



Information Technology Job Family: **Business Intelligence 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

Business Intelligence Engineer III INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer IV INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer V INDIVIDUAL CONTRIBUTOR
Work in the data warehouse environment which includes data design, database architecture, metadata and repository creation.	Coordinate the data administration technical function for both data warehouse development and maintenance.	
	Plan and oversee the technical transitions between development, testing, and production phases of the workplace.	Lead the activities of the data warehouse project teams in the design, development and implementation of data warehouses; and the configuration and auditing of data warehouses to ensure quality control of data.
	Facilitate change control, problem management, and communication among data architects, programmers, analysts, and engineers.	
	Establish and enforce processes to ensure a consistent, well managed, and well integrated data warehouse infrastructure.	Responsible for overseeing the development, operations and maintenance of data warehouse environment, including organizational balance and system coherency between front-end desktop/client environment and data warehouse back-end processing functions.
	Expand and improve data warehouse to include data from all functions of the organization using data manipulation, transformation, and cleansing tools.	

Business Intelligence Engineer III INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer IV INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer V INDIVIDUAL CONTRIBUTOR
Load functional data into the data warehouse and check for accuracy; perform data cleansing and data auditing as necessary to ensure data quality.	Review data loaded into the data warehouse for accuracy; perform data cleansing and data auditing as necessary to ensure data quality.	
Assist in the development, maintenance, and support of an enterprise data warehouse system and corresponding data marts.	Develop, maintain, and support an enterprise data warehouse system and corresponding data marts.	Responsible for managing the design, development, maintenance, and support of data warehousing and data mart technologies and systems.
Build and maintain the data infrastructure and reporting to support analytics; troubleshoot and tune existing data warehouse applications.	Design, build, and maintain the data infrastructure and reporting to support analytics; troubleshoot and tune complex existing data warehouse applications.	Design and build data infrastructure and reporting to support analytics.
	Conduct research into new data warehouse applications and determines viability for adoption.	
	Assist in establishing development standards.	Establish development standards.
	Evaluate existing subject areas stored in the data warehouse; incorporate existing subject areas into an enterprise model.	
Assist in creating new or enhanced components of the data warehouse.	Create new or enhanced components of the data warehouse.	
		Provide guidance regarding the use of data warehouse systems, capability of systems to deliver information, and subject matter expertise regarding current systems and emerging technology.
	Assess and cultivate long-term strategic goals for BI development in conjunction with end users, managers, clients, and other stakeholders.	Cultivate long-term strategic goals for BI development in conjunction with end users, managers, clients, and other stakeholders.
		Lead the development, expansion and integration efforts for merging BI platforms with enterprise systems and applications.
	Translate business requirements into appropriate Data models, ETL processes, data warehouses, and applications; work closely with analytics team to develop solutions to address business needs.	

Business Intelligence Engineer III INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer IV INDIVIDUAL CONTRIBUTOR	Business Intelligence Engineer V INDIVIDUAL CONTRIBUTOR
Assist with developing web based internal dashboards and tools; gather data from multiple external sources to create integrated databases, reports, and self-service dashboards to drive decision-making.	Develop web based internal dashboards and tools; gather data from multiple external sources to create integrated databases, reports, and self-service dashboards to drive decision-making.	Oversee the development of web based internal dashboards and tools.
Design, code, test, and document new or modified BI systems, applications, and programs.	Design, code, test, and document complex new or modified BI systems, applications, and programs.	
Assist in developing the semantic layer, metadata, reports, and report definitions; develop graphs and portal interfaces.	Develop the semantic layer, metadata, reports, and report definitions; develop graphs and portal interfaces.	Oversee the development of the semantic layer, metadata, reports, and report definitions.
Assist in the design of databases and data warehouses to ensure interoperability with BI solutions; analyze user requirements and assist in the design of functional specifications for BI front-end applications.	Design databases and data warehouses to ensure interoperability with BI solutions; analyze user requirements and design functional specifications for BI front-end applications.	
Evaluate database/data warehouse components, including hardware, relational database management systems, ETL software, metadata management tools, and database design solutions.	Evaluate and select database/data warehouse components, including hardware, relational database management systems, ETL software, metadata management tools, and database design solutions.	Evaluate and select database/data warehouse components, including hardware, relational database management systems, ETL software, metadata management tools, and database design solutions.

JOB FACTOR PROFILE TABLE

FACTOR PROFILE	11483 BUSINESS INTELLIGENCE ENGINEER III, BAND F	11484 BUSINESS INTELLIGENCE ENGINEER IV, BAND G	11485 BUSINESS INTELLIGENCE ENGINEER V, BAND H
MINIMUM EDUCATION AND EXPERIENCE EQUIVALENCY	Bachelor's degree; more than 3 years and less than 5 years experience or equivalent.	Bachelor's degree; more than 5 year and less than 7 years experience or equivalent.	Bachelor's degree; more than 7 years and less than 10 years experience or equivalent.
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	11483 BUSINESS INTELLIGENCE ENGINEER III, BAND F	11484 BUSINESS INTELLIGENCE ENGINEER IV, BAND G	11485 BUSINESS INTELLIGENCE 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, imaginative or innovative solutions, services, products, processes or programs. Work requires conceptual and imaginative thinking in a highly complex and uncharted 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