

## **INSTRUCTIONAL ASSISTANT**

### **Electronics**

#### **DEFINITION**

Under general supervision of assigned manager/supervisor, maintain, repair and operate electronic devices and equipment in an instructional electronics laboratory; to receive, store, and issue supplies and equipment; to do other work as required.

#### **TYPICAL DUTIES**

Maintains, adjusts, and repairs various types of electronic devices used in electronics laboratories; maintains and calibrates such equipment as oscilloscopes, analog meters, digital meters, signal generators; organizes electronics storeroom to provide orderly, efficient and safe storage of supplies and equipment; maintains records and perpetual inventory of all equipment and supplies ordered, received and issued; prepares materials and equipment for demonstrations as requested by instructors; may assist instructors in setting up equipment and related materials required for laboratory fabrication processes; equipment and related materials required for laboratory fabrication processes; assists in maintaining appropriate levels of materials and supplies; issues supplies, materials and equipment to student assistants as needed; may maintain student time cards and records; assists in developing laboratory experiment materials as required; and performs related duties as assigned.

#### **QUALIFICATIONS**

##### **EXPERIENCE**

Two years of experience in repair, maintenance, and testing of equipment incorporating electronic circuitry. (One year of experience if experience is equal to 12 months of experience at 40 hours per week. Applicable part-time experience will be converted to the full-time equivalent for purposes of meeting the experience requirement.)

##### **EDUCATION**

Completion of an Associate's Degree in Electronic Technology or 60 semester units (90 quarter units) with 36 units in electronic technology courses. NOTE: Additional qualifying experience may be substituted for the educational requirement on a year-for-year basis.

##### **KNOWLEDGE OF**

Basic electronics theory and electrical practice; theory and operation of DC, AC, audio, video, and digital test equipment repair and calibration procedures meters, power supplies, signal sources, frequency counters, oscilloscopes, recording equipment, television, remote control systems, communication systems and associated accessories; inventory and storage operations and procedures; safety precautions to be observed in maintaining electrical equipment.

**SKILLS IN**

Skill in training others in how to complete tasks; using multiple approaches when learning or tutoring new things; and in using logic and analysis to identify the strengths and weaknesses of different approaches. Skill in working with new material or information to grasp its implications; assessing how well one is doing when learning or doing something; knowing how to find and identify essential information; and reorganizing the information to get a better approach to problems or tasks. Skill in using mathematics to solve problems; listening to what other people are saying and asking appropriate questions; being aware of others' reactions and understanding why they react the way they do; and in adjusting actions in relation to others' actions. Skill in identifying the nature of problems; developing approaches for implementing an idea or solution to a problem; and observing and evaluating the outcomes of a problem/solution to identify lessons learned or redirect efforts. Skill in managing one's own time and the time of others; communicating effectively with others orally and in writing as indicated by the needs of the audience; understanding written sentences and paragraphs in work related documents; and working in a multi-lingual, multi-cultural environment.

**ABILITY TO (ESSENTIAL FUNCTIONS)**

The ability to perform the essential functions of the position; repair and maintain electronic equipment; read and interpret electrical and electronic schematic diagrams, operate office equipment including computers and supporting word processing, spreadsheet and database applications; and estimate cost of repairs; keep records and make reports.