

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
F	AAS	Administrative Services	Provides various office and location support activities. Identifies, enhances and follows specific processes and procedures to maximize the efficiencies of the business to which the support is being provided; ensures the correct functioning of facilities, office and/or business support services.	X
D	AAS085	Data Control	Reviews source documents for data input Checks accuracy and relevance of input and output data by visual examination, correcting codes and batching for computer processing Verifies output against control totals, reviews format and accuracy of printouts, and distributes information to appropriate departments	X
D	AAS086	Data Entry	Operates a data entry device to key and/or verify a variety of standard and/or complex coded or uncoded business and statistical source data into a computer	X
F	AID	IT Development	Designs, develops, modifies, adapts and implements short- and long-term solutions to information technology (IT) needs through new and existing applications, systems architecture, network systems and applications infrastructure. Reviews system requirements and business processes; codes, tests, debugs and implements software solutions.	X
D	AID000	IT Development Generalist/Multidiscipline	Designs, develops, modifies, adapts and implements short- and long-term solutions to information technology (IT) needs through new and existing applications, systems architecture, network systems and applications infrastructure Reviews system requirements and business processes; codes, tests, debugs and implements software solutions Responsibilities are within the IT Development Function as a generalist or in a combination of Disciplines	X
D	AID010	Application Development	Provides application software development services typically in a defined project Develops program logic for new applications or analyzes and modifies logic in existing applications Codes, tests, debugs, documents and implements software applications Analyzes requirements, tests and integrates application components Ensures that system improvements are successfully implemented	X
D	AID015	Internet/Web Application Development	Designs and develops primarily Internet/web pages and applications such as e-commerce and content-driven websites Codes, tests, debugs, documents and implements web applications using a variety of languages and platforms such as HTML, Java, PHP, JSP, Python, AJAX, JavaScript, ASP, CGI, Perl, XML Develops proof-of-concepts and prototypes of easy-to-navigate user interfaces (UI) that consist of web pages with graphics, icons and color schemes that are visually appealing Ensures that applications are compatible across multiple computing platforms and browsers May require familiarity with streaming media concepts and techniques, including digital video and audio compression standards such as MP3, WAV and MPEG May also involve responsive web design techniques	X
D	AID020	Business Systems Analysis	Acts as a liaison between the IT development group and business units for the development and implementation of new systems and enhancement of existing systems Evaluates new applications and identifies systems requirements Evaluates new IT developments and evolving business requirements and recommends appropriate systems alternatives and/or enhancements to current systems Prepares communications and makes presentations on system enhancements and/or alternatives	X
D	AID030	IT Architecture (Systems Design)	Designs and develops IT architecture (integrated process, applications, data and technology) solutions to business problems in alignment with the enterprise architecture direction and standards Performs technical planning, architecture development and modification of specifications Develops specifications for new products/services, applications and service offerings Assesses the compatibility and integration of products/services proposed as standards in order to ensure an integrated architecture across interdependent technologies	X
D	AID040	Systems Software Development	Designs, develops, tests, debugs and implements operating systems components, software tools and utilities Determines systems software design requirements Ensures that system improvements are successfully implemented and monitored to increase efficiency Generates systems software engineering policies, standards and procedures	X
D	AID050	Software Quality Assurance and Testing	Conducts a wide range of quality control tests and analyses to ensure that software meets or exceeds specified standards and end user requirements Drafts, revises and approves test plans and scripts to ensure alignment with standards and IT strategy Creates test data files with valid and invalid records to thoroughly test program logic and verify system flow Coordinates with users to plan user acceptance testing, alpha and beta testing Ensures that system tests are successfully completed and documented and all problems are resolved	X
D	AID055	Application Development Support	Maintains, integrates and implements software applications within the organization Coordinates software application testing, quality assurance, configuration, installation and support to ensure smooth, stable and timely implementation of new software and updates to installed applications Ensures proper controls are established and maintained over test and production systems and software source code	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AID060	Database Design and Analysis	Analyzes, designs, creates and implements databases, including data models, logical and physical databases, data dictionaries and schemas, access methods, device allocations, validation checks, organization and security Develops and implements database recovery plans and procedures Develops and implements database analysis and development policies, standards and procedures Collaborates with database software vendors and external technical support on issues such as software upgrades, problems and potential solutions	X
D	AID070	Database Warehousing/Mining	Creates data warehouses (very large databases, usually loaded from transaction and Enterprise Resource Planning systems, to support decision making in an organization) and/or data marts (a subset of a data warehouse for a single department or function) Designs, develops and implements data mining tools and analyses to sift through large amounts of data stored in a data warehouse or data mart to find relationships and patterns	X
D	AID080	Network Architecture Design	Plans, researches, evaluates, designs and develops network systems by applying engineering, hardware and software design theories and principles to develop a compatible system infrastructure in line with organization strategies	X
D	AID090	Network Planning and Implementation	Researches networking requirements; prepares detailed architectural and installation plans Conducts internal studies of network performance and traffic analysis Researches problems, conducts cable and equipment installations, and evaluates new technologies	X
D	AID100	Enterprise Resource Planning	Configures, implements, maintains and upgrades enterprise resource planning (ERP) application modules (e.g., Human Resources, Finance, Supply Chain Management) Analyzes user requirements to determine ERP system configuration and customization Provides ongoing ERP system support May participate in defining requirements and selecting software vendors	X
