Job Details

Job Title

Development Technician 5 (7170C) - NanoLab

Job ID

46253

Location

Main Campus-Berkeley

Full/Part Time

Full Time

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About Berkeley

At the University of California, Berkeley, we are committed to creating a community that fosters equity of experience and opportunity, and ensures that students, faculty, and staff of all backgrounds feel safe, welcome and included. Our culture of openness, freedom and belonging make it a special place for students, faculty and staff.

The University of California, Berkeley, is one of the world’s leading institutions of higher education, distinguished by its combination of internationally recognized academic and research excellence; the transformative opportunity it provides to a large and diverse student body; its public mission and commitment to equity and social justice; and its roots in the California experience, animated by such values as innovation, questioning the status quo, and respect for the environment and nature. Since its founding in 1868, Berkeley has fueled a perpetual renaissance, generating unparalleled intellectual, economic and social value in California, the United States and the world.

We are looking for equity-minded applicants who represent the full diversity of California and who demonstrate a sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, gender identity, sexual orientation, and ethnic backgrounds present in our community. When you join the team at Berkeley, you can expect to be part of an inclusive, innovative and equity-focused community that approaches higher education as a matter of social justice that requires broad collaboration among faculty, staff, students and community partners. In deciding whether to apply for a position at Berkeley, you are strongly encouraged to consider whether your values align with our Guiding Values and Principles, our Principles of Community, and our Strategic Plan.

At UC Berkeley, we believe that learning is a fundamental part of working, and our goal is for everyone on the Berkeley campus to feel supported and equipped to realize their full potential. We actively support this by providing all of our staff employees with at least 80 hours (10 days) of paid time per year to engage in professional development activities. To find out more about how you can grow your career at UC Berkeley, visit grow.berkeley.edu.

Departmental Overview

The UCB College of Engineering (COE) provides oversight support for two independently managed recharge operations – the Marvell Nanofabrication Laboratory (NanoLab) and the Cory Hall Machine Shop. The Machine Shop provides custom mechanical and facilities support for the NanoLab and for faculty research laboratories and support spaces throughout the COE. The NanoLab is a unique 15,000 sq. ft. ultra-clean, particle-free facility that houses over 170 pieces of micro/nanofabrication equipment, which serve the research needs of more than 500 researchers.

Under the general supervision of the Machine Shop Engineering Technical Supervisor, the Development Technician 5 is responsible for siting, facilitating, developing, supporting, repairing, and modifying semiconductor processing and nanotechnology equipment for the Nanofabrication Laboratory and for faculty research laboratories and support spaces. In addition, the Development Technician monitors and evaluates operation of various specialized laboratory utilities, such as air, compressed gases, nitrogen, oxygen, heating ventilating and air conditioning, cooling water and process waste streams. Semiconductor research facilities are among the most complex, costly, and technically demanding research facilities. Included in the mission of the Cory Hall Machine Shop is supporting such an operation.

Application Review Date

The First Review Date for this job is: December 14, 2022 - Open Until Filled

Responsibilities

50% Equipment and Facilities Support:

Install, facilitate, and modify environment to accommodate semiconductor processing and nanotechnology equipment. Equipment includes analytical systems for measuring thin films and semiconductor substrate properties, bonders, chillers, dicing saws, rapid thermal processors, photolithography track and exposure tools, sputter systems, etchers, atmospheric and low-pressure chemical vapor deposition furnaces and vacuum systems.

Respond quickly to equipment problem reports. Update status, repair and document systems using the NanoLab computer and software programs.

30% Design and Fabrication:

Using CAD tools and hand drawings, design, and make working drawings as needed to support systems.

Fabricate intricate devices using computer numerically controlled (CNC) milling machines, lathes, saws, grinders, drill presses, and hand tools. Selecting from a broad range of materials such as stainless steel, aluminum, brass, copper, OFHC copper, plastics, etc. Determine which materials are the best choice for application.

10% Documentation:

Understand and use the Mercury database to mark equipment status, enable tools, enter comments and problem reports and add needed support documents. Write, edit and revise equipment manuals, support documents, startup and shutdown procedures, and additional reports as needed. Utilizing the Machine Shop Jobs Management System maintain up-to-date records of assignments. Track and document job status. Maintain spare parts and a database of parts sources for assigned equipment.

10% Assist in the development of, and follow standard operating procedures and best known methods for safety and to prevent injuries:

Practice and comply with safe working practices to assure personal safety and safety to the lab environment for colleagues and researchers.

Understand and work within guidelines to protect the environment.

Provide direction, guidance and training to less experienced engineers, staff and researchers.

Offer instruction and training in support of staff development and equipment, support, and repair.

Required Qualifications

Ability to program and operate numerically controlled milling machines, lathes, welders, saws.

Ability to operate manually controlled machine shop equipment. Milling machines, lathes, saws, hand tools, etc.

Ability to design and make working drawings using CAD software.

Ability to work from drawings, blueprints, sketches and oral instructions.

Demonstrated knowledge of MSDS corrosive/toxic chemicals and gases.

Working knowledge of OSHA regulations.

Ability to work in tight spaces.

Class C California Driver’s License.

The ability to work with Environmental Health and Safety, Capital Projects, and Campus Facilities Services.

Preferred Qualifications

A working knowledge of guidelines within the Berkeley campus guidelines for safety and safe working skills.

Salary & Benefits

Salary is commensurate with experience. This is a 100% FTE position eligibile for full benefits.

For information on the comprehensive benefits package offered by the University visit:

https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html

Driving Required

A valid driver's license and DMV check for driving record is required.

Conviction History Background

This is a designated position requiring fingerprinting and a background check due to the nature of the job responsibilities. Berkeley does hire people with conviction histories and reviews information received in the context of the job responsibilities. The University reserves the right to make employment contingent upon successful completion of the background check.

Equal Employment Opportunity

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status. For more information about your rights as an applicant see:

https://www.eeoc.gov/sites/default/files/migrated\_files/employers/poster\_screen\_reader\_optimized.pdf

For the complete University of California nondiscrimination and affirmative action policy see:

http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct