



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

**SPECIALIZATIONS FOR FACULTY RECRUITMENT FOR
ASSISTANT PROFESSOR (GRADE-I & GRADE-II)/ASSOCIATE PROFESSOR /
PROFESSOR–2018**

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

Sl. No.	Department	Specialization
1	CIVIL ENGINEERING 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">• Structural Engineering• Water Resources Engineering• Geotechnical Engineering• Transportation Engineering• Environmental Engineering• Remote Sensing and GIS• Construction Technology & Management
2	ELECTRICAL ENGINEERING 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">• Power Systems Engineering• Power Electronics & Drives• Power & Energy Systems• Power Electronics• Electrical Machines & Industrial Drives• Control Systems Engineering• Instrumentation /Instrumentation & Control Engineering• Renewable Sources• Electrical Vehicle Technology• Smart Grid Technologies• Embedded Systems• Signal Processing• Applied Electronics• Power & Control• Industrial Electronics• High Voltage Engineering

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

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

8	BIOTECHNOLOGY Assistant Professor / Associate Professor/ Professor	B.Tech-Biotechnology OR M.Sc in BioTechnology/ Bio Chemistry/ MicroBiology & M.Tech in Biotechnology/ Industrial Biotechnology / Biochemical Engg./Bioinformatics with any of the following specializations at Ph.D.: <ul style="list-style-type: none"> • Biotechnology • Biochemical Engineering • Bioinformatics • Biosensors • Disease Biology • Downstream Processing • Immunology • Metabolic Engineering • Microbial Metagenomics • Molecular Cell Biology • Stem Cell Technology • Synthetic Biology • Systems Biology • Tissue Engineering
9	MATHEMATICS Assistant Professor / Associate Professor/ Professor	Ph.D. in any of the following areas of specialization with PG in respective discipline <ul style="list-style-type: none"> • Bio-Mechanics • Statistics • Operations Research • Partial Differential Equations • Fluid Dynamics • Computational Fluid Dynamics • Linear Algebra and Functional Analysis • Cryptography • Numerical Analysis
10	HUMANITIES AND SOCIAL SCIENCES (English) Assistant Professor/ Associate Professor/ Professor	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. <ul style="list-style-type: none"> • English Language Teaching

11	PHYSICS Assistant Professor / Associate Professor/Professor	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). <ul style="list-style-type: none"> • Electronics • Photonics • Instrumentation • Applied Optics
12	CHEMISTRY 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"> • Analytical Chemistry • Organic Chemistry
13	SCHOOL OF MANAGEMENT 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"> • Finance • Economics • Marketing • Commerce • Information Technology • Operations Management • Human Resource Management • Allied Areas of Business Administration <p>OR</p> <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.</p>
14	Training & Placement Professor	Ph.D. in Engineering / Management with B.Tech. in any discipline Desirable: Experience in Training & Campus Placement Administration