D	AID110	IS and Cyber Security Development	Designs, develops, implements and troubleshoots various information system (IS) and cyber security software Develops, tests and validates solutions to remediate exploitable conditions on devices such as web servers, mail servers, routers, firewalls and intrusion detection systems Evaluates, codes and implements software fixes (patches) to address system vulnerabilities such as malicious code (e.g., viruses), system exploitation using SQL injection, cross-site scripting, buffer overflows, parameter tampering, hidden field manipulation, cookie poisoning and web services manipulation Conducts security assessments of systems and applications using penetration tests, ethical hacking tools and risk assessment/mediation methodologies to evaluate vulnerabilities	X
D	AID999	IT Development - No Applicable Discipline	Responsibilities are within the IT Development Function but are not described in other Discipline summaries	X
F	AIT	IT Administration	Manages the Information Technology (IT) infrastructure within an organization, including the physical network (e.g., LANs/WANs, servers, terminals) as well as server applications and software (e.g., PeopleSoft, Oracle). Configures, installs, maintains and upgrades server applications and hardware.	X
D	AIT000	IT Administration Generalist/Multidiscipline	Administers the IT infrastructure within an organization, including the physical network (e.g., LANs/WANs, servers, terminals) as well as server applications and software (e.g., PeopleSoft, Oracle) Responsibilities are within the IT Administration Function as a generalist or in a combination of Disciplines	X
D	AIT010	Computer Systems Administration	Configures, installs, maintains and upgrades computer systems hardware and software Administers and maintains security of operating systems Restores files or systems by designing, writing and implementing back-up procedures Provides operational support for the organization's information systems and peripheral equipment such as application servers, database servers, web servers, desktops, printers and storage devices Performs recovery procedures, scheduling and back-ups and monitors batch processes	X
D	AIT015	Website Administration	Plans and administers web systems hardware and operating system server software, including web server setup and implementation Maintains and monitors website functionality (e.g., links, calculators, news feeds) and website security Conducts performance monitoring, capacity planning, workload modeling and predictive analyses to identify and resolve potential issues (e.g., performance, security breaches) Collaborates with internal and/or external resources (i.e., content owners, editors, web developers) to maintain current information and tools on the organization's website(s) Troubleshoots network problems and security issues	X
D	AIT020	IT Help Desk Support	Provides technical support to the organization's internal users of computer applications and hardware (e.g., PCs, servers, mainframes) Answers questions regarding system procedures, online transactions, systems status and downtime procedures and is typically located within a call center Collaborates with network services, software systems engineering and/or application development in order to restore service and/or identify problems Maintains a troubleshooting tracking log ensuring timely resolution of problems	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AIT025	IT On-Site Support	Provides on-site technical support to the organization's internal users of computer applications and hardware (e.g., PCs, servers, mainframes) Collaborates with network services, software systems engineering and/or application development in order to restore service and/or identify problems Typically resolves issues referred by help desk support	X
D	AIT030	Database Administration	Administers database utilities, monitors the relationships between the database users and applications, and maintains the organization's databases across multiple platforms and computing environments Applies understanding of relational database concepts and query languages in order to design required summary or aggregation tables to support analyses Collaborates with technology/infrastructure staff to identify data relationships and functional requirements; analyzes and resolves issues related to information flow and content Maintains database support tools, database tables and dictionaries and recovery and back-up procedures Performs data modeling studies and develops detailed data models; maintains data model and entity relationship diagrams	X
D	AIT040	Network Control/Administration	Provides technical expertise in the management of a public and/or private network; tests and analyzes network facilities, including network control software, routers, switches, lines, modems, adapters and servers Installs, supports and/or maintains LANs and/or WANs; evaluates and recommends networking product and software upgrades Performs technical analyses of software, hardware and transmission facilities using various diagnostic tools in support of efficient network operations Monitors data traffic and controls network resource performance to ensure high-quality transmission Identifies, diagnoses and resolves technical problems related to network failure/integrity and usage of PC hardware and software	X
D	AIT050	Email Administration	Provides overall administration and support for email applications to ensure that the system's integrity and security are not compromised Embargoes incoming email on notice of virus alert, assesses the impact of the virus on email applications and works with other IT administrators to identify affected systems Measures and maintains email capacity and utilization and notifies users when utilization exceeds established limits May administer GroupWare systems	X
D	AIT060	IS Disaster Recovery/Business Continuation	Develops and tests plans to ensure the continuity of critical business functions and minimizes information loss in the event of a disaster (e.g., fire, flood, hurricane, earthquake) Sets up hot sites so that backup systems can be brought up and running quickly Institutes loss-reduction mechanisms to lessen exposure to disaster risks such as sprinkler systems, insurance policies and evacuation procedures In the event of disaster, assesses damage to computer hardware, vital records, etc., to determine what should be salvaged, restored or replaced	X
D	AIT070	IS and Cyber Security	Evaluates, tests, recommends, develops, coordinates, monitors and maintains information systems (IS) and cyber security policies, procedures and systems, including access management for hardware, firmware and software Ensures that IS and cyber security architecture/designs, plans, controls, processes, standards, policies and procedures are aligned with IS standards and overall IS and cyber security Identifies security risks and exposures, determines the causes of security violations and suggests procedures to halt future incidents and improve security Develops techniques and procedures for conducting IS and cyber security risk assessments and compliance audits, the evaluation and testing of hardware, firmware and software for possible impact on system security, and the investigation and resolution of security incidents Implements IS and cyber security policies and takes measures against intrusion, frauds, attacks or leaks	X
