## 1. Application Development

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<tr>
<th>Position Title(s):</th>
<th>ITS6, GIS Developer</th>
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<tr>
<td>Date Range(s):</td>
<td>12/16/2017-06/31/2019</td>
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### Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that designed, documented, developed, modified, tested, installed, implemented, maintained, AND supported new or existing application software provide clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**Application Development** job tasks, knowledge, skills & abilities may include but are not limited to:

- Understands existing and emerging technologies and their applicability in the software implementation environment (e.g., vendor or open source, Service Oriented Architectures (SOA)).
- Knows and considers available COTS software to make ‘build or buy’ decisions.
- Knows Internet standards relative to web technology development.
- Considers web technology in relation to privacy standards and federal regulations.
- Identifies and uses tools for information management and technology product design and development.
- Ability to analyze and refine systems requirements.
- Analyzes and resolves complex problems, such as multiple product problems, dump analysis or major conflicts caused by new software version.
- Applies expert system analysis skills to maintain, monitor and troubleshoot system performance and environment.

**Examples of the types of work that is allied with the Application Development job family:**

- Using a specific software development method and tools to develop applications and databases for staff and/or the public to consume to perform their daily work.
- Web Development: Develops user-interface (UI) design, coding, test, and implementation of application components and web services; writes re-usable code using industry and agency standard development tools and framework.
- Designs and develops SQL databases systems for large scale data tracking, reporting and multi-user access.
- Using software development methods and tools integrates and supports Custom-Off-the-Shelf (COTS) software and services. Coordinates with vendor technical staff on implementing and coordinating system upgrades and enhancements.
- Develop, test, implement, and support custom developed business application or development of custom features within a COTS system or proprietary application.
- Uses a combination of Geographic Information System (GIS), web programming skills and development tools to build GIS map and data services that are created in a web map format. The web maps are combined with other web tools that allow the user to dynamically interact with the map to search for and display the information.
• Develops mockup/prototype interaction designs, including users’ interaction models, information architecture, wire frames and screen flows.

2. IT Architecture

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<th>Position Title(s):</th>
<th>ITS6 Enterprise Architect</th>
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<td>Date Range(s):</td>
<td>07/16/2014-12/15/2017</td>
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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves the analysis, planning, design, implementation, documentation, assessment, governance and management of the structural and decision making framework to align IT strategy, plans, and systems with the mission, goals, structure, and processes of the organization include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**IT Architecture job tasks, knowledge, skills & abilities may include but are not limited to:**

- Demonstrates understanding of basic architecture documentation (i.e., work product) methodologies at each level of a commonly used framework.
- Able to identify opportunities for improving systems that support business processes.
- Able to provide guidance and support to customers and stakeholders on the use of the enterprise system.
- Able to apply emerging and evolving technologies to current and future business needs at the enterprise, operational and tactical levels.
- Able to identify opportunities to improve enterprise-level systems to support business processes and utilize emerging technologies.
- Ensures rigorous application of information security/assurance policies, principles and practices to all components of the enterprise architecture.
- Knowledge of key regulatory requirements and guidance relating to enterprise architecture.

**Examples of the types of work that is allied with the IT Architecture job family:**

- Designs and develops a solution approach to perform all of the following tasks:
  - Integrating with other systems
  - Securing user interactions with data
  - Executing workflow and triggers for a technology area based on federal, state and agency requirements.

3. IT Business Analysis

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<tr>
<th>Position Title(s):</th>
<th>ITS4 Business Analyst</th>
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<td>Date Range(s):</td>
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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves applying analytical processes to the planning, design and implementation of IT systems to meet the business requirements of customer organizations; to includes the work of translating business needs to technical requirements for activities apply to establishing new IT systems as well as improving existing IT systems include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.
IT Business Analysis job tasks, knowledge, skills & abilities may include but are not limited to:

- Able to identify stakeholders and select appropriate business analysis techniques to manage requirements and assess the progress of the work.
- Able to ensure stakeholder’s actual underlying needs are understood and captured.
- Able to understand and apply the usability engineering lifecycle, particularly user-centered analysis and usability testing techniques.
- Able to assess proposed solutions to determine the best solution to meet business needs.
- Able to identify gaps and shortcomings in solutions and determine necessary workarounds or changes to the solution.
- Able to work with stakeholders to identify and understand their needs, concerns and working environment.

Examples of the types of work that is allied with the IT Business Analysis job family:

- Elicit business requirement from business stakeholders and business subject matter experts. Translate business requirements and function specs into technical requirements, review functional specifications and design documents for technical compliance against business requirements, identify gaps between functional spec and the capabilities of the technology, manage small IT business project deliverables coordinating IT resources with resource managers.
- Work with product specialists, usability specialists and interaction designers to develop and iterate user interface designs based on research and usability test results.
- Assist in defining functional interaction requirements specifications. Also non-functional requirements (performance, availability, etc.).
- Surveys applicable technologies and reports on the strengths and weaknesses of those technologies to address the business process. Makes recommendations on the technology approach to use and identifies where new technology customizations are necessary to adapt the technology to the business needs of the organization.

4. Customer Support

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<th>Position Title(s):</th>
<th>ITS2 Technical Support Specialist</th>
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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves the planning and delivery of customer support services, including installation, configuration, troubleshooting, and customer assistance for customer technology. For example: desktop computers, phone, laptops, email accounts, and video conferencing include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

Customer Support job tasks, knowledge, skills & abilities may include but are not limited to:

- Uses knowledge of IT principles in the practical application of methods and practices to plan, implement and coordinate services to diagnose and resolve problems and ensure continuous service.
Examples of the types of work that is allied with the Customer Support job family:

- Provides technical support for business applications using IT tools such as remote desktop, configuring automated systems to deploy software updates/installations, troubleshoot application connectivity issues, create and maintain technical documentation of desktop management, create an agency standard PC image.
- Provides technical advice and guidance relative to problems involving user interface, browser, and hardware and supporting software. Troubleshoots and restores technical service and equipment troubles by analyzing, identifying and diagnosing faults and symptoms.
- Coordinates efforts with the Help Desk to ensure all calls outside the customer environment are effectively resolved. Similar to experienced Help Desk professional, with the added responsibility of interfacing directly with external customers to the business.

5. Data Management

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<tr>
<th>Position Title(s):</th>
<th>ITS5 Business Intelligence Specialist</th>
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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves the planning, development, implementation, designing and administration of IT systems for the acquisition, storage, and retrieval of data include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

Tip: This type of work does not include business users such as research and business analyst that use data systems to compile data for analysis.

Data Management job tasks, knowledge, skills & abilities may include but are not limited to:

- Ensures rigorous application of information security/assurance policies, principles and practices in the delivery of data management services.
- Ensures data recovery, maintenance, data integrity and space requirements are met for physical database through formulations of policies, procedures and standards to ensure effective data management enterprise wide.

Examples of the types of work that is allied with the Data Management job family:

- Take business requirements and design, develop, test, implement agency databases. Administer agency databases to include schema development, performance tuning and integration between different business applications.
- Practices architectural techniques and tools for achieving consistent access to and delivery of data across the spectrum of data subject areas and data structure types in the enterprise, to meet the data consumption requirements of all applications and business processes.
- Design, test and implement data retrieval methods (including exports, proprietary reports, and database views).

6. IT Policy and Planning

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<th>Position Title(s):</th>
<th>ITS4 IT Policy and Planning Analyst</th>
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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves a wide range of IT management activities that typically extend and apply to an entire organization or major components of an organization. This includes strategic planning, capital planning and investment control, workforce planning, policy and standards development, resource management, knowledge management and auditing include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**IT Policy and Planning job tasks, knowledge, skills & abilities may include but are not limited to:**

- Able to align IT investments with the organization’s mission (e.g., capital planning and investment control, Enterprise Performance Life Cycle).
- Able to use established analysis, business cases and decision-making processes to evaluate capital investments in IT and IT-alternative investments.
- Able to consider organizational strategic and performance plans to identify specific requirements and capital planning processes to drive the acquisition strategy (e.g., Enterprise performance life cycle).
- Applies knowledge of organization’s IT acquisition approach to compare, contrast and evaluate acquisitions.

