



Information Technology Job Family: **Systems Engineer Progression**

These generic job title summaries are intended to indicate the kinds of tasks and levels of work complexity that will be required of positions classified to any of these titles and are not intended to be construed as declaring the specific duties and responsibilities of any particular position. The use of particular expressions or illustrations describing functions within a specific job title does not exclude other duties of a similar kind and/or level of complexity. Positions are classified to a particular job title based upon the predominant level of expected work complexity. ***A position that is classified into this title and band must meet the Cornell requirements for exemption under the FLSA***

GENERIC JOB PROFILE SUMMARIES

Systems Engineer III INDIVIDUAL CONTRIBUTOR	Systems Engineer IV INDIVIDUAL CONTRIBUTOR	Systems Engineer V INDIVIDUAL CONTRIBUTOR
Develop or modify moderately complex software programming applications from specifications.	Develop or modify complex software programming applications from specifications.	Develop or modify highly complex software programming applications from specifications.
Formulate and define specifications for complex operating software programming applications or modify/maintain complex existing applications using engineering releases and utilities from the manufacturer.	Instruct, direct, formulate and define specifications for complex software programming applications or modify/maintain complex existing applications using engineering releases and utilities from the manufacturer.	Provides technical consulting on formulation and defining specifications for complex operating software programming applications or modifications/maintenance of complex existing applications using engineering releases and utilities from the manufacturer.
Design, code, test, debug, and document applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks and advanced mathematical/scientific software packages.	Design, code, test, debug, and document applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, and advanced mathematical/scientific software packages.	Design, code, test, debug, and document applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, , and advanced mathematical/scientific software packages.
Responsible for quality assurance review and the evaluation of new and existing software products.	Responsible for quality assurance review and the evaluation of new and existing software products.	Responsible for quality assurance review and the evaluation of new and existing software products.
Assist in the design of new procedures and new technology integration to improve efficiency and service; research new architecture and recommend implementation.	Design new procedures and new technology integration to improve efficiency and service; research new architecture and recommend implementation.	Design and develop new procedures and new technology integration to improve efficiency and service.

Systems Engineer III INDIVIDUAL CONTRIBUTOR	Systems Engineer IV INDIVIDUAL CONTRIBUTOR	Systems Engineer V INDIVIDUAL CONTRIBUTOR
Responsible for virtualization solutions and migrations and windows infrastructure.	Design and implement tools for virtualization solutions and migrations and overall windows infrastructure.	Design, develop and implement tools for virtualization solutions and migrations and overall windows infrastructure.
	Design and implement scalable server architectures and solutions for critical business systems.	Design, develop and implement scalable server architectures and solutions for critical business systems.
	Ensure the design supports a robust technology solution, taking into account the user requirements, technical requirements, etc. (e.g., solution architecture); ensure technology requirements allow modeling and address performance and security.	Ensure high level design supports a robust technology solution, taking into account the user requirements, technical requirements, etc. (e.g., solution architecture); ensure technology requirements allow modeling and address performance and security.
Responsible for capacity planning activities and program-wide technology build, test and deployment activities.	Manage future capacity planning activities and program-wide technology build, test and deployment activities.	Plan and manage future capacity planning activities and program-wide technology build, test and deployment activities.
		Identifying opportunities to drive more value from the IT strategy through technology strategies in targeted areas, including technology infrastructure (overall as well as security, networks, and desktop) and technology architecture (overall as well as mobility, portals, and information management).

JOB FACTOR PROFILE TABLE

FACTOR PROFILE	11495 SYSTEMS ENGINEER III, BAND F	11496 SYSTEMS ENGINEER IV, BAND G	11497 SYSTEMS ENGINEER V, BAND H
MINIMUM EDUCATION AND EXPERIENCE EQUIVALENCY	Bachelor's degree and 3 to 5 years relevant experience or equivalent combination	Bachelor's degree and 5 to 7 years relevant experience or equivalent combination	Bachelor's degree and 7 to 10 years relevant experience or equivalent combination
IMPACT	Moderate impact	Moderate impact	Substantial impact
CONTACTS - INSIDE	Provide guidance to others Coordinate activities	Provide guidance to others Coordinate activities	High-level interaction Involved in diverse and highly sensitive or confidential activities
CONTACTS - OUTSIDE	Provide information that exists within pre-established documents or programs	Provide/receive guidance, advice or information that must be analyzed and developed by the position	Provide/receive guidance, advice or information that must be analyzed and developed by the position
CONTACTS - STUDENTS	Frequent contact to provide information and instruction	Frequent contact to provide information and instruction	Limited contact

FACTOR PROFILE	11495 SYSTEMS ENGINEER III, BAND F	11496 SYSTEMS ENGINEER IV, BAND G	11497 SYSTEMS ENGINEER V, BAND H
SUPERVISION	Day-to-day supervision to employees within the dept	Provide supervisory direction to other supervisors	Provide supervisory direction to other supervisors
COMPLEXITY	Frequently adapt, combine, or make improvements to services, products, processes, & programs. Work requires reasoning skills and judgment	Occasionally required to develop new innovative solutions, services, products, processes, & programs. Work requires sophisticated reasoning skills	Continually required to develop new innovative solutions, services, products, processes, & programs. Work requires conceptual and imaginative thinking in a highly complex environment
LEVEL OF DECISION MAKING	Responsible for assisting in and influencing decisions concerning policy-setting, research, planning, or students	Responsible for making decisions regarding policy-setting, research, planning, or students	Responsible for making decisions regarding policy-setting, research, planning, or students
FREEDOM OF ACTION	Very general supervision Interpretation of work policies and procedures, and, at times deviation from standard work practice	Very general supervision Interpretation of work policies and procedures, and, at times deviation from standard work practice	Little direct supervision Considerable latitude for exercising judgment and self-direction
EFFECT OF DECISION MAKING	Directly effects entire department Moderate effect on students and employees	Directly effects entire department Moderate effect on students and employees	Directly affect entire college or school administrative unit Critical effect on students and employees
WORKING CONDITIONS	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required