Infrastructure & Engineering - Infrastructure Engineering

Job Family	Grade 11	Grade 12	Grade 13	Grade 14 - Individual Contributor	G14 - Management Track	Grade 15 - Management Track
Infrastructure Engineering	Associate Infrastructure Engineer	Infrastructure Engineer	Sr. Infrastructure Engineer	Lead Infrastructure Engineer	Manager/Sr. Manager, Infrastructure Engineering	Director, Infrastructure Engineering
Purpose:	Provides day-to-day support of the system infrastructure. May include automation, processes, hardware and/or software.	Provides on-going support of platform management and of the system infrastructure, including automation, processes, hardware and software. Participate in planning and execution of engineering projects. Participate in service design/transition activities.	Participates in planning and execution of engineering projects. Provide technical expertise for specific infrastructure services and systems. SME for one or more services/technologies. Participate in service design/transition/strategy activities.	Responsible for planning and execution, and management of engineering projects. Provide technical expertise and leadership for infrastructure services and systems. SME for multiple services/technologies. Lead service design/transition/strategy activities.	Oversees the planning, scaling and integrating system capabilities (complex, multiplatform) in alignment with functional plans, goals, and directions.	The Director is charged with developing and executing a strategy within their respective area. He/She draws on experience and/or resources with in-depth knowledge of the business or function to provide system infrastructure solutions in support of IT objectives. He/She insures all projects are delivered within budget and on time. The Director will provide leadership and overall managerial oversight to their team.
Relation to Supervision:	Works under moderate direction.	Works under minimal direction.	Works under minimal direction and often without supervision.	Works independently while leading and coordinating all levels of activities including project lifecyle and day to day operations.	Manages staff and relevant teams while also leading and coordinating all levels of activities including project lifecyle and day to day operations including staff management.	Manages staff and relevant teams while also leading and coordinating all levels of activities including project life cyle, software develoment life cycle and day to day operations. Including staff management. Reports to senior leadership team member. Sets direction and goals for department and/or team.
Datacenter Network Architecture:	Assists in the development of new implementation guidelines or engineering standards.	Contributes to the development of new implementation guidelines or standards.	Responsible for the development of new implementation guidelines or standards. Provides architecture for datacenter networks.	Leads and/or oversees the development of protocols and standards for all datacenter network services and may have ultimate responsibility for their implementation and documentation.	Oversees development of protocols and standards for all network services and has ultimate responsibility for their implementation and documentation. Defines datacenter network architecture and oversees the documentation of the design for networks.	Communicates with senior management on system-wide issues recommending solutions including resources needed, time required and benefits to be achieved. Designs hard/software configurations for complex solutions. Assesses the application of new and innovative technologies, methods and concepts. Provides installation design and direction to support new technologies. May involve hardware sizing and capacity planning. Establishes the methodology, standards and protocols for installation and implementation work. Manages complex projects, components and systems.
Infrastructure Network Architecture:	Assists in the development of new implementation guidelines or engineering standards.	Contributes to the development of new implementation guidelines or standards.	Responsible for the development of new implementation guidelines or standards. Provides architecture for infrastructure networks.	Leads and/or oversees the development of protocols and standards for all network services and may have ultimate responsibility for their implementation and documentation.	Oversees development of protocols and standards for all network services and has ultimate responsibility for their implementation and documentation. Defines infrastructure network architecture and oversees the documentation of the design for networks.	Communicates with senior management on system-wide issues recommending solutions including resources needed, time required and benefits to be achieved. Designs hard/software configurations for complex solutions. Assesses the application of new and innovative technologies, methods and concepts. Provides installation design and direction to support new technologies. May involve hardware sizing and capacity planning. Establishes the methodology, standards and protocols for installation and implementation work. Manages complex projects, components and systems.