**Examples of the types of work that is allied with the IT Policy and Planning job family:**

- Plans, analyzes and leads strategic business initiatives and legislative mandates that require the development implementation and integration of technology.
- Works with service owners and business owners to develop approaches in network design, secure data access, and data management to ensure operational resilience and availability.
- Recommend implementing new technology solutions to improve a business systems; Provides recommendations for IT funding priorities based on organizational goals; Participates in an IT system audit and provide recommendations for improvement; Develops and implement a new policy to mitigate system risks.

### 7. Network and Telecommunications

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Job Tasks, Knowledge, Skills & Abilities:

If you held permanent status in an IT classification that involves the planning, analysis, design, development, testing, configuration, installation, implementation, integration, maintenance, and/or management of networked systems used for the transmission of information in voice, data, and/or video formats include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**Network and Telecommunications job tasks, knowledge, skills & abilities may include but are not limited to:**

- Knowledge of capabilities and limitations of data transmission modes and media.
- Knowledge of data transmission concepts, functions and mechanisms.
- Applies network systems knowledge to plan, design and develop systems, and properly deploy systems to support the organization.
- Uses network engineering knowledge in design, operations and security activities.
• Skilled in the acquisition, technical acceptance, installation, testing, modification, or replacement of telecommunications equipment, services and systems.
• Able to analyze missions, plans, organization structure, current and planned infrastructures and other related factors affecting enterprise network requirements.

Examples of the types of work that is allied with the Network and Telecommunications job family:
• Using network engineering methods, works with consultants and WaTech to design and support agency LAN/WAN Infrastructure.
• Using structured language and command line interfaces to navigate, evaluate and design the state network.
• Design and represent physical and logical network topologies within a database.
• Install and configure physical and virtual network components to implement a network design.
• Research and evaluation of immerging network equipment, technologies and trends for continual realignment and improvement of state network.
• Engineering and designing new telecommunications systems.

8. IT Project Management

Position Title(s):

Date Range(s):

Job Tasks, Knowledge, Skills & Abilities:
If you held permanent status in an IT classification that involves the monitoring or management of technology projects using standard project management techniques. This includes creating projects estimates, reporting, resource, and capacity planning include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed

IT Project Management job tasks, knowledge, skills & abilities may include but are not limited to:
• Able to empower and inspire others to deliver successful change initiatives.
• Able to identify, address and resolve differences between individuals and/or interest groups.
• Able to identify and/or develop frameworks and methodologies to ensure management of change initiatives will be comprehensive and consistent across different initiatives. In this context ‘framework’ means the parameters, constraints or rules established to standardize delivery.

Examples of the types of work that is allied with the IT Project Management job family:
• Leads in the development of strategic vision, roadmaps, and release plans for technology projects. Coordinates releases and sprints across different technology work streams and identifies potential technology gaps or collisions.
• Reports directly to Executive Sponsor/CIO on project deliverables, resources, budget and overall performance.
• Manages the work of technical teams including project and product backlogs, the tracking and resolution of impediments, develops the key metrics required to monitor implementation success, and triages issues in team velocity. Work with business and product owners to reprioritize backlog work items and adjustments in scope, schedule, and budgets.
9. IT Security

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Job Tasks, Knowledge, Skills & Abilities: If you held permanent status in an IT classification that ensuring the confidentiality, integrity, and availability of systems, networks, and data through the planning, analysis, development, implementation, maintenance, and enhancement of information systems security programs, policies, procedures and tools include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed

**IT Security job tasks, knowledge, skills & abilities may include but are not limited to:**

- Ability to promote awareness of security issues among management and ensuring sound security principles are reflected in organizations’ visions and goals.
- Skilled in the development and implementation of programs to ensure that systems, network, and data users are aware of, understand, and adhere to systems security policies and procedures.

