineering/ Industrial Engineering/Thermal Engineering/Production &amp; Industrial Engineering/Mechanical &amp; Automation Engineering/ Manufacturing Processes and Automation Engineering/ Manufacturing Engineering</p> <p><b>M.E./M.Tech.</b> or equivalent in Mechanical Engineering /Design/Industrial/Production/ Thermal or any other relevant specialization</p> <p><b>Ph.D.</b> in relevant discipline</p>	<ul style="list-style-type: none"> <li>• Design and Dynamics</li> <li>• CAD/CAM, Robotics and Mechatronics</li> <li>• Industrial Engineering</li> <li>• Turbomachines and Jet Propulsion</li> <li>• Thermal and Fluid Engineering</li> <li>• Automobile Engineering</li> <li>• Materials and Metallurgy</li> <li>• Manufacturing and Production Engineering</li> </ul>
7.	Artificial Intelligence	<p><b>B.E./ B. Tech.</b> or equivalent in Computer Science &amp; Engineering / Computer Engineering/ Information Technology/ Electronics &amp; Communication Engineering/Computer &amp; Communication Engineering/ Computer Technology/Information and Communications Technology/ Electrical &amp; Electronics Engineering/Electronics Engineering/Artificial Intelligence/ Intelligence/Data Science or any relevant field</p> <p><b>M.E./M.Tech.</b> or equivalent in Computer Science &amp; Engineering/ Computer Engineering/ Information Technology/ Electronics &amp; Communication Engineering/Computer &amp; Communication Engineering/ Computer Technology/Information and Communications Technology/ Electrical &amp; Electronics Engineering/Electronics Engineering/Artificial Intelligence/</p>	<ul style="list-style-type: none"> <li>• Machine Learning</li> <li>• Natural Language Processing</li> <li>• Social Networks Analysis</li> <li>• Data Science</li> <li>• Deep Learning</li> <li>• Artificial Intelligence (Cognitive computing)</li> <li>• Cloud Computing</li> <li>• Computer Vision</li> <li>• Robotics</li> <li>• Cyber Physical Systems</li> <li>• Soft Computing</li> </ul>

		Intelligence/Data Science or any relevant field  <b>Ph.D.</b> in relevant discipline	
8.	Mathematics	<b>Bachelor Degree</b> in Mathematics or equivalent  <b>Master Degree</b> in Mathematics or equivalent  <b>Ph.D.</b> in relevant discipline	<ul style="list-style-type: none"> <li>• Probability &amp; Statistics</li> <li>• Algebra</li> <li>• Topology</li> <li>• Number Theory</li> <li>• Computational Mathematics</li> </ul>
9.	Humanities & Social Sciences	<b>Bachelor Degree</b> of Arts in English  <b>Master Degree</b> of Arts in English  <b>Ph.D.</b> in relevant discipline	<ul style="list-style-type: none"> <li>• Indian English literature</li> <li>• Indian English Fiction</li> <li>• South Asian Fiction</li> <li>• Communication Skills</li> <li>• Employability Skills</li> <li>• Diaspora Literature</li> <li>• World Literature</li> </ul>
10.	Management Studies	<b>Bachelor Degree</b> in any Discipline  <b>Mater degree/MBA</b> or equivalent P.G Degree in Management  <b>Ph.D.</b> in relevant discipline	<ul style="list-style-type: none"> <li>• Business Analytics and Digital Transformation</li> <li>• Business Computing</li> <li>• Data Analytics</li> <li>• Big Data and Cloud Computing</li> <li>• Management Accounting</li> <li>• Human Resource Management</li> <li>• Operation and Supply Chain Management</li> <li>• Marketing</li> <li>• Strategy</li> <li>• General Management</li> <li>• Time Series Analysis</li> <li>• Econometrics</li> <li>• Quantitative Analysis</li> <li>• Stock Market</li> <li>• Portfolio Management</li> <li>• Finance Management</li> <li>• Innovation &amp; Entrepreneurship</li> <li>• Organisation Behaviour</li> </ul>