D	AIT080	IT Training/Documentation	Develops, coordinates and conducts IT training, educational and orientation programs for users Develops and maintains documentation of information technology systems and applications and coordinates incorporation of documentation within applications (e.g., online help) Develops, implements and/or approves training and documentation policies, standards and procedures Maintains records and prepares documentation of training programs, scheduling, employee attendance and training program effectiveness	X
D	AIT090	Voice Communications	Performs technical analysis of software, hardware and transmission systems for voice communications Ensures that remote hardware and communication facilities have procedures for installation and support of voice communications systems Collaborates with internal and external customers and vendors to determine voice communications system requirements	X
D	AIT999	IT Administration - No Applicable Discipline	Responsibilities are within the IT Administration Function but are not described in other Discipline summaries	X
F	AMT	Technical Customer Support	Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance. Responds to customer questions regarding operation and malfunctions. Advises customers on preventive maintenance and configuration adjustments to improve product performance and customer satisfaction.	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AMT000	Technical Customer Support Generalist/Multidiscipline	Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance of products and services Responsibilities are within the Technical Customer Support Function as a generalist or in a combination of Disciplines	X
D	AMT010	Technical Customer Support - Remote/Help Desk	Delivers remote (e.g., telephone, online) post-sale troubleshooting and diagnostic support services to ensure that all products and services function properly Resolves technical support inquiries directly or indirectly through on-site and/or remote first-level support representatives	X
D	AMT020	Technical Customer Support - Customer Site	Delivers post-sale services at customer sites, including installation, maintenance and repair of organization and third-party products and services to ensure that all function properly Ensures customer satisfaction by advising customers on preventive maintenance and configurations that may favorably impact performance	X
D	AMT999	Technical Customer Support - No Applicable Discipline	Responsibilities are within the Technical Customer Support Function but are not described in other Discipline summaries	X
F	AOM	Manufacturing/Operations	Oversees manufacturing and/or production operations, including assembly, machinery, processing and/or packaging. Sets production schedules based on product introduction, equipment efficiency, materials supply, staffing resources and volume required to meet demand and to ensure maximum production quantity and quality.	X
D	AOM000	Manufacturing/Operations Generalist/Multidiscipline	Manufactures sufficient quantities of quality products at or below budgeted production costs in order to meet marketplace demand Sets up equipment operation feed, speed and temperature Follows established procedures for operating various conventional and/or CNC (computerized numerical control) manufacturing equipment for tasks such as cutting, punching, forming, drilling, tapping, turning, milling and stamping to fabricate, form or shape manufactured parts, tools or parts assemblies from raw materials Selects and measures raw materials and parts to specifications to prepare for production processing Resolves issues related to the organization's production, machinery, processing and/or packaging operations Responsibilities are within Manufacturing/Operations Function as a generalist or in a combination of Disciplines	X
D	AOM010	Production Planning and Control	Plans and prepares manufacturing production schedules and departmental workflows to establish sequence and lead time of each production operation to meet shipping dates according to sales forecasts or customer orders Expedites operations that delay schedules and alters schedules to meet unforeseen conditions; includes estimating Analyzes plant capacity and production requisition data to determine manufacturing processes and required resources; prepares production reports	X
D	AOM999	Manufacturing/Operations - No Applicable Discipline	Responsibilities are within the Manufacturing/Operations Function but are not described in other Discipline summaries	X
F	AQY	Quality Assurance Methods	Develops and implements programs to establish and maintain quality standards of existing products and services, as well as developing programs to focus employees on quality improvement. Develops policies, procedures and methods to check product, material, components and/or operational quality and improve same.	X
D	AQY000	Quality Assurance Methods Generalist/Multidiscipline	Develops policies, procedures and methods to evaluate and improve the quality of products, materials, components and/or operations Develops, assures and maintains the quality of products and processes, including standard procedures (e.g., ISO 9001:2000, ISO 14000 family of standards), quality audits/review, Taguchi methods, process reengineering, etc. Responsibilities are within the Quality Assurance Methods Function as a generalist or in a combination of Disciplines	X
D	AQY020	Business Process Improvement	Analyzes and measures the effectiveness of existing business processes and develops sustainable, repeatable and quantifiable business process improvements Researches best business practices within and outside the organization to establish benchmark data Collects and analyzes process data to initiate, develop and recommend business practices and procedures that focus on enhanced safety, increased productivity and reduced cost Determines how new information technologies can support reengineering business processes May specialize in one or more of the following areas: benchmarking, business process analysis and reengineering, change management and measurement, and/or process-driven systems requirements	X
D	AQY030	Six Sigma Process	Develops, implements and sustains process improvement initiatives utilizing Six Sigma methodologies Drives process improvement initiatives throughout the organization, often extending them to suppliers and customers Typically requires or is working towards Six Sigma certification (i.e., Master Black Belt, Black Belt)	X
D	AQY040	Supplier Quality Assurance	Collaborates with suppliers to assure the quality of their products, materials, components and/or operations Monitors supplier performance and supports efforts to develop and implement changes to improve the production process Follows up with suppliers on quality deviations and ensures that solutions are identified and implemented	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AQY050	Food Safety	Ensures food products meet standards set by organization and regulatory authorities Executes and tracks regulatory compliance policies and procedures for food safety and quality, including allergens, microbiological issues, foreign materials and other food safety issues that pose a risk to human health Collaborates with quality, R&D, marketing, manufacturing and legal functions on food safety implications of new product formulations or ingredient changes Develops and reviews food quality and safety policies, provides training and manages audits by third-party inspectors	X
D	AQY999	Quality Assurance Methods - No Applicable Discipline	Responsibilities are within the Quality Assurance Methods Function but are not described in other Discipline summaries	X
