Knowledge/Skill Levels:
Many functional labor categories below (marked with “#”) are further subdivided by knowledge/skill level. Definitions of these knowledge/skill levels are shown in this chart:

<table>
<thead>
<tr>
<th>Level</th>
<th>Knowledge/Skill Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry-Level</td>
<td>Applies fundamental concepts, processes, practices, and procedures on technical assignments. Performs work that requires practical experience and training. Work is performed under supervision.</td>
</tr>
<tr>
<td>Journeyman</td>
<td>Possesses and applies expertise on multiple complex work assignments. Assignments may be broad in nature, requiring originality and innovation in determining how to accomplish tasks. Operates with appreciable latitude in developing methodology and presenting solutions to problems. Contributes to deliverables and performance metrics where applicable.</td>
</tr>
<tr>
<td>Senior</td>
<td>Possesses and applies a comprehensive knowledge across key tasks and high impact assignments. Plans and leads major technology assignments. Evaluates performance results and recommends major changes affecting short-term project growth and success. Functions as a technical expert across multiple project assignments. May supervise others.</td>
</tr>
<tr>
<td>Master</td>
<td>Provides technical/management leadership on major tasks or technology assignments. Establishes goals and plans that meet project objectives. Has domain and expert technical knowledge. Directs and controls activities for a client, having overall responsibility for financial management, methods, and staffing to ensure that technical requirements are met. Interactions involve client negotiations and interfacing with senior management. Decision making and domain knowledge may have a critical impact on overall project implementation. May supervise others.</td>
</tr>
</tbody>
</table>

The “G” in the labor identification (ID) numbers below indicates Government-Site Work. The “C” in the labor ID numbers below indicates Contractor-Site Work.

Administration/Clerical (101G# and 101C#)

(a) Responsible for developing, drafting, writing and editing reports, briefs, proposals, and other documents in support of a client’s requirements.

(b) Interfaces with personnel to coordinate meetings, maintain logs, records and files, provides end-user support, and performs general administrative duties.

(c) Assists in budgetary, billing, and financial management.

(d) Responsible for preparing and/or maintaining systems, programming and operations documentation, procedures and methods, including user reference manuals.

Applications Developer (102G# and 102C#)
(a) Designs, develops, enhances, debugs, and implements software. Troubleshoots production problems related to software applications.

(b) Researches, tests, builds, and coordinates the conversion and/or integration of new products based on client requirements. Designs and develops new software products or major enhancements to existing software.

(c) Addresses problems of systems integration, compatibility, and multiple platforms.

(d)Consults with project teams and end users to identify application requirements.

(e) Performs feasibility analysis on potential future projects to management.

(f) Assists in the evaluation and recommendation of application software packages, application integration and testing tools.

(g)Resolves problems with software and responds to suggestions for improvements and enhancements.

(h) Acts as team leader on projects.

(i) Instructs, assigns, directs, and checks the work of other software developers on development team.

(j) Participates in development of software user manuals.

Applications Systems Analyst (103G# and 103C#)

(a) Formulates/defines system scope and objectives.

(b) Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results.

(c) Prepares detailed specifications for programs. Assists in the design, development, testing, implementation, and documentation of new software and enhancements of existing applications.

(d) Works with project managers, developers, and end users to ensure application designs meet business requirements.

(e) Formulates/defines specifications for complex operating software programming applications or modifies/maintains complex existing applications using engineering releases and utilities from the manufacturer.

(f) Designs, codes, tests, debugs, and documents those programs.

(g) Provides overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting, and advanced mathematical/scientific software packages.
(h) Assists all phases of software systems programming applications.

(i) Evaluates new and existing software products.

**Business Process Consultant (104G and 104C)**

(a) Analyzes process and re-engineering, with an understanding of technical problems and solutions as they relate to the current and future business environment.

(b) Creates process change by integrating new processes with existing ones and communicating these changes to impacted Business Systems teams.

(c) Recommends and facilitates quality improvement efforts.

**Business Systems Analyst (105G and 105C)**

(a) Formulates and defines systems scope and objectives based on both user needs and a thorough understanding of business systems and industry requirements.

(b) Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operation time, and form of desired results. Includes analysis of business and user needs, documentation of requirements, and translation into proper system requirements specifications.

