

**Stanford University  
Electrical Engineering  
Job Opening**

**Instructional Labs Manager**

<http://stanfordcareers.stanford.edu/job-search>

**Job Code # 63863**

**Instructional Labs Manager, 4P3, 100% FTE Exempt**

The Electrical Engineering (EE) Department in the School of Engineering seeks a highly organized and energetic Instructional Labs Manager who thrives on managing the teaching labs and the lab's computer and equipment systems. We seek a friendly and efficient team member with strong communication skills and a high level of attention to detail. The Instructional Labs Manager reports to the EE Department Manager and working closely with the Associate Chairs for Undergraduate and Graduate Education, develops and maintains the facilities that directly support the educational laboratories designed and taught by the EE faculty. In addition to the basic education courses, the laboratories support several capstone design project classes as well as independent student projects such as honors theses and club-based activities.

This exciting and diverse job requires someone with excellent technical and interpersonal skills while working with professors, students and staff. It involves maintaining and upgrading over a dozen teaching and student labs with instrumentation that ranges in function from support of basic electronics teaching laboratories to high-frequency measurement systems and a diverse set of digital systems requirements.

Maintenance and upgrading of the laboratories requires skills in calibrating and repairing equipment as well as a good understanding of state-of-the-art measurement and testing equipment. In addition, this position is responsible for managing the computer systems required in each lab. Working closely with faculty, this staff member has broad responsibilities to design, equip and manage the full range of these educational laboratories.

**Teaching Lab Management**

Manage facilities and instructional experience within ~13 teaching labs and several independent project labs. Must be able to proactively engage faculty and course assistants to research solutions appropriate to ever changing instructional goals. Train lab users in safe practices and oversee all safety issues in the labs. Maintain, repair and oversee proper use of equipment such as oscilloscopes, signal sources, voltmeters (AC/DC, analog/digital), power supplies, and wave, distortion, spectrum and network analyzers. Design and fabrication of prototype equipment and electronic circuits. Coordinate hardware, software and parts needs for the lab courses being offer on Stanford's campus and at several international universities where our EE courses are taught. Coordinate faculty requests for new equipment and software. Create and maintain relationships with potential equipment donors for the labs. Analyze and coordinate the needs of approximately 25 labs taught per academic year. Collaborate with the summer REU program to ensure student's needs for facilities, computers and test/measurement equipment are met.

**Computer and Equipment Systems Management**

This position manages and maintains approximately 130 client computers in 13 teaching labs. This includes configuring and installing operating systems (Windows and Linux). Develop and deploy software specific computer images needed to properly accomplish the individual course requirements. Analyze and test new software and hardware. Maintain and administer the proper software and security packages. Develop and maintain computer scripts to automate new user additions, password regeneration, folder creation and shares. Interface the computers with other hardware (FPGA boards, USB programmable devices, etc.) and/or test and measurement equipment. Design, manage and deploy independent department servers that support the lab operations (EE domain controller, the Symantec GHOST Console Server, Software License Server, Software download server, Print Quota server and the department's Conference Room server).

**Qualifications**

- Bachelor's degree and five years of relevant experience, or a combination of education and relevant experience required. Seven plus years of relevant experience preferred. College degree in the field of electronics is preferred.

**Knowledge**

- Significant computer experience including configuring and installing operating systems (Windows and Linux).
- Professional experience in all aspects of designing, building and testing electronics, including analog, digital, mixed-signal and high-frequency (RF) systems. Specific examples include, but are not limited to: transistor-level circuits; integrated circuit modules (i.e. OpAmps, PLL, ADC, RF etc.), signal processing (DSP) and networked micro-processor and micro-controller based systems.
- The job also requires a broad skill-set in electronic system fabrication (i.e. making PCBs, surface mount etc.) as well as physical system fabrication (NC machining, 3D printing etc.).

**Critical Competencies**

- Ability to operate independently with great self-initiative.
- Must be able to commit to and follow through on tasks with minimal supervision.
- Must demonstrate excellent decision-making and problem-solving skills and the ability to meet deadlines under pressure while maintaining accuracy and attention to detail.
- Must demonstrate a strong service-oriented work ethic, along with a friendly, approachable manner, with excellent interpersonal communication skills; ability to build community while interacting effectively and professionally with a diverse population. Tact and diplomacy.

**Other Requirements**

- Position required to work during normal business hours.
- Successfully pass a background check (Criminal, Education, and Employment Verification).
- We are unable to provide sponsorship for this position.
- We are unable to relocate for this position.

Letter of interest and resume are required with application. Please state how the job matches your professional interests and goals, and how your experience provides a relevant background for the position.

Stanford University is an affirmative action, equal opportunity employer. Thank you for your interest!