F	ARP	Product Development	Discovers, develops and evaluates new product ideas, enhancements to existing products or strategic product extensions, and translates research discoveries into usable and marketable products. Leads, plans and tracks all phases of the product life cycle, from inception to introduction into the marketplace. Appraises new product ideas to determine their potential to address customer needs and to achieve goals in revenue growth and market share. Establishes product specifications and coordinates with various functions, including Engineering, Manufacturing, Marketing and Sales, to ensure successful product development and implementation.	X
D	ARP000	Product Development Generalist/Multidiscipline	Discovers, develops and evaluates new product ideas, enhancements to existing products or strategic product extensions, and translates research discoveries into usable and marketable products Leads, plans and tracks all phases of the product life cycle, from inception to introduction into the marketplace Develops design briefs for new product ideas, including specifications, sketches and/or models to present a clear, focused concept for strategic consideration Responsibilities are within the Product Development Function as a generalist or in a combination of Disciplines	X
D	ARP010	Product Development - Physical Science	Initiates, leads, conducts and supports product development based on chemistry, earth sciences, physics or metallurgy	X
D	ARP020	Product Development - Health Science	Initiates, leads, conducts and supports product development based on medicine, nuclear medicine, dentistry, osteopathy or veterinary medicine	X
D	ARP030	Product Development - Life Science	Initiates, leads, conducts and supports product development based on biology, bio-tech, physiology, pharmacology, neurosciences, microbiology, agriculture, food, genomics, bioinformatics, bacteriology or stem cell research	X
D	ARP035	Food Science/Technology	Develops and formulates new or improved food products or processes Documents processes, formulas, ingredients and results related to production tests, samples and product evaluations Conducts taste-test panel evaluation with test batches for new products or processes Typically has a strong working knowledge of food science, health and nutrition, food manufacturing processes, quality assurance principles, ingredient functionality and supply, and market research practice	X
D	ARP040	Product Development - Mathematics, Statistics and Computer Science	Initiates, leads, conducts and supports product development based on mathematics, statistics or computer science	X
D	ARP050	Product Development - Engineering	Designs, validates and brings new products to market Specifies precise new product functional requirements; designs, tests and integrates components to produce final designs; and evaluates the design's overall effectiveness, cost, reliability and safety Designs, develops, executes and evaluates fitness-for-use testing, product specifications and process validation plans; creates and reviews material part specifications and bills of materials Collaborates with internal manufacturing partners, contract manufacturers, designers and product specialists to optimize designs for manufacturability Utilizes CAD (Computer Aided Design) or CAE (Computer Aided Engineering) systems to model new designs and produce detailed engineering drawings	X
D	ARP080	Product Development - Creative Design/Industrial Design	Creates and develops the look of products (e.g., shape, color and size) with a focus on product external appearance rather than internal functionality Evaluates the feasibility of design ideas based on factors such as appearance, safety, function, serviceability, budget, production costs/methods and market characteristics	X
D	ARP999	Product Development - No Applicable Discipline	Responsibilities are within the Product Development Function but are not described in other Discipline summaries	X
F	ARR	Product Development Support	Provides technical support to discovery and development of new product ideas or strategic product extensions. Participates in analytical, experimental, investigative and other fact-finding work in support of product development scientists and engineers. Collects and classifies new product ideas. Captures specifications for product requirements and functionality.	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	ARR000	Product Development Support Generalist/Multidiscipline	Provides technical support to discovery and development of new product ideas or strategic product extensions Collects and classifies new product ideas or strategic product extensions to support evaluation of their potential to address customer needs and to achieve goals in revenue growth and market share Captures specifications for product requirements and functionality Supports the development of design briefs for new product ideas, including specifications, sketches and/or models to present a clear, focused concept for strategic consideration Responsibilities are within the Product Development Support Function as a generalist or in a combination of Disciplines	X
D	ARR010	Product Development Support - Physical Science	Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists and/or engineers engaged in product development in the fields of chemistry, earth sciences, physics or metallurgy	X
D	ARR020	Product Development Support - Health Science	Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists, physicians and/or engineers engaged in product development in the fields of medicine, nuclear medicine, dentistry, osteopathy or veterinary medicine	X
D	ARR030	Product Development Support - Life Science	Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists, physicians and/or engineers engaged in product development in the fields of biology, bio-technology, physiology, pharmacology, neurosciences, microbiology, agriculture, food, genomics, bioinformatics, bacteriology or stem cell research	X
D	ARR040	Product Development Support - Mathematics, Statistics and Computer Science	Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists and/or engineers engaged in product development in the fields of mathematics, statistics and computer science	X
D	ARR060	Product Development Technical Writing	Develops clear-written materials to support product development activities such as operations, maintenance or repair manuals, tutorials, specifications and help systems Interviews technical staff to collect product information and specifications Collects and organizes technical information and product images and coordinates layout for publication Adheres to established terminology, style and editorial quality standards	X
D	ARR070	Product Development Library/Knowledge Management	Organizes and maintains the product development research library Catalogs documents, papers and written materials as well as electronic materials Implements new or improved storage and retrieval systems Responds to various information requests from product development staff	X
D	ARR999	Product Development Support - No Applicable Discipline	Responsibilities are within the Product Development Support Function but are not summarized in other Discipline summaries	X
F	ASC	Supply Chain and Logistics	Performs supply chain and logistics functions, which may include, but are not limited to, material procurement, production planning, inventory control, outsourcing, vendor selection and distribution. Creates integrated processes among internal functions such as operations, purchasing and logistics, and outside suppliers. Focuses resources on continuous improvement of the movement of materials through various production processes and establishes key performance metrics and benchmarks relating to supply chain planning/forecasting to measure actual performance against goals on a regular basis. Promotes alignment by understanding and communicating customer needs and requirements throughout the organization.	X