(c) Provides consultation on complex projects and is considered to be the top level contributor/specialist of most phases of systems analysis, while considering the business implications of the application of technology to the current and future business environment.

**Chief Information Security Officer (106G and 106C)**

(a) Responsible for determining enterprise information security standards. Develops and implements information security standards and procedures.

(b) Provides tactical information security advice and examining the ramifications of new technologies.

(c) Ensures that all information systems are functional and secure.
Computer Scientist (107G and 107C)

(a) Acts as a senior consultant in complex or mission critical client requirements.

(b) Develops, modifies, and applies computer modeling and programming applications to analyze and solve mathematical and scientific problems affecting system and program performance.

(c) Participates in all phases of scientific and engineering projects such as research, design, development, testing, modeling, simulating, training, and documentation.

Computer Forensic & Intrusion Analyst (108G and 108C)

(a) Provides knowledge in computer and network forensics.

(b) Conducts vulnerability assessments/penetration tests of information systems.

(c) Develops, researches, and maintains proficiency in tools, techniques, countermeasures, and trend in computer and network vulnerabilities, data hiding, and encryption.

(d) Identifies, deters, monitors, and investigates computer and network intrusions.

(e) Provides computer forensic support to high technology investigations in the form of evidence seizure, computer forensic analysis, and data recovery.

Configuration Management Specialist (109G# and 109C#)

(a) Provides configuration management planning.

(b) Describes provisions for configuration identification, change control, configuration status accounting, and configuration audits.

(c) Regulates the change process so that only approved and validated changes are incorporated into product documents and related software.

Data Architect (110G AND 110C)

(a) Designs and builds relational databases. Performs data access analysis design, and archive/recovery design and implementation.

(b) Develops strategies for data acquisitions, archive recovery, and implementation of a database.

(c) Works in a data warehouse environment, which includes data design, database architecture, and metadata repository creation.

(d) Translates business needs into long-term architecture solutions.

(e) Defines, designs, and builds dimensional databases.
(f) Develops data warehousing blueprints, evaluating hardware and software platforms, and integrating systems.

(g) Reviews and develops object and data models and the metadata repository to structure the data for better management and quicker access.

**Data Warehousing Specialist (111G# and 111C#)**

(a) Coordinates the data administration technical function for both data warehouse development and maintenance.

(b) Facilitates change control, problem management, and communication among data architects, programmers, analysts, and engineers.

(c) Establishes and enforces processes to ensure a consistent, well-managed, and well-integrated data warehouse infrastructure.

(d) Analyzes and identifies data and metadata requirements.

(e) Defines user requirements and database design specifications.

(f) Designs, implements, and supports data warehousing requirements. Implements business rules via stored procedures, middleware, or other technologies.

(g) Provides product support and maintenance of the data warehouse.

(h) Performs data warehouse design and construction.

(i) Prepares/implements data verification and testing methods for the data warehouse.

**Database Specialist (112G# and 112C#)**

(a) Provides all activities related to the administration of computerized databases.

(b) Projects long-range requirements for database administration and design in conjunction with other managers in the information systems function.

(c) Designs, creates, and maintains databases in a client/server environment.

(d) Conducts quality control and auditing of databases in a client/server environment to ensure accurate and appropriate use of data.

(e) Advises users on access to various client/server databases.

(f) Designs, implements, and maintains complex databases with respect to JCL, access methods, access time, device allocation, validation checks, organization, protection and security, documentation, and statistical methods.
(g) Applies knowledge and experience with database technologies, development methodologies, and front-end (e.g., COGNOS)/back-end programming languages (e.g., SQL). Performs database programming and supports systems design.

(h) Includes maintenance of database dictionaries, overall monitoring of standards and procedures, file design and storage, and integration of systems through database design.

**Disaster Recovery Specialist (113G# and 113C#)**

(a) Designs and administers programs to include policies, standards, guidelines, training programs, and a viable quality assurance process for disaster recovery.

(b) Oversees and reviews the testing and implementation of software, data systems, and data networks to ensure that the integrity and security of all electronic data and data systems are adequately protected.

(c) Facilitates the preparation of an organization-wide business resumption plan.

(d) Assists in the coordination and establishment of disaster recovery programs and business resumption planning across mainframe and client server platforms.

