Class Concept

Cloud Engineer positions are responsible for designing, deploying, configuring, developing, and maintaining cloud-based systems, services, and solutions using cloud platforms. Positions analyze the existing infrastructure and convert existing services and platforms to cloud technologies. Positions design and implement cloud-based solutions to ensure high performance and reliability. Positions also analyze, design, code, debug, test, and modify new software or enhancements. Cloud Engineers manage large and complex projects and collaborate with cross-functional teams to identify and implement new cloud technologies and services. Positions work closely with other teams, including cloud architects, developers, security professionals, network engineering, and operations to ensure that cloud network infrastructure meets the needs of the organization. Positions are tasked with continuously improving processes and building solutions which focus on scaling, elasticity, and cost optimization. Positions in this class continuously improve processes, identifying areas for improvement and implementing changes to increase efficiency, reduce costs, and improve reliability. Positions in this class may also cover different Cloud Engineering roles such as Cloud DevOps Engineer, Cloud Network & Security Engineer, and Cloud Platform Engineer.

Positions in the <u>Cloud DevOps Engineer</u> role are responsible for designing and developing software solutions for cloud-based operating systems. This role builds and maintains infrastructure as code (IaC) using DevOps methodology and versioning with a descriptive model to define and deploy infrastructure, such as networks, virtual machines, load balancers, and connection topologies. The role implements various development, testing, and automation tools. Positions in this role work closely with the development and operations teams to ensure that cloud infrastructure is optimized for performance and reliability. Positions in this role develop and maintain processes and procedures to ensure the cloud infrastructure is secure, reliable, and scalable.

Positions in the <u>Cloud Network and Security Engineer</u> role are responsible for designing, implementing, and managing the cloud network infrastructure including the deployment and configuration of cloud-based network solutions to ensure high performance, reliability, and security. Positions in the role consult with enterprise architects and automation teams to drive cloud configuration. Positions design and implement networking and security controls while ensuring compliance. Positions in this role assess cloud vulnerabilities, identify cloud security threats, identify risks, and perform audits. Positions also oversee the testing of data contingencies and disaster recovery planning.

Positions in the <u>Cloud Platform Engineer</u> role are responsible for providing a reliable and scalable platform for developers to build and deploy applications. Positions in the role consult with enterprise architects and automation teams to drive cloud configuration, migration, and technical consultation. Positions in this role select the technologies and tools for hosting capabilities. Cloud Platform Engineers focus on operations, database, storage, data, containerization, microservices, and utilize fin ops tools. Positions in this role work closely with development teams to deploy infrastructure and strive towards continuous integration and continuous delivery (CI/CD). Cloud Platform Engineers are responsible for facilitating the onboarding process of enterprise applications into the cloud environment. They troubleshoot and resolve issues related to production.

Recruitment Standards

Knowledge, Skills, and Abilities

- Thorough knowledge of DevOps principles and practices, such as continuous integration (CI), continuous delivery (CD), and continuous deployment (CD)
- Thorough knowledge of DevOps tools
- Intermediate knowledge of cloud platforms such as Amazon Web Services (AWS), Microsoft Azure, or Google Cloud Platform (GCP)
- Thorough knowledge of cloud infrastructure best practices, including security, scalability, and performance optimization
- Intermediate knowledge of business and management principle
- Strong analytical and problem-solving skills

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.

• Excellent communication and collaboration skills

Minimum Education and Experience

Bachelor's degree in computer science, information technology, or a closely related field from an appropriately accredited institution, and five years of IT experience including three years of progressive experience in cloud-related systems infrastructure design, implementation, and management; or

Associate degree in computer science, information technology, or a closely related field from an appropriately accredited institution and six years of IT experience including four years of progressive experience in cloud-related systems infrastructure design, implementation, and management; or an equivalent combination of education and experience.