Infrastructure & Engineering - Research Engineering

Job Family	Grade 10	Grade 11	Grade 12	Grade 13	Grade 14 - Individual Contributor	G14 - Management Track	Grade 15 - Management Track
Research Engineering	Assistant Research Systems Engineer	Associate Research Systems Engineer	Research Systems Engineer	Sr. Research Systems Engineer	Lead Research Systems Engineer	Manager/Sr. Manager, Systems Engineering	Director - Research Services
Purpose:	Assists with the day-to-day support of the system infrastructure. May include automation, processes, hardware and/or software.	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.	Has responsibility for advanced infrastructure support and implementing highly complex projects with impact on the network and business system applications.	Leads/supervises day to day activities in support of the planning, scaling and integrating system capabilities (complex, multiplatform) in alignment with functional plans, goals, and directions.	Manages and coordinates the deployment and ongoing operations of team systems and services.	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 direction.	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.
Architecture, Design, Development & Installation:	Assists with assigned research and assigned design and development, such as the development of a small report or the automation of internal report monitoring. Assists and completes simple infrastructure installations and upgrades as assigned.	Assists with assigned research and assigned design and development, such as the development of a small report or the automation of internal report monitoring. Assists and completes simple infrastructure installations and upgrades as assigned.	Conducts assigned research, design and development, such as the design/development of a single technology for a CUIT group or a small customer group. Installs low/moderately complex soft/hardware infrastructure.	Responsible for the development of new implementation guidelines or standards. Provides architecture for systems. Installs moderate/complex soft/hardware infrastructure. Performs complex implementations and/or customizations.	Leads and/or oversees the development of protocols and standards for all system services and may have ultimate responsibility for their implementation and documentation. Leads and performs complex implementations and/or customizations of moderate/significant size and risk.	Designs hard/software configurations for moderate/complex solutions to address University needs. Reviews and approves designs. Involved in the design and development effort of large and complex soft/hardware that is deemed critical to the University's operations. Performs complex implementations and/or customizations of moderate/significant size and risk.	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 colleageus on all tasks in the systems engineering and maintenance life cycle. Participates constructively in team environment.	Works closely with CUIT colleageus on all tasks in the systems engineering and maintenance life cycle. Participates constructively in team environment.	Works closely with CUIT colleagues on all tasks in the systems 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 junior systems 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 academic/research 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 0-2 years related experience. Familiarity with industry standards and practices.	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 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: Research Computing, Windows/Linux support/administration.	Basic skills in some/all of the following technologies: Research Computing, Windows/Linux support/administration.	Proficiency in some/all of the following technologies: Research Computing, Windows/Linux support/administration. Prior programming/scripting exeprience.	Strong proficiency in some/all of the following technologies: Research/High Performance Computing, Linux (RedHat) administration, AWS, GIT, Puppet, prior programming/scripting exeprience.	Expert level skills in some/all of the following technologies: Research/High Performance Computing, Linux (RedHat) administration, AWS, GIT, Puppet, prior programming/scripting exeprience.	Strong Proficiency in some/all of the following technologies: Research/High Performance Computing, Linux (RedHat) administration, AWS, GIT, Puppet, prior programming/scripting exeprience.	Broad functional and/or technical experience in all relevant technical specialties, methodologies and tools such as Research/High Performance Computing, Linux (RedHat) administration, AWS, GIT, Puppet, prior programming/scripting experience.