TRANSMITTER ENGINEER ADVANCED

**DEFINITION**

Performs/oversees duties required in operating, diagnosing, repairing, and maintaining facilities/electronic equipment for Iowa Public Television at network transmitter/translator sites with specialization in audio, video, digital, remote control, and computer-based engineering relating to electrical/pneumatic controls, polyphase motors, etc., operation, diagnosis, and repair of more complex building mechanics (e.g., HVAC, plumbing, electrical/pneumatic controls, polyphase motors, etc.); performs related work as required.

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The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

**WORK EXAMPLES**

Performs all duties in the Transmitter Engineer, Senior.

Trains, oversees, and participates in the work of other engineers/technical personnel engaged in the operation, repair, and maintenance of transmitting, electronic, and electrical equipment, and associated software related to the production and broadcasting of educational radio/television programs.

Advises and collaborates with other engineers/technical personnel involved in testing and repairing of transmitter/translator equipment and schedules/oversees less experienced engineers in the repair of the more complex equipment applicable to the latter's assigned work areas.

Performs/verifies diagnosis, testing, maintenance, and preventive maintenance of high-power transmitters, low-power transmitters, translators, and related electronic equipment used in the broadcasting of radio/television programs.

Performs/verifies maintenance and repair of more complex building mechanics (e.g., HVAC, plumbing, cooling system, electrical/pneumatic controls, pumps, blowers, motors, etc.).

Researches, plans, and implements equipment and systems for transmitter/translator facilities.

**COMPETENCIES REQUIRED**

Knowledge of HVAC systems.

Knowledge of high-powered RF circuits and systems.

Knowledge of liquid cooling transmission systems.

Knowledge of safety related to transmitter/translator facilities including OSHA, non-ionizing radio frequency radiation (RFR), etc.

Knowledge of transmitter engineering computer systems, methods, and techniques.

Knowledge of Federal Communications Commission (FCC) and Federal Aviation Administration (FAA) rules and regulations.

Knowledge of transmitter principles of electronics applicable to the assigned area of engineering.

Knowledge of techniques of repairing electronic transmitter equipment.

Knowledge of types of equipment used in the production and transmission of radio/television programs.
Ability to understand the budget and budgetary procedures in the area of responsibility.

Ability to diagnose, operate, and repair complex electronic equipment applicable to the assigned area of engineering responsibility.

Ability to assume responsibility in the absence of a supervisor.

Ability to perform RF sweep measurements.

Ability to perform FCC proof of performance measurements on transmission systems.

Ability to train and oversee others.

Ability to organize staff, schedules, equipment, and maintenance programs.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort, and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Follows policy and cooperates with supervisors.

Aligns behavior with the needs, priorities, and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

**EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS**

Graduation from an accredited four-year college or university with a bachelor’s degree in broadcast engineering technology, or a closely related field, and two years of experience in operating, maintaining, or repairing complex electronic equipment;

OR

graduation for an accredited two-year college or university with an associate’s degree in electronics technology, or closely related field, and four years of experience in operating, maintaining, or repairing complex electronic equipment in a radio or television transmitter/translator or network studio;

OR

possession of a certificate in electronics technology, or closely related field, from a recognized technical, military, business, area school, junior college, or university, and five years of full-time experience operating, maintaining, and/or repairing complex electronic equipment in a radio or television transmitter/translator or network studio;

OR

an equivalent combination of experience and education, substituting one year of required experience (30 semester hours or one year) for each year of the required education;

OR

employees with current continuous work in the state executive branch that includes the equivalent of one year of full-time experience as a Transmitter Engineer, Senior at Iowa Public Television.

**NOTES:**

Must possess a valid driver's license.
Positions in this class are exempt from the screening and referral requirements of the Iowa Department of Administrative Services – Human Resources Enterprise. Apply directly to the employing agency.

Iowa Public Television  
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