

Code: 2453

Title: GEOGRAPHIC INFORMATION SYSTEMS (GIS) CARTOGRAPHER

SUMMARY: Produces complex presentation-quality maps, charts and related Geographic Information System (GIS) products through application of cartographic principles and techniques and use of Automated Mapping/Facilities Management and/or Geographic Information System (AM/FM/GIS) system programs, databases and equipment. This classification is distinguished from other GIS, Drafting, Design Specialist and Illustrator classifications by the requirement for applying specific cartographic expertise and techniques and the level of judgment exercised to produce complex cartographic products.

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 and arranges map elements to produce presentation-quality maps from complex and diverse sources, e.g., existing maps, aerial photographs, satellite imagery, GIS databases, etc.;

Creates and documents application macros using software programs associated with departmental computer-based databases;

Meets with requestors of products or services to determine specific information, formats and like requirements for cartographic products;

Coordinates with outside vendors for the reproduction of cartographic products;

Applies quality control standards and procedures for cartographic products;

Leads other technical staff and participates in the production of AM/FM/GIS, computer-aided drafting/design (CAD/D) programs and related products and services;

Documents time and materials expended in cartographic production projects;

Performs operator-level servicing and maintenance of departmental hardware, software and peripheral devices/equipment;

Trains technical staff in unique or complex cartographic techniques.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles, techniques and applications of cartography applicable to an AM/FM/GIS environment;
- computer-based illustration programs, hardware, software and peripheral devices;
- drafting, graphic art/illustration and media techniques;
- geometry and mathematics;
- effective leadership, training and communication techniques.

Skill in:

- designing, producing and applying quality control standards to presentation-quality cartographic products using AM/FM/GIS software, hardware and peripheral devices;
- using computer-aided illustration techniques, media and material;
- balancing aesthetic and informational requirements of cartographic products;
- writing and documenting application macros in software programs/languages used in the GIS department;
- leading, training and communicating effectively.

MINIMUM QUALIFICATIONS:

EITHER:

(1) One year of technical experience in cartography, surveying, photogrammetry, remote sensing, GIS or AM/FM, which included the use of CAD programs and equipment.

OR:

(2) An Associate's degree (or 60 semester hours) from an accredited college, university or technical school in graphic arts, illustration or commercial art, which included course work in computer-aided drafting/design (CAD/D) programs and equipment and nine semester hours in cartography, photogrammetry, aerial photo interpretation or surveying.

OTHER REQUIREMENTS:

Licenses and Certificates: Some positions may require a valid Arizona driver's license with endorsements defined by the appointing authority 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.

Pima County

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