Relationship Management:	Works closely with CUIT colleagues on all tasks in the Infrastructure engineering and maintenance life cycle. Participates constructively in team environment.	Works closely with CUIT colleagues on all tasks in the Infrastructure engineering and maintenance life cycle. May be responsible for directing and monitoring the work of team members and or project teams.	Work with all levels of organization on problem management and resolution. Provides assistance to less senior developers. Gives guidance to other team members. May oversee team members performing specific tasks.	Leads specific infrastructure, systems and administration initiatives. Provides expert level assistance to less senior system engineers; functions as a technical consultant.	Leader of team. Sets team goals, coaches and counsels staff to accomplish goals. May have performance management responsibility for team. Liases with relevant faculty and administrators on various projects/initiatives and ongoing operations of systems.	Responsible for the capabilities and configuration of the team and its preparedness to meet the IT and business requirements of the department. Partners with relevant faculty and administrators to support financial, academic and research goals of the University. Has responsibility and oversight for all personnel decisions.
Education & Experience:	Bachelors degree and/or its equivalent required. Minimum 2-4 years related experience. Familiarity with industry standards and practices.	Bachelors degree and/or its equivalent required. Minimum 3-5 years related experience. Solid network/systems knowledge and understanding of industry standards and practices.	Bachelors degree and/or its equivalent required. Minimum 4-6 years related experience. Strong networking knowledge and experience with multiple technical specialties.	Bachelors degree and/or its equivalent required. Minimum 5-7 years related experience. Expert level networking knowledge and experience with a specific technical specialty.	Bachelors degree and/or its equivalent required. Minimum 5-7 years related experience. Expert level experience with a broad range of technical specialties. Prior supervisory experience strongly preferred.	Bachelors degree and/or its equivalent required. Minimum 7-9 years related experience. Experience in all relevant technical specialties, methodologies and tools. Prior managerial experience required.

Soft skills:	Demonstrates a variety of competencies including teamwork/collaboration, analytical thinking, and strong communication.	Demonstrates a variety of competencies including teamwork/collaboration, analytical thinking, and communication.	Demonstrates proficiency in a variety of competencies including teamwork/collaboration, analytical thinking, communication and influencing skills.	Demonstrates excellence in a variety of competencies including teamwork/collaboration, analytical thinking, communication, influencing skills, and proven ability to act as a change agent.	Demonstrates excellence in a variety of competencies including ability to manage a team, teamwork/collaboration with technical and functional clients/peers, analytical thinking, communication and influencing skills. Proven ability to act as a change agent.	Demonstrates excellence in a variety of competencies including ability to lead a team, teamwork/collaboration with technical and functional clients/peers, analytical thinking, communication and influencing skills. High degree of emotional intelligence. Proven ability to act as a change agent.
Technical Skills:	Basic skills in some/all of the following technologies: Linux, Windows, VMware.	Proficiency in some/all of the following technologies: VMWARE vSphere 4/5, vCenter, Linux RHEL 5/6, Windows Server 2008+, Systems Automation and Configuration Management (Puppet, Chef, Salt, CFEngine) Virtualization environment design, development, maintenance techniques, and processes.	Strong proficiency in some/all of the following technologies: VMWARE vSphere 4/5, vCenter, Linux RHEL 5/6, Windows Server 2008+, Systems Automation and Configuration Management (Puppet, Chef, Salt, CFEngine)Virtualization environment design, development, maintenance techniques, and processes.	Expert level skills in some/all of the following technologies: VMWARE vSphere 4/5, vCenter, Linux RHEL 5/6, Windows Server 2008+, Systems Automation and Configuration Management (Puppet, Chef, Salt, CFEngine)Virtualization environment design, development, maintenance techniques, and processes.	Strong Proficiency in some/all of the following technologies: VMWARE vSphere 4/5, vCenter, Linux RHEL 5/6, Windows Server 2008+, Systems Automation and Configuration Management (Puppet, Chef, Salt, CFEngine)Virtualization environment design, development, maintenance techniques, and processes.	Broad functional and/or technical experience in all relevant technical specialties, methodologies and tools such as VMWARE vSphere 4/5, vCenter, Linux RHEL 5/6, Windows Server 2008+, Systems Automation and Configuration Management (Puppet, Chef, Salt, CFEngine)Virtualization environment design, development, maintenance techniques, and processes.