

University of New Mexico

Research Engineer 3 (Electrical/Electronics)

The Department of Physics and Astronomy at the University of New Mexico is part of a fundamental research project investigating physics phenomena at the world's leading particle physics laboratory: CERN, the site of the Large Hadron Collider in Geneva, Switzerland. The project aims to answer fundamental questions about the ultimate components of nature and the evolution of the universe. A Research Engineer is required to initiate and collaborate on projects intended for applications at CERN, including developing novel silicon particle detectors for high energy physics experiments. These custom devices will be used in the search for New Physics processes that may answer fundamental questions about the Higgs boson, dark matter, extra spacetime dimensions, and similar topics. As the engineer will design and characterize custom silicon devices, invention of new techniques and instruments will be an important part of the job. Collaboration with particle physicists and engineers worldwide will be essential to this position. Creative and independent development of new research thrusts and themes in particle detection will be encouraged.

Minimum Qualifications

- Bachelor's degree in a directly related field; at least 3 years of experience directly related to the duties and responsibilities specified.
- Completed degree(s) from an accredited institution that are above the minimum education requirement may be substituted for experience on a year for year basis.

Preferred Qualifications

- Master's degree in a directly related field
- Experience with some of the following:
 - Silicon particle detector design and characterization
 - Data acquisition electronics
 - Data collection software and advanced graphical tools
 - Research instrument maintenance, repair, adaptation, and construction for a complex and highly specialized laboratory environment
 - Maintaining knowledge of state-of-the-art principles; applying them to develop new or improved approaches to the solution of problems encountered
 - Working effectively within a team involving scientists as well as engineers
 - Technical writing and presentation
 - Mentoring and training of student technicians in hands-on technical skills
 - Planning and executing laboratory research with general guidance while applying creativity and judgment in making decisions independently on technical problems and methods

Applicants must submit an application through UNM Jobs at <https://unmjobs.unm.edu> (posting number req18259). If you are viewing this job advertisement on a 3rd party site, please visit UNMJobs to submit an application. Please provide the following:

- A cover letter that expresses how your qualifications and experience match the preferred qualifications
- A resume that includes a complete educational and employment history, including beginning and ending dates for each position and details of the duties and responsibilities performed

- At least 2 letters of professional reference

For best consideration, all application materials, including letters of reference, must be received by January 15, 2022; however, **applications will be accepted until the position is filled.** Inquiries can be addressed to Professor Sally Seidel at seidel@unm.edu or via telephone, 505-277-2087.

The University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator. Qualified women and minorities are strongly encouraged to apply.