

*Code: 2764*

*Title: WASTEWATER COMPUTER OPERATIONS SPECIALIST*

**SUMMARY:** This classification provides technical support to departmental mini- and microcomputer systems, networks and equipment, combining systems analysis, programming, hardware/software installation, maintenance and repair and development of computer-based engineering programs and processes to facilitate the work of professional engineering staff. It is distinguished from Engineering Computer Applications Specialist by its broader range of technical knowledge required in the engineering disciplines encountered in the Wastewater department, as well as the relatively higher level of Information Systems (IS) know ledges and skills required.

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

Provides technical support to departmental mini- and microcomputer systems and programs;  
Performs systems analysis to facilitate engineering technical studies, through defining requirements for data collection, programming, generating reports and other output;  
Applies relevant engineering technical knowledge to software/hardware situations, in concert with departmental professional engineering staff;  
Evaluates and selects software, hardware and peripheral devices, to include obtaining price quotations, preparing bid specifications/requirements and purchase requests;  
Installs, programs and provides user support for computer systems and their components;  
Writes, tests, debugs, modifies and evaluates applications programs, macros and related processes;  
Performs test diagnostics on software, hardware and peripheral devices, and makes or coordinates repairs by vendors, manufacturers, service providers and contractors;  
Removes, installs, modifies and repairs electronic circuitry in central processing units (CPUs), monitors and peripheral devices, to include installation of networking software/hardware, data communications cables, etc.;  
Trains staff in the use of hardware, software and peripheral devices;  
May lead other technical staff in complex projects.

**KNOWLEDGE & SKILLS:**

Knowledge of:

- principles and techniques of engineering applications programming and mini- and microcomputer systems analysis;
- machine language(s) appropriate to area of assignment;
- paraprofessional engineering technology;
- operating principles, capabilities and limitations of microcomputer electronics, engineering and diagnostic software applications, hardware, data communication systems, and peripheral devices applicable to mini- and microcomputer systems;
- principles and techniques for the adaptation of manual engineering and office procedures to automated systems;
- research methods including the design, analysis and documentation of results;
- effective training and communication techniques.

Skill in:

- analyzing engineering applications programming and systems operations and organizing their component parts into logical order;
- using appropriate machine language(s) to develop, modify and maintain engineering applications programs for mini- and microcomputers;
- identifying, analyzing and resolving programming, software, hardware, and peripheral equipment problems and needs applicable to mini- and microcomputer systems;
- organizing, conducting, analyzing and documenting computer program research and development;
- communicating and training effectively.

MINIMUM QUALIFICATIONS: EITHER

(1) An Associate's degree from an accredited college, university or technical school in electronics, computer operations/repair or information systems management and four years of technical experience including the operation, programming and maintenance of mini- or microcomputer systems in a scientific or engineering support setting.

OR:

(2) Six years of technical experience which included the operation, programming and maintenance of mini- or microcomputer computer systems in a scientific or engineering support setting.

OR:

(3) Three years of experience with Pima County as an Engineering Computer Applications Specialist, Information Systems Coordinator or Programmer-Analyst.

OTHER REQUIREMENTS:

Licenses and Certificates: Some positions may require a valid Arizona driver's license at the time of appointment or prior to completion of initial/promotional probation.

Special Notice Items: Some positions may require satisfactory completion of a personal background investigation, polygraph examination and/or pre-/post-appointment drug-testing by law enforcement agencies due to need for access to law enforcement, corrections or Courts facilities, property and associated confidential and sensitive information, documents, communications, and database systems.

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.