

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
FACILITIES ENGINEER 2

DEFINITION

Performs licensed professional engineering or registered architectural work; oversees the work of other engineers, technicians or contractors in the design, construction, maintenance, and operation of buildings, utilities, earthwork and related facilities; performs related work as required.

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

Confers with departmental and institutional personnel concerning program requirements for proposed construction, maintenance, repair or alterations to existing and new facilities; provides technical advice to a higher level manager regarding engineering/architectural design of new and existing facilities.

Prepares written engineering analysis and assessment plans and specifications regarding general structural, mechanical or electrical design compliance to various codes and regulations; recommends conceptual design changes to consultant plans.

Reviews advanced plans and specifications for engineering/architectural features of construction projects and coordinates complex construction projects from proposal to completion; reviews and evaluates plans and specifications prepared by architectural/engineering firms to determine compliance with sound professional practices and established standards, codes and regulations; reviews the requirements for plumbing, sewage, water supply, electrical and electronic equipment, elevators, air conditioning, heating and ventilating for proposed and existing structures; affixes professional seal or stamp and signature to in-house drawings and reports.

Analyzes and recommends solutions to non-routine maintenance problems for state agencies or other entities; evaluates the existing conditions of state or other buildings in relation to structural, mechanical, fire protection and electrical design work.

Visits sites to observe construction or alteration in order to insure compliance with approved plans and specifications; prepares progress reports and keeps superiors informed as to the status of projects.

Assists supervisor by performing such duties as instructing employees, answering questions, distributing and balancing the workload, and checking work; may make suggestions on selection, promotions and reassignments.

COMPETENCIES REQUIRED

Knowledge of the principles and practices of building engineering, including one or more specialized areas such as mechanical, electrical or structural engineering.

Knowledge of state building codes, rules and regulations.

Knowledge of the materials, methods, practices, machinery, tools and equipment used in large-scale construction work.

Knowledge of mechanical, electrical and environmental systems; computer systems as applied to environment and energy management.

Knowledge of modern methods and techniques of installation, operation and maintenance of mechanical equipment.

Knowledge of modern security requirements particularly as applied to design concepts, perimeter security and security related equipment.

Ability to prepare complete engineering plans and specifications for a variety of building facilities.

Ability to determine the adequacy of building design from standpoint of one or more specialized areas such as mechanical, electrical, fire protection or structural engineering.

Ability to determine, from an inspection of existing facilities, the feasibility of proposed alterations or additions.

Ability to organize and coordinate construction projects.

Ability to plan and participate in the work of subordinate professional and technical assistants in the development of plans and specifications.

Ability to read, interpret, and accurately obtain necessary information from engineering related source documents/data such as design plans and specifications, scientific and technical journals and reports, and other reference materials to document proposals or theories, search for precedents, seek out alternative procedures, etc. for assigned engineering problems or projects.

Ability to assist in the planning, organizing, and overseeing the work of lower level staff.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing quality professional service.

Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.

Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization.

Exchanges information with individuals or groups effectively by listening and responding appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited college or university with a Bachelor's Degree in Architecture, Civil, Mechanical, Architectural or a related engineering field, six years of full-time engineering experience in the design/construction of buildings, utilities, earthwork, or related facilities/structures, and possession of a valid Professional Engineer license recognized by the State Board of Engineering Examiners or Certificate of Registration as a Professional Architect by the State Board of Architectural Examiners;

OR

employees with current continuous experience in the state executive branch that includes two years of full-time work as a Facilities Engineer 1, and possession of a valid Professional Engineer license recognized by the State Board of Engineering Examiners or Certificate of Registration as a Professional Architect by the State Board of Architectural Examiners.

SPECIAL REQUIREMENT

Within a period of time as determined by the appointing authority, certain employees in this class may be required to obtain a Fire Sprinkler Installer and Maintenance License in accordance with Chapter 100D, Iowa Code.

NOTE

Applicants for natural resources positions should indicate in the appropriate section of the application: hydraulics, fluid mechanics or hydrology coursework completed or submit a college transcript with the application.