**IT BROADBAND CLASSIFICATION:** DATABASE ADMINISTRATOR/ANALYST

**JOB TITLES:** DATABASE ADMINISTRATOR, DATABASE ANALYST, DATABASE MANAGEMENT SYSTEM SPECIALIST

**PAY GRADE(s):** 71 or 72

**CLASS FUNCTION:**
The majority of duties performed in this IT Broadband class include integrating systems, creating, modifying or developing databases to include set-up and monitor tables, indexes, views, triggers, table spaces, fragmentation issues, monitoring processes, referential integrity, security, performance tuning and sizing. Positions in this IT Broadband class typically are not involved in maintaining system software or providing hardware support as a majority function.

Positions in this IT Broadband class may reside in a central computing department, individual administrative departments or college units.

Within this IT Broadband class a full continuum of position complexity and competency from entry level to expert is represented. Within this IT Broadband class there will be positions of varying levels of technical complexity based on departmental needs. Positions may also function as working supervisors with a full range to permanent supervisory responsibilities or may act as team, technical, or project leads. Positions may direct or supervise positions in this class or in other classes.

**TYPICAL DUTIES:**
The following are typical activities of positions on the Database Administrator/Analyst IT Broadband class. Actual functions performed will differ from position to position and will be determined by specific work assignment. A position in this IT Broadband class has the majority of its ongoing work assignments in one or more of the following functions:

Structure and implement databases to optimize data access and security. Design database systems and programs which include access methods, access time, file structure, device allocation, validation checks, and statistical methods. Work with user community to understand data access and integration needs. Ensure the integration of systems through the database structure. Monitor database standards and procedures, systems usage and performance. Troubleshoot and resolve database problems. Develop and administer disaster recovery plans. Ensure data and its sources are accurate and easily accessible to the user community. Monitor, analyze, and verify data to ensure data integrity; develop assigned databases to support specific applications. Maintain the database archives by acquiring and installing data sets and documentation. Assist in data transfers or sharing of files. Develop policies and procedures to access or interact with remote resources. Conducts file maintenance, set-up and monitor tables, indexes, views, triggers, table spaces, fragmentation issues, monitoring processes, referential integrity, security, performance tuning and sizing. Position may also develop specifications and requirements for the optimal integration of systems which may include applications, databases, networks, and related systems. Completes database upgrades and patch maintenance.

Install, structure, tune, and maintain database management systems and software on mainframe and/or mini-computers. Manage database organization and data storage. Monitor database system usage and performance. Troubleshoot and resolve database problems. Create database and/or migrate databases between machines. Support client/server database access tools. Develop benchmarks for testing new software releases. Provide consultation to programmers on relational database design. Oversee vendor software fault resolution. Run checks on data integrity. Develop system backup and
archival methodology. Maintain data security and integrity by developing system access standards and procedures. Work with users to understand their security needs and evaluate level of security required. Conduct virus avoidance procedures. Design data storage capacity to provide for efficient and timely response and operating time. Calculate data storage media and cost alternatives. Specify sources and methods of data storage. Plan for efficient allocation of system storage capacity.

QUALIFICATIONS GUIDE:

Minimum Qualifications for the Database Administrator/Analyst band: Bachelor’s degree in Computer Science, Information Technology, Computer Engineering or related degree and three (3) years of experience; or an Associate’s degree with five (5) years of experience; or a combination of relevant education and seven years of experience.

Individuals in this IT Broadband class will typically possess knowledge and/or applied skills and abilities in systems development and analysis; systems integration including operating systems, applications, networks and databases, as well as knowledge of distributed systems and client-server technologies; formal data structure design, relational database design, and file structure; applications software; operating systems and utilities; communication interfaces; interactive debugging and testing; and identifying and resolving software/hardware interface problems. Depending on departmental needs and the specific work assignment, a working knowledge of specific industry standard applications programming languages and report/screen generators, advanced knowledge of systems analysis and design, and/or supervisory or significant project management experience may be required.

Specific qualifications including knowledge, skills, abilities, required programming language(s) and education will differ from position to position as work assignments vary.

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