

Class Concept

This work involves planning, development, implementation, maintenance, and monitoring of an integrated database system which contains multiple applications consisting of diverse data sets and provides concurrent accessibility of the database by multiple customers. Positions ensure the availability, performance, and security of database systems, supporting the efficient and effective operation of the organization. Databases may be cloud-based or on premises, and work may include evaluating and selecting cloud database technologies. Work involves the design of the logical and physical database structure, data security and integrity, and architecture. Work involves a consultative role with applications developers to assure that the conceptual and design phases of new applications are consistent with the structural parameters within the database environment. Positions will develop and enforce database design standards, best practices, and guidelines. This role is responsible for data protection and access control of valuable agency information. Work also involves database maintenance including but not limited to backups and recovery, and database performance and efficiency; identifying and resolving performance issues, system errors, and other database-related problems; and monitoring database systems for potential security vulnerabilities and proactively implementing measures to mitigate risks. The role is distinguished from the Database Administrator I and II by the complexity of the projects or the expertise for enterprise/statewide systems, the ability to lead complex projects, and the ability to guide the lower level Database Administrators on projects and everyday tasks and assignments.

Recruitment Standards

Knowledge, Skills, and Abilities

- Thorough knowledge of all principles behind the administration and structuring of an integrated database system, which may include knowledge of cloud database technologies
- Thorough knowledge of applications analysis and programming techniques
- Thorough knowledge of data and database security and compliance standards
- Demonstrated ability in database query optimization and several database languages
- Ability to effectively communicate in written and oral form with systems end-users, application programmers, and IT management and to establish effective working relationships
- Demonstrated ability in planning or scoping a variety of database projects with varied time frames of greater complexity and/or diversity
- Ability to interact with and manage underlying operating system and network technology supporting the database environment
- Ability to provide training and technical leadership
- Ability to problem solve and troubleshoot database issues, which may include cloud database issues

Minimum Education and Experience

Bachelor's degree in computer science or an IT related field or a related curriculum from an appropriately accredited institution and six years of progressive experience in programming and applications analysis including the design and maintenance of an integrated database system; or

Associate degree in computer science or an IT related field or a related curriculum from an appropriately accredited institution and seven years of progressive experience in programming and applications analysis including the design and maintenance of an integrated database system; or

High School or General Educational Development (GED) diploma and ten years of relevant experience in programming and applications analysis including the design and maintenance of an integrated database system; or an equivalent combination of education and experience.