

## **INSTRUCTIONAL ASSISTANT**

### **Mechanical/Electrical Technology**

#### **DEFINITION**

Under general supervision of assigned manager/supervisor, assists faculty by working with students individually or in groups in the improvement of academic knowledge and technical skill, and does related work as required.

#### **TYPICAL DUTIES**

Assists with safety training and oversight of safe working conditions and student practices as directed by instructors; and assists instructors in setting up, caring for and storing equipment and related materials for instructional use. Identifies and works with equipment, hand, heat, and power tools and materials common to mechanical-electrical fields; organizes shop and lab spaces and tool rooms to provide orderly, and efficient use; and practices safety and directs proper safety practices in mechanical-electrical fields. Prepares materials and equipment for demonstrations and instructional use as requested by instructors; tutors students in courses in the MET program; and establishes and maintains effective relationships with instructors and students in the course of work. Maintains records of equipment and supplies ordered, received, and issued; trains students to do specific installation, operation, and maintenance jobs as required; and trains students to understand and use maintenance and inventory systems. Assists faculty and staff with laboratory or field research; assists in reviewing students' work and maintaining records; and performs related duties as required.

#### **QUALIFICATIONS**

##### **EXPERIENCE**

One year of experience in mechanical-electrical installation, operation and maintenance experience.

(One year of 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 Mechanical-Electrical Technology; **OR**, 60 semester units (90 quarter units) with 47 units in mechanical-electrical technology courses. (Note: Additional qualifying experience may be substituted for the required educational requirement on a year-for-year basis.)

One year of education is equal to 30 semester units. Education must be from an accredited institution.

##### **KNOWLEDGE OF**

Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, and basic geometry, and their applications. Knowledge of the names, care and use of hand, heat, and power tools, materials and equipment in instructional classroom, shop and laboratory for mechanical-electrical work. Knowledge of principles applicable to mechanical and electrical equipment and their operation and maintenance in T-3 shop and lab; and maintenance, tool room and storage operations and procedures. Knowledge of federal, state and local safety laws and regulations.

**SKILLS IN**

Skill in training others how to do something; 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; and in evaluating the likely success of an idea in relation to the demands of the situation. Skill in 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; generating a number of different approaches to problems; and observing and evaluating the outcomes of a problem solution to identify lessons learned or redirect efforts. Skill in managing one's own time; 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 environment.

**ABILITY TO (ESSENTIAL FUNCTION)**

The ability to perform the essential functions of the position; sustain regular work attendance; work cooperatively and effectively with the public, students, faculty and staff; exercise initiative and good judgment; work as a member of a team; and meet schedules and time lines. The ability to work with students having cultural and academic diversity. The ability to identify and work with equipment, hand, heat, and power tools and materials common to mechanical-electrical fields; practice safety and direct proper safety practices in mechanical-electrical fields; and maintain records of accountability for equipment, tools, and materials. The ability to organize shop, lab, tool rooms and storage rooms for safe and efficient instructional use;; and tutor students in courses in the MET program. The ability to operate office equipment including computers and supporting word processing, spreadsheet and database applications.

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

Hand, heat and power tools common to mechanical-electrical fields.