(e) Coordinates and monitors simulation testing across all platforms.

(f) Designs and administers programs to include policies, standards, guidelines, training programs, and a viable quality assurance process for disaster recovery.

**Enterprise Architect (114G and 114C)**

(a) Provides high-level architectural expertise to managers and technical staff.

(b) Develops architectural products and deliverables for the enterprise and operational business lines.

(c) Develops strategy of system and the design infrastructure necessary to support that strategy.

(d) Advises on selection of technological purchases with regards to processing, data storage, data access, and applications development. Sets standards for the client/server relational database structure for the organization (SQL, ORACLE, SYBASE, etc.).

(e) Advises of feasibility of potential future projects to management.

**Enterprise Resource Planning (ERP) Analyst (115G and 115C)**

(a) Assists with the development and maintenance of the Enterprise Resource Planning (ERP) program.
(b) Analyzes and evaluates ERP application systems. Assists in software upgrades, documentation, and implementation.

(c) Customizes and configures workflow to allow the integration of client/server applications.

(d) Tests ERP layout to ensure the system is meeting corporate needs.

**ERP Business/Architectural Specialist (116G and 116C)**

(a) Adapts functional business requirements and processes to technical solutions based upon comprehensive enterprise application solution sets.

(b) Enterprise resource planning and management processes, including but not limited to: knowledge management, investment analysis, data warehousing, e-commerce, return on investment analysis, human resource analysis, material management and logistics, supply chain management, procurement, ordering, manufacturing, decision support, and information dissemination.

**Financial Analyst (117G and 117C)**

(a) Provides support in the areas of budget, billing, reporting, and financial management for IT initiatives.

**Geographic Information System (GIS) Analyst/Programmer (118G and 118C)**

(a) Demonstrates proficiency in GIS analysis and data modeling.

(b) Demonstrates and maintains proficiency with current and developing technologies and software related to geographic analysis.

(c) Coordinates, manages, administers, and develops the Geographic Information Systems.

(d) Develops various types of GIS maps and related data sets.

(e) Designs and implements GIS analytical procedures.

(f) Performs analysis and maintenance of GIS systems.

**Graphics Specialist (119G and 119C)**

(a) Produces graphic art and visual materials for promotions, advertisements, films, presentations, packaging, and informative and instructional material through a variety of media outlets such as websites and CD-ROMs.

(b) Generates, manipulates, and integrates graphic images, animations, sound, text and video generated with automated tools into consolidated and seamless multimedia programs.
Groupware Specialist (120G and 120C)

- Provides the implementation, maintenance, and support of company messaging system.
- Provides technical support on local groupware replication and client dial-up access issues.

Hardware Engineer (121G# and 121C#)

- Provides analysis related to the design, development, and implementation of hardware for products.
- Develops test strategies, devices, and systems.
- Performs stress and performance tests on a variety of computer hardware including circuit boards, processors and wiring.

Help Desk Specialist (122G# and 122C#)

- Responds to and diagnoses problems through discussion with users.
- Ensures a timely process through which problems are controlled. Includes problem recognition, research, isolation, resolution, and follow-up steps.
- Supervises operation of help desk and serves as focal point for customer concerns.
- Provides support to end users on a variety of issues.
- Identifies, researches, and resolves technical problems.
- Responds to telephone calls, email and personnel requests for technical support.
- Documents, tracks, and monitors the problem to ensure a timely resolution.
- Provides second-tier support to end users for either PC, server, or mainframe applications or hardware.
- Interact with network services, software systems engineering, and/or applications development to restore service and/or identify and correct core problem.
- Simulates or recreates user problems to resolve operating difficulties.
- Recommends systems modifications to reduce user problems.

Information Assurance/Security Specialist (123G# and 123C#)

- Determines enterprise information assurance and security standards.
(b) Develops and implements information assurance/security standards and procedures.

(c) Coordinates, develops, and evaluates security programs for an organization. Recommends information assurance/security solutions to support customers’ requirements.

(d) Identifies, reports, and resolves security violations.

(e) Establishes and satisfies information assurance and security requirements based upon the analysis of user, policy, regulatory, and resource demands.

(f) Supports customers at the highest levels in the development and implementation of doctrine and policies.