D	ASC000	Supply Chain and Logistics Generalist/Multidiscipline	Performs supply chain and logistics functions such as material procurement, production planning, inventory control, outsourcing, vendor selection and distribution Creates integrated processes among internal functions (e.g., operations, purchasing and logistics) and outside suppliers Responsibilities are within the Supply Chain and Logistics Function as a generalist or in a combination of Disciplines	X
D	ASC010	Supply Chain Development and Optimization	Coordinates and integrates the flow of materials and information among suppliers, manufacturers, distributors and customers Conducts and/or oversees strategic supply chain analysis Identifies and recommends opportunities for improving efficiency, effectiveness and capabilities of the supply chain Develops and implements supply chain designs, models, strategies and/or processes to improve the business	X
D	ASC012	Supplier Development	Coordinates the development of new products, materials and/or services with suppliers Provides specifications and collaborates with suppliers on the organization's technical, operational and quality requirements Collaborates with suppliers on technical aspects of development work such as selecting materials Administers a roster of approved suppliers	X
D	ASC015	Materials Planning/Scheduling	Plans, schedules and monitors inbound movement of materials from suppliers Determines material requirements and coordinates the efficient movement of materials with purchasing, production and engineering Develops specifications for new contract orders	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	ASC020	Materials Management	Coordinates incoming and outgoing movement and storage of raw materials, finished products and parts that include functions such as warehousing, shop and delivery services to ensure material availability and delivery when needed to meet production schedules Compiles data on order volume, production schedules and forecasts and applies statistical methods to estimate future materials requirements	X
D	ASC025	Inventory Control	Ensures that inventories are secure, properly identified and readily accessible to authorized personnel Maintains controls over various types of inventories (e.g., raw materials, subassemblies, finished goods) Conducts physical inventory counts and reconciles results with inventory records Ensures that quantities of incoming and outgoing shipments are correct Conducts analyses of inventory levels and coordinates with production and sales requirements	X
D	ASC030	Logistics	Coordinates inbound and outbound logistical operations, including inventory management, warehousing and transportation to ensure sufficient supply of goods and products Controls the commercial impact of the complete range of activities from receiving, locating and dispatching, sourcing, purchasing and optimizing inventory levels Administers an effective system that meets the organization's inventory control needs through efficient transportation of raw materials, component parts and/or finished goods	X
D	ASC035	Import/Export	Administers the efficient and economical movement of goods (e.g., materials, products, equipment) across international borders in accordance with organizational policies and in compliance with relevant local, country and international customs laws and processes Prepares, reviews, approves and maintains files for import/export documents (e.g., customs declarations, a PO (purchase order), packing list, commercial invoice, SLI (shipper's letter of instruction), SED (shipper's export declaration), BOL (bill of lading), AWB (air waybill), IC (import certificate), etc.) required for the lawful completion of import/export activities Ensures that commercial and sales invoices are accurate in accordance with physical shipment and customer's SLI, quantities, value of goods, country of origin and other regulatory requirements Serves as an import/export liaison for international customers/subsidiaries, distribution, procurement, planning, manufacturing, intercompany finance, regulatory and import/export compliance functions	X
D	ASC045	Fulfillment	Fulfills orders, including order entry, administration and shipping Processes orders and oversees related activities of third-party vendors to ensure orders flow effectively through systems and processes in accordance with the organization's customer service standards Develops capacity plans to support build-to-stock and/or build-to-order environments Ensures adequate inventory levels are maintained to maximize customer satisfaction and minimize cost Prepares and maintains volume and demand planning analyses and supply and production schedules based on internal and external information to establish and effectively manage an order backlog	X
D	ASC050	Transportation	Analyzes transportation and distribution systems and procedures to ensure the efficient and economical delivery of the organization's products Reviews proposals and makes recommendations for modifications in rates and transportation regulations Evaluates freight classifications, tariff rates and operating efficiency to ensure the proper delivery of products Plans and coordinates fleet operations, including acquisition, scheduling, maintenance service and repair, and disposal of trucks, and hires common carriers (third-party transportation companies) as appropriate	X
D	ASC060	Purchasing Generalist/Multidiscipline	Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares and processes requisitions and purchase orders for the procurement of goods, services and supplies for customer-related business processes or for internal use as a generalist or in a combination of Purchasing Disciplines	X
D	ASC070	Goods Purchasing	Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares and processes requisitions and purchase orders for the procurement of goods and supplies (e.g., paper, office supplies, coffee, tea) Develops and implements strategies for cost reduction, supplier consolidation, quality improvements and process efficiencies Reviews purchase order claims and contracts for conformance to organization policy, and discusses defects and delivery problems with suppliers and negotiates refunds	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	ASC080	Services Purchasing	Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares and processes requisitions and purchase orders for the procurement of services (e.g., travel, cleaning, transportation, consulting services) Develops and implements strategies for cost reduction, supplier consolidation, service delivery improvements and process efficiencies Sources services for the organization and its employees (e.g., travel, cleaning, transportation, consulting services) or the negotiation of contracts with third-party suppliers (e.g., software licenses) Reviews purchase order claims and contracts for conformance to organization policy and discusses defects and delivery problems with suppliers and negotiates refunds	X
D	ASC090	Technical Purchasing	Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares and processes requisitions and purchase orders for the procurement of technical equipment, custom engineered products, systems, software or components Acquires and maintains understanding of technology trends, market forces, cost trends and supplier technology road maps Reviews purchase order claims and contracts for conformance to organization policy and discusses defects and delivery problems with suppliers and negotiates refunds	X
