

ELECTRONIC CALIBRATION AND REPAIR TECHNICIAN

DEFINITION

Under general supervision, organizes and supervises the electronics laboratory facilities and equipment; maintains, repairs and operates electronic devices and equipment; receives, stores, and issues supplies, and equipment.

TYPICAL DUTIES

Organizes and supervises the electronics laboratory facilities and equipment. Maintains, adjusts, and repairs various types of electronic devices used in electronics laboratories; maintains, repairs and operates electronic devices and equipment; and maintains and calibrates such equipment as oscilloscopes, analog meters, digital meters, signal generators, microwave equipment, computer equipment, laser and fiber optics equipment. Establishes and maintains effective relationships with instructors and students in the course of work; assists instructors in caring for and storing equipment and related materials for instructional use; assists instructors in setting up equipment and related materials required for laboratory fabrication processes; and assists faculty members or staff with laboratory or field research. Prepares materials and equipment for demonstrations and instructional use as requested by instructors; and assists in developing laboratory experiment materials as required. Organizes electronic storeroom to provide orderly, efficient and safe storage of supplies and equipment; receives, stores, and maintains records and perpetual inventory of all equipment and supplies ordered, received and issued; and issues supplies, materials and equipment to student assistants as needed. Practices safety and directs proper safety practices; and assists with safety training and oversight of safe working conditions and student practices as directed by instructors. Monitors lab and assists students during the absence of the instructors; maintains student time cards and records; and proctors exams during absence of instructors. Performs related duties as required.

QUALIFICATIONS

EXPERIENCE

Two years of experience in repair, maintenance, and operation of electronic equipment used in instructional programs.

EDUCATION

Associate of Arts degree in electronics or equivalent in industrial/military experience. Additional qualifying experience may be substituted on a year-for-year basis for the educational requirement.

SPECIAL REQUIREMENT

Any offer of employment will be contingent upon the successful completion of a medical evaluation.

KNOWLEDGE OF

Knowledge of repair and calibration procedures for meters, power supplies, signal sources, frequency counters, oscilloscopes, recording equipment, television, remote control systems, all types of communication systems, computer equipment, inventory and storage operations and procedures. Knowledge of theory and operation of DC, AC, audio, video, analog, digital, microwave, computer test equipment; and advanced electronics theory and electrical practice. Knowledge of safety precautions to be observed in operating and maintaining electronic test equipment; maintenance, tool room and storage

operations and procedures; and the names, care and use of hand, heat and power tools, materials and equipment used for instruction. Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, forms design principles, and other office procedures and terminology. Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, and their applications. Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

SKILL IN

Skill in evaluating the likely success of an idea in relation to the demands of the situation; weighing the relative costs and benefits of a potential action; and using logic and analysis to identify the strengths and weaknesses of different approaches. Skill in identifying the nature of problems; generating a number of different approaches to problems; and knowing how to find essential information. Skill in listening to what other people are saying and asking questions as appropriate; understanding written sentences and paragraphs in work related documents; and communicating effectively with others orally and in writing as indicated by the needs of the audience.

ABILITY TO (ESSENTIAL FUNCTIONS)

The ability to perform the basic functions of the position; sustain regular work attendance; work cooperatively and effectively with the public, students, faculty and staff; exercise initiative and mature judgment; work as a member of a team; and meet schedules and time lines. The ability to organize shop, lab, tool rooms and storage rooms for safe and efficient instructional use. The ability to practice safety and direct proper safety practices in mechanical-electrical fields. The ability to read and interpret electrical and electronic schematic diagrams; manipulate small objects; estimate cost of repairs; identify and work with equipment, hand, heat and power tools and materials; and repair and maintain electronic equipment. The ability to maintain records of accountability for equipment, tools, and materials; keep records and make reports. The ability to oversee students as assigned. The ability to speak clearly so that it is understandable to a listener; and listen to and understand information and ideas presented orally. The ability to read and understand information and ideas presented in writing; and communicate information and ideas in writing so others will understand. The ability to stand and maneuver for long periods; bend at waist and knees; lift heavy objects (up to 50 pounds) with and without assistance; reach, grasp, pull, push equipment across various types of surfaces; stoop and crouch and climb ladders; and occasionally work around loud noise.

TYPICAL EQUIPMENT USED (May include, but not limited to)

Oscilloscopes, analog meters, digital meters, signal generators, microwave equipment, laser and fiber optics equipment, computers and modern office equipment.