



**NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL,  
WARANGAL –506 004, TELANGANA STATE, INDIA**

**SPECIALIZATIONS FOR FACULTY RECRUITMENT (Advt.No.Admin.02/2018)  
ASSISTANT PROFESSOR (GRADE-I & GRADE-II)/ASSOCIATE PROFESSOR / PROFESSOR**

The Essential Minimum Academic Qualifications for Posts of Assistant Professor/Associate Professor /Professor are PhD in respective discipline and shall have First Class (at least 6.5 CGPA on a scale of 10 or equivalent or 60% aggregate) in the preceding Degrees. Candidates having PhD degree directly after B.Tech are also eligible and they should have obtained First Class at Bachelor's level

<b>Sl. No.</b>	<b>Department</b>	<b>Specialization</b>
1	<b>CIVIL ENGINEERING</b>  Assistant Professor / Associate Professor/ Professor	B.Tech. in Civil Engg./ Agriculture Engg /Architecture/ Planning/ Geo informatics with Ph.D in any of the following specializations <ul style="list-style-type: none"> <li>• Structural Engineering</li> <li>• Water Resources Engineering</li> <li>• Geotechnical Engineering</li> <li>• Transportation Engineering</li> <li>• Environmental Engineering</li> <li>• Remote Sensing and GIS</li> <li>• Construction Technology &amp; Management</li> </ul>
2	<b>ELECTRICAL ENGINEERING</b>  Assistant Professor / Associate Professor/ Professor	B.Tech. in Electrical Engg./Electrical & Electronics Engg./Electrical Power Engg. With Ph.D in any of the following specialization <ul style="list-style-type: none"> <li>• Power Systems Engineering</li> <li>• Power Electronics &amp; Drives</li> <li>• Power &amp; Energy Systems</li> <li>• Power Electronics</li> <li>• Electrical Machines &amp; Industrial Drives</li> <li>• Control Systems Engineering</li> <li>• Instrumentation /Instrumentation &amp; Control Engineering</li> <li>• Renewable Sources</li> <li>• Electrical Vehicle Technology</li> <li>• Smart Grid Technologies</li> <li>• Embedded Systems</li> <li>• Signal Processing</li> <li>• Applied Electronics</li> <li>• Power &amp; Control</li> <li>• Industrial Electronics</li> <li>• High Voltage Engineering</li> </ul>

<p>3</p>	<p><b>MECHANICAL ENGINEERING</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>B.Tech in Mechanical Engg/ Automobile Engg/ Production Engg/ Industrial Engg with Ph.D in any of the following specializations</p> <ul style="list-style-type: none"> <li>• Dynamics and Control</li> <li>• Computational/Applied Mechanics</li> <li>• Geometric Modelling</li> <li>• Vibration and Acoustics</li> <li>• Product Design and realization</li> <li>• Engineering Design</li> <li>• Industrial Engineering</li> <li>• Robotics and Industrial Automation</li> <li>• Material testing and evaluation</li> <li>• Surface Engineering</li> <li>• Multiphysics simulation of Manufacturing Process</li> <li>• AI and Machine learning in Mechanical Engineering</li> <li>• Additive Manufacturing</li> <li>• Micro and Nano Manufacturing</li> <li>• Thermal Engineering</li> <li>• Energy Systems</li> <li>• Cryogenics</li> <li>• Jet Propulsion and Rocketry</li> <li>• Combustion</li> <li>• Automobile Engineering</li> <li>• Production Engineering</li> </ul>
<p>4</p>	<p><b>ELECTRONICS AND COMMUNICATIONS ENGINEERING</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>B.Tech in Electronics &amp; Communication Engg. with Ph.D in any of the following specializations</p> <ul style="list-style-type: none"> <li>• Communication Networks</li> <li>• RF and Microwaves</li> <li>• Wireless Communications</li> <li>• Signal Processing</li> <li>• Speech Recognition / Speech Processing</li> <li>• Image Processing</li> <li>• Electronic Instrumentation</li> <li>• Biomedical Signal Processing</li> <li>• Embedded System Design</li> <li>• Digital Signal Modelling</li> <li>• Device Modelling</li> <li>• VLSI System Design</li> <li>• Advanced Communications Systems</li> </ul>