D	ASC095	Commodity Purchasing	Develops and implements procurement plans and strategies to support forecasted needs for commodities (i.e., homogeneous products that are traded solely on the basis of price such as foodstuffs, metals and fuels) Establishes and implements strategies for negotiating commodity purchase agreements based on in-depth knowledge of foreign and domestic markets for optimum pricing and terms Purchases commodities in accordance with approved buying programs, using trade judgment in implementation and/or the established procurement policy	X
D	ASC999	Supply Chain and Logistics - No Applicable Discipline	Responsibilities are within the Supply Chain and Logistics Function but are not described in other Discipline summaries	X
F	AZE	Engineering	Performs engineering work in operations, production, construction or maintenance environments. Designs and scales up manufacturing processes, instruments and equipment and tests manufactured products to maintain quality. Plans, designs and estimates time and cost and oversees construction and maintenance of structures, facilities, systems and components. Analyzes and develops solutions to engineering problems related to manufacturing equipment and systems or the causes of component failures. Develops and applies engineering standards and procedures and provides advice on issues within the engineering field.	X
D	AZE000	Engineering Generalist/Multidiscipline	Performs engineering work in operations, production, construction or maintenance environments Responsibilities are within the Engineering Function as a generalist or in a combination of Disciplines	X
D	AZE010	Chemical Engineering	Performs engineering work related to the operation of chemical plant equipment and processes Maintains and operates chemical production equipment such as condensers, absorption and evaporation towers, columns and stills Coordinates maintenance and operation of chemical production equipment such as mixing, crushing, heat transfer, distillation, oxidation, hydrogenation and polymerization May specialize in the processes pertaining to specific chemical products such as gasoline, synthetic rubber, plastics, detergents, cement, or paper and pulp	X
D	AZE030	Quality Assurance Engineering	Develops and implements methods and procedures for process control, process improvement, testing and inspection to ensure that the products are free of flaws and function as designed Designs and installs sophisticated testing equipment and performs product testing and analysis to maintain quality levels and minimize defects and failure rates Analyzes reports and defective products to determine trends and recommend corrective actions Collaborates with supplier representatives on quality problems, ensures that effective corrective actions are implemented and contributes to supplier quality improvement programs	X
D	AZE040	Civil Engineering	Plans and designs structures and facilities such as bridges, railroads, roads, airports, harbors, dams, irrigation projects, pipelines, tunnels, power plants and other projects Analyzes proposed projects to ensure structural reliability, resource efficiency and cost-effectiveness May construct models to identify project specifications and meet related needs	X
D	AZE050	Electrical Equipment Engineering	Plans and implements the design, manufacture, installation and/or maintenance of electrical systems and apparatus, such as electric motors, machinery controls, lighting, wiring and power systems/devices, for the generation, transmission and control of electric power	X
D	AZE060	Process Engineering	Develops and modifies process formulations, methods and controls to meet quality standards Recommends and implements improvements, modifications or additions to document work Reviews product development requirements for compatibility with processing methods to determine costs and schedules Integrates equipment and material capabilities to meet process module target specifications and technology target specifications	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AZE070	Industrial Engineering	Develops, designs and plans equipment and machine layouts, workflow and safety precautions to maximize utilization of plant and manufacturing facilities Ensures compliance with established industry safety and design standards and guidelines Evaluates worker productivity and recommends improvements to increase manpower efficiency and operating performance, reduce waste and delays and promote cost control/reductions Develops metrics to measure plant and equipment capacity output and identifies equipment and process flow bottlenecks Establishes accident prevention measures and plans and schedules training programs for personnel concerning all phases of production operation	X
D	AZE080	Manufacturing Engineering	Plans, designs and constructs manufacturing facilities and related structures Determines facility specifications, including analysis and evaluation of location, material resources and structural design Resolves technical problems and recommends production improvements	X
D	AZE090	Tool and Design Engineering	Develops and designs a variety of tools, machinery and equipment, such as shaping and cutting tools, dies, gauges and fixtures, for manufacturing and experimental purposes Consults with plant and manufacturing personnel to determine tool specifications and requirements Evaluates tools and machinery to improve quality and performance	X
D	AZE110	Mechanical Engineering	Directs and coordinates fabrication, installation, operation, application, maintenance and repair of mechanical or electromechanical machines, equipment, tools, engines and systems Ensures that quality levels and industry standards are maintained or improved in the manufacturing process Oversees installation, operation, maintenance and repair of equipment such as centralized heat, gas, water and steam systems Evaluates mechanical products to determine their cost effectiveness and efficiency May evaluate field installations and recommend design modifications to eliminate malfunctions	X
D	AZE120	Environmental Engineering	Analyzes environmental conditions and recommends changes to prevent or eliminate dangerous substances and materials Ensures compliance with regulatory agency policies, including government legislation pertaining to the preservation of the environment Develops, designs and may operate gauging equipment to determine the amounts of toxic pollutants present in air, land and water to ensure compliance with regulatory agency policies	X
D	AZE130	Computer Control Systems Electronics Engineering	Implements, tests, troubleshoots and improves electronic automation and controls systems in manufacturing/production/operations processes to increase production quality, efficiency and volume Checks control system schematics and specifications and uses software and testing equipment to diagnose and resolve system malfunctions Develops and defines control system applications for various machinery and equipment using technologies or platforms such as ladder logic programming for programmable logic controllers (PLCs), human machine interfaces (HMI), data control systems (DCSs), supervisory control and data acquisition (SCADA), computerized numerical control (CNC) systems or motion control technology	X
