



## Research Engineer (I or II)

### Mechanical Engineer

NEETRAC, the National Electric Energy Testing, Research and Applications Center is looking for a Mechanical Engineer with experience testing, researching and designing mechanical components to develop and conduct applied research programs in its mechanical testing laboratory located in Forest Park, GA, just south of downtown Atlanta.

NEETRAC is a widely respected center in the US for applied research and testing in the field of electric energy distribution and transmission. The center operates as a membership focused consortium that includes electric utilities, equipment manufacturers and related industries in the electric energy arena. The diverse interests of the consortium enable NEETRAC to provide a dynamic work environment with extensive interaction with real world issues and opportunities.

As a part of the School of Electrical and Computer Engineering at the Georgia Institute of Technology, NEETRAC provides solid benefits and competitive compensation packages. The job level (Research Engineer I, Research Engineer II, or Senior Research Engineer) will depend on the relevance of the candidate's skills, experience and degree(s).

### **Job Duties**

This position will:

Design, manage and execute test programs for NEETRAC's customers (50%)

- Managing test programs involves:
  - Developing a test plan proposal based on a customer's RFQ
  - Writing a detailed test plan and/or following national/international standards
  - Coordinating testing activities, schedules, resources, technicians, etc.
  - Coordinating tests with NEETRAC's high voltage, high power, medium voltage and FQA laboratories
  - In many cases, be actively involved in the testing itself
  - Analyzing test data
  - Writing test reports
  - Communicating with customers on test status and results
- The mechanical laboratory includes the following types of testing:
  - Tension/compression
  - Creep
  - Vibration
  - Drop/impact
  - Thermal
  - Ultra Violet Light Exposure
  - Corrosion/Salt Fog
  - Basic metrology including materials analysis

Conduct applied research on member approved collaborative projects (45%)

- Types of projects might include:
  - Comparative analysis of competing or new technologies
    - Example: Hydrophobic coatings on insulators
  - Investigation of some phenomena that impacts utility system components
    - Example: Corrosion caused by condensation within an equipment cabinet
  - Evaluating the effectiveness of a process or method
    - Example: Evaluating the effectiveness of wood pole inspection methods

Provide engineering consultation to NEETRAC customers (5%)

- Education
  - Minimum of a Bachelor's degree in an engineering discipline, including engineering technology
- Personal characteristics/knowledge/skills
  - Ability to work on multiple projects in parallel
  - Good self-prioritization skills
  - Strong interpersonal skills
  - Proven ability to work as part of a team
  - Ability to use standard measurement instruments (voltmeters, ammeters, oscilloscopes, etc.)
  - Ability to work in a laboratory (assist with test setups, record data, troubleshoot, etc.)
  - Solid speaking, presentation and writing skills
  - Solid knowledge of engineering principles
- Preferential consideration given for the following experience/skills
  - 5+ years relevant work experience (testing/research)
  - Electrical or Mechanical Engineering degree
  - Control circuit design and construction
  - Conducting, developing, managing R&D projects
  - Electric utility operations experience
  - Test lab engineering
  - Knowledge of computer/control systems including SharePoint, App development and PLC programming and data processing.

#### **More about this position**

- The position is located in Forest Park, GA (not GA Tech's main campus)
- Pay will be commensurate with skills and experience
- GA Tech has competitive benefits
- GA Tech is an equal opportunity employer

#### **To Apply**

Email your resume to [info@neetrac.gatech.edu](mailto:info@neetrac.gatech.edu). For more information about NEETRAC, go to [www.NEETRAC.gatech.edu](http://www.NEETRAC.gatech.edu).