(g) Applies know-how to government and commercial common user systems, as well as to dedicated special purpose systems requiring specialized security features and procedures.

(h) Performs analysis, design, and development of security features for system architectures.

(i) Analyzes and defines security requirements for computer systems which may include mainframes, workstations, and personal computers.

(j) Designs, develops, engineers, and implements solutions that meet security requirements.

(k) Provides integration and implementation of the computer system security solution.

(l) Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems.

(m) Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle.

(n) Ensures that all information systems are functional and secure.

Information Specialist/Knowledge Engineer (124G and 124C)

(a) Develops information retrieval solutions to support client requirements for specified domain subjects, using information retrieval software languages and automated text analysis and extraction techniques.

Modeling and Simulation Specialist (125G and 125C)

(a) Specialist in modeling and simulation functions or operations such as, but not limited to exercises, plans, coordination, demonstrations, and instruction in the fields such as,
but not limited to health, environmental, transportation, law enforcement, and security for military, and civil agencies.

(b) Supports live, constructive, or virtual training.

Network Specialist (126G# and 126C#)

(a) Provides technical guidance for directing and monitoring information systems operations. Designs, builds, and implements network systems.

(b) Directs compilation of records and reports concerning network operations and maintenance. Troubleshoots network performance issues. Analyzes network traffic and provides capacity planning solutions.

(c) Monitors and responds to complex technical control facility hardware and software problems. Interfaces with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance.

(d) Manages the purchase, testing, installation, and support of network communications, including LAN/MAN/WAN systems.

(e) Performs system-level design and configuration of products including determination of hardware, OS, and other platform specifications.

(f) Plans large-scale systems projects through vendor comparison and cost studies.

(g) Performs a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation, including personnel, hardware, software, budgetary, and support facilities and/or equipment.

(h) Provides quality assurance review and the evaluation of new and existing software products.

(i) Provides assistance and oversight for all information systems operations activities, including computer and telecommunications/communications operations, data entry, data control, LAN/MAN/WAN administration and operations support, operating systems programming, system security policy procedures, and/or web strategy and operations.

(j) Provides input to policy level discussions regarding standards and budget constraints.

(k) Supervises all personnel engaged in the operation and support of network facilities, including all communications equipment on various platforms in large scale or multi-shift operations.

(l) Supervises complex operations that involve two or more additional functions such as, but not limited to, network operations, systems security, systems software support, and production support activities.
(m) Monitors and responds to hardware, software, and network problems.

(n) Provides the routine testing and analysis of all elements of the network facilities (including power, software, communications machinery, lines, modems, and terminals).

(o) Utilizes software and hardware tools and identifies and diagnoses complex problems and factors affecting network performance.

(p) Troubleshoots network systems when necessary and makes improvements to the network

Program Manager (127G and 127C)

(a) Organizes, directs, and manages contract operation support functions, involving multiple, complex and inter-related project tasks.

(b) Manages teams of contract support personnel at multiple locations.

(c) Maintains and manages the client interface at the senior levels of the client organization.

(d) Meets with customer and contractor personnel to formulate and review task plans and deliverable items. Ensures conformance with program task schedules and costs.

Project Manager (128G and 128C)

(a) Leads team on large projects or significant segment of large complex projects.

(b) Analyzes new and complex project related problems and creates innovative solutions involving finance, scheduling, technology, methodology, tools, and solution components.

(c) Provides applications systems analysis and programming activities for a Government site, facility or multiple locations.

(d) Prepares long and short-range plans for application selection, systems development, systems maintenance, and production activities and for necessary support resources.

(e) Oversees all aspects of projects.
Quality Assurance Specialist (129G# and 129C#)

(a) Provides development of project Software Quality Assurance Plan and the implementation of procedures that conforms to the requirements of the contract.

(b) Provides an independent assessment of how the project's software development process is being implemented relative to the defined process and recommends methods to optimize the organization's process.

(c) May be responsible for all activities involving quality assurance and compliance with applicable regulatory requirements.

(d) Conducts audits and reviews/analyzes data and documentation.

(c) Develops and implements procedures and test plans for assuring quality in a system development environment which supports large databases and applications.

Research Analyst (130G and 130C)

(a) Plans, organizes, and conducts research in a variety of areas, such as new or existing products, science, social science, law or business, etc. in support of an IT initiative.

