College of the Redwoods

Position Description

Position: Electronic Systems Specialist I	Position Number:
Department:	FLSA: Non-exempt
Reports to:	Salary Grade: 117

<u>Summary</u>

Performs technical duties relating to the installation, repair and maintenance of electronic systems and equipment such as, but not limited to personal computers, peripherals, audio-visual media, and office equipment.

Essential Duties and Responsibilities

- Installs, services, and repairs equipment such as computers, peripherals, office machines, audio-visual media, and other electronic equipment. Assists senior-level specialists in the installation and repair of tele-and-data communications systems and equipment.
- Services electronic equipment by checking, testing, and replacing faulty components, circuit modules, printed circuit boards, vacuum tubes, and similar electronic devices. Diagnoses equipment malfunctions by localizing and isolating problems, determining appropriate repair procedures, and replacing defective parts, restoring to proper operation.
- Performs preventive maintenance on equipment such as cleaning, lubricating and replacing worn parts to assure safe operating condition and optimum performance of equipment.
- May build electronic circuits for special purposes as required.
- Diagnoses failures in personal computer and audio-visual components including but not limited to screens, hard drives, modems, and connections. Uses computerized diagnostic tools to identify problems with computer and telecommunications systems.
- Evaluates cost of repair versus replacement of equipment.
- Participates with others to install personal computer terminals, wiring, and related equipment to interface with the main computer system.
- Maintains a variety of logs and records on maintenance and repair activity; prepares reports as needed. Maintains records of time and materials used on repair and service calls, preventive maintenance and work orders. Maintains records of repairs, technical manuals, and lists of vendors.
- Participates with network and telecommunications specialists to design and recommend electronic system improvements and enhancements, modify existing equipment to improve performance and reliability.
- Operates a variety of hand and power tools, testing and measurement devices, and other technical instruments used in the repair and maintenance of electronic equipment.
- Provides assistance, information and technical expertise to faculty, administrators, and students regarding the safe and proper operation and maintenance of assigned equipment.

- Maintains up-to-date knowledge of technological advancements and developments in the field of electronics. Proposes new equipment and electronic systems purchases to replace damaged or obsolete items. May contact with vendors and manufacturers for specifications, pricing, and purchase.
- Participates with others in the setup and operation of multi-media to support audio and visual presentations and performances. Conducts tests of wiring and circuits to assure safe use by others. This work may be performed on varying and non-routine work shifts.
- Performs other duties as assigned that support the overall objective of the position.

Qualifications

Knowledge and Skills

Requires technical knowledge of repair, maintenance, and installation program of low voltage electronics such as microcomputers and audio-visual equipment. Requires knowledge of the operating characteristics of television, and audio and video recording devices. Requires a working knowledge of personal computer assembly, installation, and maintenance. Requires a working knowledge of the procedures and sequences for setting up new equipment, troubleshooting, and performing routine maintenance according to equipment standards. Requires a basic understanding of common productivity software used on personal computers. Requires knowledge of safety practices and precautions used in working with electrical/electronic equipment. Requires skill in operation of specialized hand and power tools and testing and measuring instruments. Requires sufficient human relations skill to convey technical concepts to others; writing skill to document work activity and write repair instructions and specifications. Requires sufficient math skill to compute precise, ratios, percentages, distances, and electronic measurements.

Abilities

Requires the ability to carry out all of the responsibilities of the position. Requires the ability to learn how to read and interpret electronic diagrams and blueprints. Requires the ability to analyze and interpret equipment specifications. Requires the ability to read and interpret service manuals for installation and repair. Requires the ability to operate electronic measuring instruments and test equipment as well as a variety of hand and power tools in a safe and correct manner. Requires the ability to us computerized diagnostic tools. Requires the ability to organize, sequence, and complete work activities to meet schedules and timelines. Requires the ability to maintain accurate records.

Physical Abilities

Requires sufficient ambulatory ability to lift and carry medium weight materials up to 40 pounds, at waist level for a distance of up to 100 feet. Requires the ability to bend, kneel, stoop, crawl, and perform work in awkward body positions. Requires visual acuity to read small words and numbers; hand-eye coordination to locate, touch, and manipulate small objects. Requires auditory ability to carry on conversations in person and over the phone. Requires the ability to work in a variety of indoor and outdoor settings, including but not limited to classrooms, instructional labs, offices, grounds, and underground wiring caves.

Education and Experience

Requires an Associates degree and at least 1-year of experience with personal computer, network equipment, peripheral, and audio-visual equipment installation, operation, and

repair. Additional experience or special industry training with appropriate certifications may substitute for some formal education.

Licenses and Certificates