

THE UNIVERSITY OF WYOMING JOB DESCRIPTION

This is a description of a staff position at the University of Wyoming not a job opening announcement. Look for current job openings at the following link: [UW Human Resources](#).

The following statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

Title: TECHNICIAN, MASTER

Reports To: Designated Supervisor

UW Job Code: 3970

UW Job Family: 51 - Technicians

SOC Code: 17-3029

FLSA: Exempt

Pay Grade: 24

Date: 6-18-02 (revised 7-1-02; 7-1-04; 7-1-08)

JOB PURPOSE:

Under very limited supervision, perform complex expert-level engineering, research, and/or computer systems configuration(s); responsible for the development, interpretation and adaptation of project plans, techniques, designs and layouts; oversee the completion of projects by determining work assignments and by reviewing, analyzing and integrating the technical work of designated support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Review and analyze a variety of engineering, research, and/or computer-enhanced systems to determine requirements to meet technical objectives.
- Consult with engineers, researchers, staff and/or vendors; design, construct or modify equipment, machines and systems based on information provided such as written specifications, drawings, rough sketches and verbal instructions.
- Direct the completion of projects by determining technical requirements and work objectives; coordinate work assignments and schedules; calculate cost estimates for labor, materials and equipment.
- May be responsible for budget management including purchasing authority, assigned signing authority, and monitoring expenditures to stay within budget limits.
- Evaluate and provide expert-level technical information and analysis for troubleshooting, repairs, reports, bid requests and instructions concerning proper operating procedures for equipment.
- Evaluate and perform expert-level troubleshooting of mechanical, electrical and electronic equipment to determine the nature of malfunctions and extent of repair or modification required to properly repair equipment.
- Perform expert-level calibration of equipment and instruments and monitor performance to ensure they are in proper working condition.
- May perform all other duties within the Technician series.

SUPPLEMENTAL FUNCTIONS:

- Assist faculty, staff and students with mechanical, electrical and electronic design problems and may provide training.
- Instruct others on troubleshooting, repairing, installation, and operation of equipment.
- Prepare and update technical reports and operating, maintenance and repair manuals for equipment, machinery and systems.

COMPETENCIES:

- Analysis/Problem Identification
- Independence
- Influence
- Work Prioritization & Management
- Service Orientation
- Technical/Professional Knowledge

MINIMUM QUALIFICATIONS:

Education: **Associate's degree in a related field, or completion of related technical or vocational education/training**

Experience: **9 years work-related experience in the design, construction, fabrication, repair and maintenance of mechanical or electronic equipment or systems**

Required licensure, certification, registration or other requirements:

- **Some positions may require a low-voltage, FCC, or other specialized license and/or certification.**

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Expert-level of principles and practices of the trade involved.
- Advanced data gathering methods.
- Expert level equipment safety inspection methods and techniques.
- Safe operation of complex lab, research, testing, and/or computer equipment.
- Safety measures and occupational hazards of the trade.
- Expert level of maintenance, troubleshooting, and repairs for the assigned equipment, experiments, and tools.
- Tools and equipment associated with the expert level of tasks of the position.
- Expert level of calibration methods and techniques for tools and equipment associated with the position.
- Expert-level fabrication techniques.
- Inventory and purchasing methods including bid request procedures.
- Expert-level in industry trends of procurement, materials, tools, and procedures in fabrication.

- Scientific methods.
- Preparing cost estimates.
- Budget management.
- Detailed expert-level specific research, engineering, computer network, or telecommunications network system.

Skills and Abilities to:

- Perform expert assembly of complex equipment and systems.
- Follow detailed written and oral instructions.
- Maintain complete and accurate records.
- Prepare and interpret schematics and drawings at the expert or component level.
- Troubleshoot failures and problems at the expert or component level.
- Weld and solder using a variety of methods and techniques.
- Draft expert-level mechanical and electronic diagrams, schematics, blueprints and departmental network(s).
- Design prototypes at the expert level.
- Provide project leadership.
- Communicate ideas and concepts clearly and concisely.
- Creatively design and/or modify equipment and systems.
- Establish and maintain effective supervisory relationships.
- Plan and schedule work.
- Teach methods and techniques of the trade involved and safety procedures and practices.

WORKING CONDITIONS:

Shop environment; regular exposure to electrical, mechanical, chemical and fire/explosive hazards, fumes and vapors; occasionally subject to confined spaces. Some positions may travel regularly.

DISTINGUISHING FEATURES:

Technician: Works under general supervision performing fundamental work including running tests, troubleshooting problems, preventive maintenance, and providing problem resolution. May create finished products from design drawings. Responsible for safety compliance for the shop/project; assembling fundamental equipment; fabricating parts, tools and equipment; troubleshooting routine failures and operational problems.

Technician, Senior: Performs under limited supervision specialized and advanced troubleshooting and repairs; employs advanced methods of troubleshooting and resolving systematic problems, may take projects from original design concept to finished product; assembles complex equipment and systems; may have budget responsibility; maintains an inventory of replacement parts and supplies. May supervise and have project leadership.

Technician, Master: Highest level of expertise in the career field with work performed under very limited supervision. Tasks, duties and responsibilities are primarily at the design level. May supervise project from design to completion, or may supervise assigned employees; may be involved in long-range project planning; has budget responsibility and authority; has expert knowledge and application of the specific research, engineering, computer network, or telecommunications network systems.

Authorized by Classification/Compensation, Human Resources

Employees may be requested to perform job-related tasks other than those specifically presented in this description. Participating in the University's hazardous waste minimization program is part of the job of each employee who uses (or may come in contact with) hazardous materials. Fair Labor Standards Act (exempt/non-exempt) is designated by position. University of Wyoming actively supports Americans with Disabilities Act and will consider reasonable accommodations.