

*Code: 2331*

*Title: MECHANICAL ENGINEER*

**SUMMARY:** Supervises and participates, within the limits imposed by registration or certification, in professional mechanical engineering activities in the office and field.

**DUTIES/RESPONSIBILITIES:** (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor.)

Supervises and participates in the design, preparation and review of plans for construction and improvements of buildings including heating, air-conditioning, wiring, plumbing and related activities;

Supervises and participates in the installation, operation and maintenance of a wide variety of mechanical systems and equipment;

Monitors computer systems and programs to determine levels of energy use and provides diagnostic recommendations for the efficient operation of the mechanical systems of all County buildings;

Implements and monitors computer programs to provide a system of preventive maintenance for County buildings;

Designs and tests fire alarm systems;

Develops fire prevention, safety programs and inspections;

Acts as project engineer on all new buildings and modification programs;

Performs advanced mechanical testing and trains others in testing procedures;

Reviews project plans and specifications prepared by others for conformance with standards, applicable codes and established design criteria;

Supervises professional and sub-professional staff as assigned;

Maintains files and prepares reports;

Responds to correspondence and public contact concerning projects.

**KNOWLEDGE & SKILLS:**

Knowledge of:

- engineering principles and procedures relating to the professional practice of mechanical engineering in the building construction field;
- design applications of construction materials and equipment relating to mechanical systems of buildings;
- electric system requirements;
- computer systems and programs as applied to energy management and preventive maintenance of buildings;
- administrative practices and procedures.

Skill in:

- applying engineering principles and procedures to the design, installation, operation and maintenance of a wide variety of mechanical systems and equipment;
- presenting ideas clearly and concisely, graphically, orally and in writing;
- establishing and maintaining effective working relationships with others;
- supervising the work of staff.

**MINIMUM QUALIFICATIONS:**

Registration in any state as a professional Mechanical Engineer.

**OTHER REQUIREMENTS:**

**Licenses and Certificates:** All positions require certification as a Registered Professional Mechanical Engineer in the State of Arizona, per Arizona Revised Statute (ARS) 32-121, at the time of

appointment, or within a specified period after initial appointment. Some positions require a valid Arizona Class D driver license at the time of application. Failure to obtain/maintain the required licensure/registration shall be grounds for termination.

Special Notice: (Incumbents Only) Pending professional Arizona State technical registration as a Mechanical Engineer, incumbents must not use the title Mechanical Engineer. The interim title of Mechanical Engineering Associate is to be used during this period.

Physical/Sensory Requirements: Physical and sensory abilities will be determined by position.

This class specification is intended to indicate the basic nature of positions allocated to the class and examples of typical duties that may be assigned. It does not imply that all positions within the class perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Pima County

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