

## **DATABASE ADMINISTRATOR**

**DISTINGUISHING FEATURES OF A CLASS:** This is a technical professional level position that involves the responsibility for designing, programming, upgrading and customizing databases and queries to meet various user needs including importing, exporting, uploading and downloading data for reports as needed. Duties also include evaluating complex data storage, access and use requirements for established and requested computer applications, and designing, maintaining and monitoring appropriate database structures to meet those needs. The work is performed under the general supervision of a higher-level administrator and work guidance (e.g., lead work) may be exercised over lower-level staff. Does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Designs and coordinates the implementation of databases for individual applications using all data structures in a multi-activity environment;  
Communicates with users to determine needs and programs and customizes various databases and designs advanced queries to meet those needs;  
Monitors databases for usage, response, breach of privacy and potential restructuring;  
For non-cloud based databases, manages mass information storage resources by determining the physical placement for all data records incorporated into the database;  
Creates and implements data security procedures while adhering to data privacy laws, best practices and cybersecurity measures;  
Audits database usage to ensure compliance with established standards;  
Provides data back-up and recovery procedures;  
Reorganizes and/or restructures databases to accommodate physical or logical changes;  
Reviews both new systems and proposed or requested changes to existing applications which may affect the established database and makes recommendations for changes or modifications;  
Provides training to users on various software applications and capabilities;  
Supports users in maximizing the use and capability of the various information systems in order to collect, manage and report data;  
Designs and implements data warehouse systems to extract, transform and analyze data from disparate information systems and to provide backup storage and archival capabilities;  
Works with administrators to determine and develop information needs and resolve problems related to database management and information systems;  
Maintains documentation and develops comprehensive reports and diagrams relative to data management and information management systems;  
Keeps abreast of changing technology and software;  
Performs related technical and administrative functions to ensure responsive and effective data support.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of database management systems, structures and techniques; thorough knowledge of database applications for personal computers including but not limited to Microsoft Access and Excel, Visual Basic, SQL, and all versions of Windows and Google; thorough knowledge of the principles, practices and procedures of systems and applications programming; good knowledge of the current literature, sources of information and technological developments in the field of database management; ability to analyze the database requirements of a variety of computer applications and to design appropriate relational database structures; ability to develop documentation and prepare comprehensive reports and diagrams relative to data management;

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ability to program, upgrade and customize databases to user defined needs; ability to design advanced queries for the purpose of user defined reporting requirements and to generate reports from various databases; ability to organize, manage and complete projects related to database management; ability to communicate effectively, both orally and in writing; ability to train staff on the use of software; ability to handle multiple tasks and set work priorities; ability to analyze problems in a logical and systematic manner.

**MINIMUM QUALIFICATIONS:**

1. A Bachelor's degree or higher in Computer Science, Information Technology, Management Information Systems or comparable curriculum and three (3) years of work experience in database programming which involved hands-on application and development of computer database programs as a major function\* of the work; or
2. An Associate's degree that included or was supplemented by thirty (30) college credit hours in Computer Science, Information Technology, Management Information Systems or comparable curriculum and five (5) years of work experience in database programming which involved hands-on application and development of computer database programs as a major function\* of the work.

\*Major function of the work shall mean more than 50%.