5	<p><b>METALLURGICAL AND MATERIALS ENGINEERING</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>B.Tech in Metallurgy or Metallurgical Engg or Metallurgical &amp; Material Engg. with Ph.D in any of the following specializations</p> <ul style="list-style-type: none"> <li>• Foundry Technology</li> <li>• Extractive Metallurgy</li> <li>• Corrosion Engineering</li> <li>• Transport Phenomena</li> <li>• Polymer Technology</li> <li>• Functional Materials</li> <li>• Bioceramics</li> <li>• High Temperature Materials</li> <li>• Advanced Materials and Processing</li> <li>• Surface Engineering</li> </ul>
6	<p><b>CHEMICAL ENGINEERING</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>B.Tech in Chemical Engg. with Ph.D in any of the following specializations</p> <ul style="list-style-type: none"> <li>• Process Control</li> <li>• Molecular Dynamic Simulation</li> <li>• Rheology of Complex Fluids</li> <li>• Catalysis</li> <li>• Nanomaterials</li> <li>• Process Intensification</li> <li>• Data Analytics</li> <li>• Machine Learning</li> <li>• Drug Delivery Systems</li> <li>• Petroleum Technologies</li> </ul>
7	<p><b>COMPUTER SCIENCE AND ENGINEERING</b></p> <p>Assistant Professor /Associate Professor/ Professor</p>	<p>B.Tech in C.S.E. or IT with Ph.D in any of the following specializations</p> <ul style="list-style-type: none"> <li>• Machine Learning</li> <li>• Software Engineering</li> <li>• Algorithms</li> <li>• Information Security</li> <li>• Data Mining</li> <li>• Bioinformatics</li> <li>• Image Processing</li> <li>• Computational Neuroscience</li> <li>• Model Driven Frameworks</li> <li>• Distributed Systems</li> <li>• High Performance Computing</li> </ul>

8	<p><b>BIOTECHNOLOGY</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>B.Tech-Biotechnology OR</p> <p>M.Sc. in Life Sciences &amp; M.Tech in Biotechnology/ Industrial Biotechnology / Biochemical Engg./Bioinformatics</p> <p>with any of the following specializations at Ph.D.:</p> <ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Biochemical Engineering</li> <li>• Bioinformatics</li> <li>• Biosensors</li> <li>• Disease Biology</li> <li>• Downstream Processing</li> <li>• Immunology</li> <li>• Metabolic Engineering</li> <li>• Microbial Metagenomics</li> <li>• Molecular Cell Biology</li> <li>• Stem Cell Technology</li> <li>• Synthetic Biology</li> <li>• Systems Biology</li> <li>• Tissue Engineering</li> </ul>
9	<p><b>MATHEMATICS</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>Ph.D. in any of the following areas of specialization with PG in respective discipline</p> <ul style="list-style-type: none"> <li>• Bio-Mechanics</li> <li>• Statistics</li> <li>• Operations Research</li> <li>• Partial Differential Equations</li> <li>• Fluid Dynamics</li> <li>• Computational Fluid Dynamics</li> <li>• Linear Algebra and Functional Analysis</li> <li>• Cryptography</li> <li>• Numerical Analysis</li> </ul>
10	<p><b>HUMANITIES AND SOCIAL SCIENCES (English)</b></p> <p>Assistant Professor/ Associate Professor/ Professor</p>	<p>Ph.D. in the following area of specialization with M.A. (English) or M.A./M.Sc.(Psychology) and B.Sc./B.A./ B.Com.</p> <ul style="list-style-type: none"> <li>• English Language Teaching</li> <li>• Industrial Psychology</li> </ul>
11	<p><b>PHYSICS</b></p> <p>Assistant Professor / Associate Professor/ Professor</p>	<p>Ph.D. in any of the following areas of specialization with M.Sc.(Tech.) Engineering Physics OR M.Sc. (Applied Physics) OR M.Sc.(Physics) OR M.Tech.(With B.Tech in Engineering Physics).</p> <ul style="list-style-type: none"> <li>• Electronics</li> <li>• Photonics</li> <li>• Instrumentation</li> <li>• Applied Optics</li> <li>• Material Science</li> </ul>

12	<b>CHEMISTRY</b>  Assistant Professor / Associate Professor / Professor	Ph.D. in any of the following areas of specialization with M.Sc. (Chemistry) <ul style="list-style-type: none"> <li>• Analytical Chemistry</li> <li>• Organic Chemistry</li> </ul>
13	<b>SCHOOL OF MANAGEMENT</b>  Assistant Professor/ Associate Professor /Professor	Ph.D. with any of the following specializations with M.Com. OR M.B.A. <ul style="list-style-type: none"> <li>• Finance</li> <li>• Economics</li> <li>• Marketing</li> <li>• Commerce</li> <li>• Information Technology</li> <li>• Operations Management</li> <li>• Human Resource Management</li> <li>• Allied Areas of Business Administration</li> </ul> <p style="text-align: center;"><b>OR</b></p> B.Tech. in any Branch of Engg. and MBA or equivalent PG degree in Management with any of the above specializations at Ph.D.
14	<b>Training &amp; Placement</b>  Professor	Ph.D. in Engineering / Management with B.Tech. in any discipline  <b>Desirable:</b> Experience in Training & Campus Placement Administration

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