D	AZE140	Electronic Engineering	Designs, fabricates, tests, implements and modifies electronic components, products and systems in a production setting Establishes test procedures and systems for inspection of incoming electronics components Develops, tests and implements engineering change orders (ECOs) for design revisions Analyzes and evaluates new or improved electronic components	X
D	AZE150	Packaging Engineering	Develops and designs packaging equipment and materials for safe, convenient and attractive transport of goods under a variety of conditions Analyzes engineering drawings and specifications to determine the required type of packaging materials and to maximize convenience, utility and function based on the product's physical characteristics, safety and special-handling requirements Evaluates packaging and transporting methods and procedures to ensure compliance with safety and quality standards Evaluates and recommends efficient packing procedures, innovations in packaging materials, and utilization of sealing and fastening devices	X
D	AZE160	Safety Engineering	Identifies, analyzes and controls occupational hazards and promotes worksite or product safety by applying knowledge of industrial processes, mechanics, psychology, physiology, and industrial health and safety laws Advises on structural safety requirements based on failure mode analysis of such factors as fatigue, stability, stress, concentration and creep Designs protective equipment or safety devices for machines and redesigns machines and plant equipment to eliminate occupational hazards Develops standards which set tolerances, stress ratios, strength of materials and other related engineering requirements Reviews proposed occupational safety policies, guidelines and standards to determine their consistency with accepted engineering principles and practices; recommends technical changes as needed	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AZE165	Welding Engineering	Develops welding techniques, procedures, and application of welding equipment to problems involving fabrication of metals by utilizing knowledge of production specifications, properties and characteristics of metals and metal alloys, and engineering principles Conducts research to develop and test new fabrication processes and procedures, improve existing or develop new welding equipment, develop new or modify current welding methods, techniques, and procedures or discover new patterns of welding phenomena Establishes welding and inspection procedures that comply with regulatory code requirements and serve as guides for production and welding personnel Ensures quality control and welding personnel are qualified/certified and maintains compliance with established procedures Maintains current knowledge of regulatory developments in welding/hot tapping fields	X
D	AZE170	Structural/Facilities Engineering	Develops and implements capital improvement projects, such as construction, remodeling, renovation, and maintenance of buildings and facilities, including preliminary concept development, detailed engineering design and bidding Conducts preliminary surveys and prepares schematics and work drawings for the construction and maintenance of new or remodeled structures and facilities Examines and approves engineering and architectural drawings and design computations for buildings and facilities to ensure compliance with sound engineering practices and codes; incorporates functional requirements into facility requirements Estimates cost of projects; writes contracts and specifications for labor, materials and equipment for construction projects; secures bids from contractors Conducts periodic inspections of work in progress and advises construction supervisors and contractors on plans and specifications Inspects existing facilities and prepares reports on the condition, deficiencies observed, designs necessary for repairs and estimated cost of repairs	X
D	AZE999	Engineering - No Applicable Discipline	Responsibilities are within the Engineering Function but are not described in other Discipline summaries	X
F	AZT	Technical Specialty/Skilled Trade	Provides technical support to engineers and scientists in areas such as production, operations, maintenance, safety, testing, process improvement or product development. Uses schematics, diagrams, written and verbal descriptions or defined plans to perform testing and troubleshooting on electronic or mechanical components, equipment or systems. Gathers, maintains, formats, compiles and manipulates technical data using established formulae and procedures and performs detailed mathematical calculations.	X
D	AZT000	Technical Specialty/Skilled Trade Generalist/Multidiscipline	Provides technical support to engineers and scientists on a variety of technical tasks Develops and recommends procedures and methods and prepares technical reports and documentation Performs technical evaluations of events to determine root cause; recommends corrective action Responsibilities are within the Technical Specialty/Skilled Trade Function as a generalist or in a combination of Disciplines	X
D	AZT010	Equipment Maintenance Technical Specialty	Performs preventive maintenance and repairs on equipment and systems (e.g., mechanical, electrical) Evaluates and recommends equipment improvements to improve availability, capability and yield Performs equipment failure analyses (including preventive and unscheduled maintenance) Troubleshoots and diagnoses equipment problems Prepares technical reports to document equipment modifications and equipment maintenance procedures	X
D	AZT015	Civil Engineering Technical Specialty	Supports engineers in the planning, design, and supervision of the construction of structures and facilities such as bridges, railroads, roads, airports, harbors, dams, irrigation projects, pipelines and tunnels Monitors and inspects completed and in-progress construction work and may performs tests to ensure quality standards are met Compiles and analyzes traffic patterns, hydrological and meteorological information and other engineering data Prepares detailed site layouts and specifications Reviews and analyzes design drawings for feasibility, performance, safety and durability	X
D	AZT020	Calibration Technical Specialty	Performs precise calibrations and preventive and corrective maintenance on measuring and test equipment, instruments, tools, gauges and fixtures Sets up test equipment and conducts tests on performance and reliability of mechanical, structural or electromechanical equipment Develops calibration operating procedures and documentation for all instruments Selects and procures instrument spare parts to minimize machine downtime Coordinates calibration with outside contractors for equipment that cannot be maintained internally	X
D	AZT030	Product Test/Debug Technical Specialty	Debugs and troubleshoots failed electronic components, assemblies and systems using test equipment and schematics Monitors component failures and initiates supplier notification if defect rates exceed acceptable levels Identifies and resolves issues that adversely affect test yields Collaborates with engineering and manufacturing teams to establish production test plans and processes Compiles and maintains test-related documentation, including test plans, procedures, results and reports	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AZT040	Facilities Technical Specialty	Operates, monitors and maintains utilities, including HVAC (heating, ventilation and air conditioning) setup, maintenance and balancing, WFI (water for injection), purified water and process equipment Maintains, troubleshoots and repairs facilities mechanical components and electrical equipment and systems in accordance with SOPs (standard operating procedures), internal requirements, manufacturer's specifications and safety policies Develops, maintains and secures a spare parts inventory of basic maintenance hand and power tools Recommends purchase of maintenance tools, equipment and supplies as required to streamline processes and increase efficiency Assists engineers in developing methods and procedures to control or improve facilities processes	X
