

# Lithography Engineer

## University of Delaware, Newark, Delaware

The University of Delaware (UD) is constructing a state-of-the-art Nanofabrication Facility as part of the Interdisciplinary Science and Engineering Laboratory. Nanofabrication Facilities play a central and essential role in most modern science and engineering research programs as researchers from a wide variety of disciplines realize the opportunities available at the nanoscale. The primary objective of the facility is to enable UD to attract and retain top caliber faculty and to provide the infrastructure necessary to enable existing and new faculty and researchers in the tri-state area and beyond to undertake competitive research and development in the growing number of fields that rely on nanofabrication.

Under limited direction from the Nanofabrication Facility Manager, the Lithography Engineer is responsible for specifying, acquiring, installing, qualifying, operating, developing processes, and providing training on equipment worth approximately five million dollars. The engineer provides expert guidance to existing and prospective users on the materials and techniques best suited to meet their research needs. The engineer continually develops new processes to push the state of the art in order to attract and serve both internal and external customers. The engineer has primary responsibility for the lithography service provided to those customers. The Lithography Engineer is also expected to assist in proposal preparation including preliminary investigation and writing.

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The position requires a Master's degree in physics, engineering, or related field with at least six years of experience with electron-beam lithography (EBL) equipment and processes. Ph.D. preferred. In-depth knowledge of the fundamentals as well as recent advances in the applications of lithographic techniques. Extensive hands-on experience with 100 kV EBL systems preferred. Strong mechanical inclination and troubleshooting skills. Ability to coordinate technical personnel to effect repairs

and maintenance of complex equipment. Strong attention to detail, persistence, follow through, and the ability to work with minimal supervision. High energy, self-motivated with strong communication skills and personal work ethic, and a strong sense of ownership. Ability to work collaboratively with a wide variety of personnel at multiple levels of expertise. Project management skills to prioritize and organize work, analyze and solve problems, and make sound decisions. Competence in investigation, analysis and logic to coordinate scientific research. Broad nanofabrication experience in terms of both process development and equipment troubleshooting/maintenance/repair. Experience with specifying, purchasing, installing, and qualifying a wide range of nanofabrication equipment (lithography, deposition, etch, metrology, inspection).

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer that encourages applications from minority group members and women.

For additional information regarding this position, and to apply please visit

[www.udel.edu/udjobs](http://www.udel.edu/udjobs)



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