(b) Searches sources such as reference works, literature, documents, newspapers, statistical records, and other sources of information. May use Internet, Intranet, magazines, periodicals, journals, and other media to perform research.

(c) Analyzes information and statistical data to prepare reports and studies for use by professionals.

Strategic/Capital Planner (131G and 131C)

(a) Provides strategic planning of large projects or a significant segment of a strategic planning portion of a large complex project.

(b) Provides the overall approach to clarify mission statements so they can be used as springboards in envisioning their desired future.

(c) Assists in developing mission and vision statements, subsequent goal delineation, provides guidance for building operational plans and specifying measurable outcomes to include capital outlay planning efforts in a consolidated strategic planning process and prioritizes those initiatives.

(d) Assist in preparation of key strategic planning documentation, including OMB Form 300.
Subject Matter Expert (132G# and 132C#)

(a) Serves as subject matter expert, possessing in-depth knowledge of a particular area, such as business, computer science, engineering, mathematics, or the various sciences.

(b) Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation.

(c) Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases.

(d) Applies principles, methods and knowledge of the functional area of capability to specific task order requirements, advanced mathematical principles and methods to exceptionally difficult and narrowly defined technical problems in engineering and other scientific applications to arrive at automated solutions.

Systems Engineer (133G and 133C)

(a) Provides analysis related to the design, development, and integration of hardware, software, man-machine interfaces and all system level requirements to provide an integrated IT solution.

(b) Develops integrated system test requirement, strategies, devices and systems.

(c) Directs overall system level testing.

Technical Editor (134G and 134C)

(a) Reviews content of technical documentation for quality.

(b) Produces technical and scientific illustrations for presentations and/or publication, as appropriate to the requirements.

(c) Ensures that documents follow the style laid out in the company's style guide.

Technical Writer (135G and 135C)

(a) Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses.

(b) Coordinates the display of graphics and the production of the document.

(c) Ensures content is of high quality and conforms with standards.
Test Engineer (136G# and 136C#)

(a) Evaluates, recommends, and implements automated test tools and strategies.

(b) Designs, implements, and conducts test and evaluation procedures to ensure system requirements are met.

(c) Develops, maintains, and upgrades automated test scripts and architectures for application products. Also writes, implements, and reports status for system test cases for testing. Analyzes test cases and provides regular progress reports.

(d) Serves as subject matter specialist providing testing know-how for the support of user requirements of complex to highly complex software/hardware applications.

(e) Directs and/or participates in all phases of risk management assessments and software/hardware development with emphasis on analysis of user requirements, test design and test tools selection.

Training Specialist (137G# and 137C#)

(a) Assesses, designs, and conceptualizes training scenarios, approaches, objectives, plans, tools, aids, curriculums, and other state of the art technologies related to training and behavioral studies.

(b) Identifies the best approach training requirements to include, but not limited to hardware, software, simulations, course assessment and refreshment, assessment centers, oral examinations, interviews, computer assisted and adaptive testing, behavior-based assessment and performance, and team and unit assessment and measurement.

(c) Develops and revises training courses. Prepares training catalogs and course materials.

(d) Trains personnel by conducting formal classroom courses, workshops, and seminars.

Voice/Data Communications Engineer (138G# and 138C#)

(a) Provides technical direction and engineering knowledge for communications activities including planning, designing, developing, testing, installing and maintaining large communications networks.

(b) Ensures that adequate and appropriate planning is provided to direct building architects and planners in building communications spaces and media pathways meet industry standards.

(c) Develops, operates, and maintains voice, wireless, video, and data communications systems.
(d) Provides complex engineering or analytical tasks and activities associated with one or more technical areas within the communications function.

**Web Content Analyst (139G and 139C)**

(a) Provides for development and content that will motivate and entertain users so that they regularly access the website and utilize it as a major source for information and decision-making.

(b) Provides managing/performing website editorial activities including gathering and researching information that enhances the value of the site.

**Web Designer (140G and 140C)**

(a) Designs and builds web pages using a variety of graphics software applications, techniques, and tools.

(b) Designs and develops user interface features, site animation, and special-effects elements. Contributes to the design group's efforts to enhance the look and feel of the organization's online offerings.

(c) Designs the website to support