D	AZT050	Process Technical Specialty	Provides technical support to engineers to achieve improvements in cycle-time, yield, unit cost, quality, safety and compliance of production and operations processes Monitors instruments and equipment and collects operating data, including calibration, inspection, testing and repair activities, to assist in making on-line adjustments to instruments, equipment or products Analyzes and resolves malfunctions and deviations of instruments and control systems to identify and resolve problems Conducts analyses and prepares reports using metrics from salvage tracking, trending, reporting and root-cause analyses Maintains process designs to optimize process and facility use while conforming to standard operating procedures (SOPs) and Good Manufacturing Practices (GMPs)	X
D	AZT060	Quality Control/Inspection Technical Specialty	Provides technical support to the quality and quality engineering (QE) functions Conducts nondestructive examination (NDE) and quality control (QC) inspections on products, materials, components, parts, etc., at various stages of the production process to ensure compliance with established quality and reliability standards Captures and analyzes statistical data from processes to either confirm compliance with established standards or identify deviations from standards Recommends new or enhanced methods, procedures and standards	X
D	AZT070	Test Equipment Technical Specialty	Plans, lays out, assembles, modifies, validates and maintains test equipment and related structural assemblies by reading and interpreting blueprints, engineering drawings and sketches Assists engineers in operating test equipment to obtain performance data on parts and assemblies under varying operating conditions Collects, compiles and summarizes test data and reviews results with Engineering to resolve problems such as product or equipment issues, malfunctions and incomplete test data Diagnoses test equipment malfunctions and services and repairs equipment as required	X
D	AZT080	CAD/CAE Drafting Technical Specialty	Prepares and maintains detailed design drawings, schematics or specifications typically using computer-aided design software Works closely with design originators (e.g., engineers, designers) to resolve design details or discrepancies or to prepare drawings of unusual, complex or original designs which require a high degree of precision using computer-aided drafting (CAD) or computer-aided engineering (CAE) equipment Creates, modifies and controls detailed two- and three-dimensional parts and assembly drawings from engineers' and technicians' sketches, plans and written and verbal instructions Develops and maintains drafting standards and procedures Evaluates and recommends purchase of CAD/CAE-related computer hardware and software	X
D	AZT085	Design and Drafting	Prepares drawings for civil engineering projects such as bridges, highways, waterfront facilities, sanitary and drainage systems, traffic systems, tunnels, mass transit systems, airports, commercial and industrial buildings, dams and reservoirs Prepares drawings or schematics of electronic power distribution systems involving electronic circuitry Prepares drawings for HVAC (heating, ventilating and air conditioning) systems, piping systems, refrigeration systems and equipment machinery, engines and mechanical apparatus Prepares drawings for vehicle (e.g., automobiles, planes, motorcycles) design and production Prepares maps, cross-sections, logs, graphs and charts used in resource exploration operations	X
D	AZT090	Production/Operations Laboratory Technical Specialty	Assists engineers and scientists with a variety of laboratory tasks Performs chemical and/or physical analyses or scientific tests using both routine and special techniques in compliance with all safety and infection control standards Collects, analyzes and processes laboratory samples Records results of tests, organizes data, performs basic computations, and prepares reports and analyses using standard procedures and guidelines Installs, operates, maintains and repairs laboratory test equipment, apparatus, systems and supplies	X
D	AZT100	Biology Technical Specialty	Assists biologists with a variety of laboratory tasks in studying living organisms and infectious agents related to product development or quality control of production processes or products Analyzes organic substances such as blood, food and drugs	X

Benchmark/ Discipline/ Function	Code	Title	Description	GI CSR US
D	AZT110	Chemistry Technical Specialty	Assists chemists and chemical engineers conducting chemical and physical laboratory tests using instrumental techniques in making qualitative and quantitative analyses of solids, liquids and gaseous materials related to product development or quality control of production processes or products Performs quantitative and qualitative analyses in organic, inorganic, physical, analytical chemistry, photochemistry or electrochemistry to determine the chemical and physical properties of materials, liquids and gases	X
D	AZT120	Stationary Engineering Technical Specialty	Operates, monitors, adjusts, maintains and repairs stationary engines and mechanical equipment and systems used in production and operations under the overall guidance of stationary engineers Ensures that equipment such as generators, motors, turbines, boilers and complex fire safety systems in buildings and plants operate safely, economically and within established limits by monitoring meters, gauges and computerized controls either on-site or from a central location Performs repairs ranging from a complete overhaul to replacing defective valves, gaskets or bearings Records relevant events and facts concerning the operation and maintenance of equipment Conducts routine maintenance to maintain or improve operating efficiency such as lubricating moving parts, replacing filters, removing soot and corrosion from boilers, and adding chemicals to boiler water to prevent corrosion and harmful deposits	X
D	AZT130	Technical Documentation Control	Compiles and maintains technical documentation such as blueprints, drawings, change orders and specifications Examines documents to verify completeness and accuracy of data and resolves discrepancies with document originators Maintains computerized document control records management system and/or hardcopy documents to ensure compliance with all applicable and required standards, including GMP (good manufacturing practice) and QSR (quality system regulation) requirements Develops and maintains procedures and standards for maintaining documents and change control of documents, including document development, approval, production, distribution and amendment Plans and directs document and content management life cycles and may work with either structured or unstructured metadata	X
D	AZT999	Technical Specialty/Skilled Trade - No Applicable Discipline	Responsibilities are within the Technical Specialty/Skilled Trade Function but are not described in other Discipline summaries	X