

Code: 1453

Title: DATABASE SPECIALIST

SUMMARY: This classification provides technical design, development, implementation and maintenance of major database systems on a mainframe, mini- or microcomputer system. The databases may be department-unique or may involve multiple County and non-County departments, activities or agencies. It is distinguished from other Information Systems (IS) classifications by its specialization in database development and maintenance.

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

Designs, develops, implements and maintains major database systems on a mainframe, mini- or microcomputer system;
Creates user oriented file structures and characteristics to insure efficient computer operation and timely user turnaround and on-line response;
Implements and maintains a data dictionary and database definitions according to departmental standards;
Reviews existing and proposed database applications to insure effective, secure database development, maintenance and security;
Performs systems and hardware performance measurements and evaluations;
Maintains documentation of database status, attributes and related technical information;
Establishes and implements standards concerning procedures and conventions for data definition, data manipulation and database support;
Coordinates database installation, maintenance, security and access with other affected Information Systems (IS) staff or activities and using agencies;
Trains staff and users in the use and maintenance of assigned database systems;
Meets with end-users of assigned database systems to better define their needs or to identify and resolve problems encountered;
May evaluate requests for database creation or modification and make effective recommendations to management for implementation;
May supervise and evaluate assigned staff;
May serve as lead to other staff in complex or unique database-related projects.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles and techniques of database design and management and systems analysis applicable to mainframe, mini- and microcomputer systems;
- operating principles, capabilities and limitations of hardware, software, and database systems on a mainframe, mini, or microcomputer system;
- machine language(s) appropriate to area of assignment;
- database security and privacy techniques;
- Arizona Revised Statutes (ARS) applicable to the maintenance and sale of data;
- effective training and communication techniques.

Skill in:

- identifying, analyzing, and resolving problems and needs applicable to database systems to include problem-avoidance;
- using appropriate machine language(s) to design, develop, implement and maintain major database systems;

- conducting, organizing, analyzing and documenting database research and development;
- communicating effectively;
- training others in the use of database systems.

MINIMUM QUALIFICATIONS:

(1) A Bachelor's degree from an accredited college, university or technical school in Geographic Information Systems (GIS), Automated Mapping/Facility Management (AM/FM), computer science, management information systems (MIS) or computer engineering and three years of technical experience in the development and maintenance of database systems, which included programming and systems analysis.

OR

(2) An Associate's degree from an accredited college, university or technical school in Geographic Information Systems (GIS), Automated Mapping/Facility Management (AM/FM), remote sensing, computer science, cartography, geography, planning or landscape architecture and five years of technical experience in the development and maintenance of database systems, which included programming and systems analysis.

OR

(3) Three years of experience with Pima County as an EDP Project Supervisor, Senior Programmer Analyst, or GIS Analyst.

OTHER REQUIREMENTS:

Licenses and Certificates: Some positions may require a valid Arizona driver's license of the appropriate class or other certification/licenses at the time of appointment.

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.