Posted: December 6, 2024



POSITION ANNOUNCEMENT

| TITLE: RESEARCH ENGINEER | <u>l</u> (3) | DEPT : <u>EMRTC</u> |
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REG ☑ TEMP □ FULL TIME ☑ PART TIME □

STARTING RATE or SALARY RANGE \$55,000 - \$68,000

Employees being promoted to a higher classified position receive the minimum for the position or a pay rate adjustment of 8% whichever is greater.

All regular positions also entitle the employee to several benefits including health, dental, vision, life insurance, and retirement which is largely paid by New Mexico Tech for the employee and dependents.

INTERNAL POSTING THROUGH: 12/18/2024* CONSIDERATION WILL BE GIVEN FIRST TO TEMPORARY AND REGULAR TECH EMPLOYEES WHO APPLY WITHIN THE 7 DAY INTERNAL POSTING. APPLICATIONS RECEIVED AFTER THE 7 DAY POSTING MARGIN WILL BE CONSIDERED WITH OTHER OUTSIDE APPLICANTS.

JOB SUMMARY:

The Research Engineer I supports the planning, execution, and analysis of tests under the guidance of a Principal Investigator (PI). They assist in advanced instrumentation and data collection techniques, including flash x-ray, Doppler radar, high-speed imaging, and Digital Image Correlation. Responsibilities include contributing to test plan development, proposal preparation, and post-test reporting. They also support the design and fabrication of specialized test fixtures and articles, such as mounts, sabots, and targets, and contribute to programming software needed to collect and analyze test data. This position emphasizes hands-on learning, technical growth, and innovation in test management and analysis while supporting national defense objectives.

JOB DUTIES:

Participates in the planning, execution, and analysis of tests under the guidance of a Principal Investigator, including test range preparation, cleanup, coordination of field operations, and the application of engineering controls to ensure safety and efficiency.

Assists with and learns the processes for test plan and proposal development, as well as post-test reporting, ensuring alignment with customer specifications and project objectives.

Supports the design, fabrication, and assembly of specialized test fixtures and articles, such as mounts, sabots, and targets, while learning to incorporate engineering controls to meet unique testing requirements.

Participates in the use and learning of advanced data collection and analysis techniques with instrumentation systems, including flash x-ray, Doppler radar, high-speed imaging, Digital Image Correlation, and software tools; collects and analyzes test data, such as fragments and photos, to support technical reporting.

Assists in developing and learning to program software for data acquisition and analysis, ensuring accuracy and reliability in test results while adhering to established engineering controls.

REQUIRED QUALIFICATIONS:

A Bachelor's degree in Engineering is required, with preference given to candidates from disciplines such as Mechanical, Electrical, Aerospace, or related engineering fields. A strong proficiency in mathematics and applied sciences is essential. Strong foundation in engineering principles, particularly in mechanical,

electrical, or aerospace disciplines. Familiarity with engineering controls and safety protocols in testing environments. Excellent analytical, problem-solving, and communication skills, with the ability to support technical reporting and documentation. Ability to obtain or possession of a valid New Mexico driver's license. Ability to obtain and maintain a Department of Defense Secret security clearance within a reasonable time after employment.

DESIRED QUALIFICATIONS:

Experience with programming and software development for data collection and analysis. Ability to design, fabricate, and assemble specialized test fixtures and articles. Certifications or training in safety protocols, such as OSHA or HAZMAT, are preferred but not required. Additional certifications in relevant software tools, data acquisition systems, or engineering methods (e.g., LabVIEW, SolidWorks) are desired.

LIFTING REQUIREMENTS:

(f)requently, (o)ccasionally, or (s)eldom

| 0 - 15 pounds | |
|-----------------|---|
| 15 - 30 pounds | |
| 30 - 50 pounds | |
| 50 - 100 pounds | 0 |
| 100 + pounds | |

PHYSICAL DEMANDS:

| Standing 20% | Sitting 25% | Walking 20% | Pulling 5% |
|--------------|-------------|-------------|-------------|
| Pushing 5% | Lifting 5% | Stooping 5% | Kneeling 5% |
| Crawling | Climbing 5% | Reaching 5% | Other |

Apply to: nmtjobapps@npe.nmt.edu