

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: ENGINEER

Reports To: Designated Supervisor

UW Job Code: 3873

UW Job Family: 3E - Engineers/Research

SOC Code: 17-2199

FLSA: Exempt

Pay Grade: 24

Date: 4-1-95 (revised 3-20-01; 7-1-02; 7-19-02; 4-13-04; 7-1-04; 6-14-05; 7-1-08)

JOB PURPOSE:

Provide engineering expertise for designated department. Coordinate, supervise and evaluate all functions related to construction project(s), and/or designs or repairs. Develop, interpret and execute project plans. Maintain, and fabricate instruments for research projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Design, analyze, build and test special-purpose equipment, systems and/or instrumentation for construction/remodeling or research purposes.
- Apply engineering theory to solve mechanical, environmental, electrical, electronic, or fabrication problems.
- Make preliminary selections and adaptations of engineering alternatives.
- Some positions may maintain broadcast, automation and audio equipment to provide continuous station operation; maintain ancillary equipment, utilized in support of broadcast operations.
- Assist faculty, staff, students, or public with technical problems by providing engineering expertise.
- Supervise construction project(s), or construction of research instruments and equipment.
- As directed, test equipment and instruct in proper use.
- Assist with development, review and approval of design and construction documents for code and safety compliance, as directed.
- Prepare documentation on project(s); may be directed to approve shop drawings, change orders, payment requests or other submittals and documents.
- Assist in the publication of construction documents, operation and maintenance manuals, as directed.

SUPPLEMENTAL FUNCTIONS:

- Prepare cost estimates and budget recommendations for projects, equipment and supplies; may order supplies as directed.
- Maintain project records and other records as needed for work orders, inventory, and purchase orders.
- As assigned, may be selected to chair or sit on University committees.

COMPETENCIES:

- Analysis/Problem Identification
- Attention to Detail
- Initiative
- Innovation
- Integrity
- Quantity of Work
- Quality Orientation

MINIMUM QUALIFICATIONS:

Education: **Bachelor's degree in a related field**

Experience: **2 years work-related experience**

Required licensure, certification, registration, or other requirements:

- **Federal Communications Commission Operator's Permit may be required in some positions**

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Basic and routine engineering principles, practices, and protocols of the specific field.
- Basic and routine data collection techniques.
- American Society for Testing and Materials, test methodology.
- Personal computers and software in use in the department.
- Current trends, methods, materials and equipment of the area.
- Basic and routine blueprints, drawings, and schematics.
- Basic and routine prototype fabrication.
- Engineering experiments and tests.
- Occupational hazards and safety precautions of the trade.
- Broadcast equipment and automation systems and their proper/appropriate functions.
- FCC rules and regulations.

Skills and Abilities to:

- Utilize, test, maintain, and modify a range of engineering equipment.

- Build and test engineering and/or scientific systems and components.
- Design, assemble and configure engineering prototype models.
- Design and configure basic and routine test apparatus, circuitry, and equipment.
- Read, understand, and follow safety procedures.
- Accurately document work in process.
- Design schematics and mechanical drawings.
- Design, organize, and coordinate scientific and/or engineering research projects.
- Use independent judgment to develop model concepts and approaches for research.
- Develop and follow research methodology and protocol.
- Draw conclusions and make recommendations based on research data and findings.
- Communicate effectively both orally and in writing.
- Work as a team member and foster a cooperative work environment.
- Adjust and repair high-power RF transmitters.

WORKING CONDITIONS:

Standard office environment. Regular exposure to shop, or research lab environment(s); subject to noise, fumes, dust, material electrical and mechanical hazards constantly.

DISTINGUISHING FEATURES:

Engineer: Provides engineering expertise for designated department. Coordinates, supervises and evaluates all functions related to construction project(s), and/or designs or repairs. Develops, interprets and executes project plans. Maintains and fabricates instruments for research projects.

Engineer, Senior: Provides professional direction to and coordination of other engineers, technicians and/or skilled trade employees in planning and designing engineering construction/remodeling/research projects and research for a designated department; may direct and supervise the operational, personnel and basic engineering functions of that department. Provide high-level engineering expertise and clearly defines appropriate approaches and solutions to complex problems and projects.

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.