**Examples of the types of work that is allied with the IT Security job family:**

- Evaluate proposed system changes to maintain security and data protection policies.
- Responsible for conducting security audits and implementing corrective actions.
- Develop and execute security policies, plans, and procedures; design and implement data network security measures; operate Network Intrusion Detection and Forensics; conduct performance analysis of Information Systems security incidents; develop COOP/DR plans and support certification of Information Systems and Networks.
- Operate and manage all aspects of Information Systems, data availability, integrity, authentication, confidentiality, and non-repudiation. Implement and monitor security measures for communication systems, networks, and provide advice that systems and personnel adhere to established security standards and Governmental requirements for security on these systems.

10. Systems Administration

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Job Tasks, Knowledge, Skills & Abilities: If you held permanent status in an IT classification that involves planning and coordinating the installation, testing, operation, troubleshooting, and maintenance of hardware, software systems, and systems environment. This includes defining or coordinating common processes or procedures to support IT operations include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**Systems Administration job tasks, knowledge, skills & abilities may include but are not limited to:**
- Ensures information security/assurance policies, principles, practices are an integral element of the operating environment.
- Ability to anticipate and forecast hardware requirements when software needs change.
- Supports decisions to determine when hardware upgrades are required based on emerging software requirements.
- Ensures system availability, functionality, integrity and efficiency, and maintains system configuration.
- Ensures customers receive current versions of supported software as they become available.

Examples of the types of work that is allied with the Systems Administration job family:
- Customizes, configures, and extends content management tools used by web content producers.
- Analyze, plan, test, and implement application configuration changes that include system control data affecting application behaviors, including behaviors that affect integration with other systems.
- Designs and prototypes application. Create, maintain and implement source code for application or program.
- Conduct testing: unit testing of application modules and their changes, integration testing of interaction of application modules and changes, as well as testing the interfaces between systems. Load testing, Regression tests. Respond to findings of tests (troubleshooting and repairing bugs).
- Develop, prepare, and deploy system changes into technology environments (development, test, preproduction, production).
- Develop system administration automation, monitoring, and event handling to identify and rapidly resolve faults in systems.

11. IT Vendor Management

If you held permanent status in an IT classification that manages IT vendors and ensures that all service level agreements (SLAs) or underpinning contracts for IT services across the organization are delivered according to specifications. This work also includes working with IT, business units, and contract managers in identifying and evaluating technology services providers that are consistent with the organization’s business strategy and architecture. Include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**IT Vendor Management job tasks, knowledge, skills & abilities may include but are not limited to:**
- Establishes and formalizes vendor relationship to create mutually beneficial partnerships.
- Brings about vendor performance and client expectations.
- Recognizes, monitors, and manages vendor risk to the organization.
- Coordinates and oversees vendor relationships, contracts, performance and risks.
- Balances contractual requirements against expectations to ensure both stakeholders and vendors work toward a common understanding of outcomes.
- Partners in the evaluation and negotiation of vendor contracts.
**Examples of the types of work that is allied with the IT Vendor Management job family:**

- Research different technology, assessing technology for fit within the existing environment, identifying proper technical criteria and requirements for selection.
- Serves as internal and external contact regarding system and service requirements, coordinates issues across multiple technology disciplines, and serves as the domain expert and an information manager.
- Develops and leads the implementation of all vendor management strategic planning. Oversees contracts, contract management, procurement, vendor relationships, and asset management for the IT function. Establishes the standards, procedures, and guidelines that direct all aspects of IT vendor management, consistent with procurement and financial policies and controls.

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<th>12. Quality Assurance (QA)</th>
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**Job Tasks, Knowledge, Skills & Abilities:**

If you held permanent status in an IT classification that involves monitoring the software engineering processes and methods used to ensure quality. Quality Assurance (QA) is a supporting process that has to provide the independent assurance in which all the work products, activities and processes comply with the predefined plans. The methods by which this is accomplished are varied and may include ensuring conformance to one or more standards such as ISO 9000 or a model such as CMMI. QA encompasses the entire software development process, which includes process such as requirements definition, software design, coding, source code control, code reviews, software configuration management, testing, release management and product integration include clear examples of all of the specific job tasks, knowledge, skills & abilities you acquired and/or performed.

**Quality Assurance job tasks, knowledge, skills & abilities may include but are not limited to:**

- Able to apply various assurance assessment methods (such as validation of security requirements, risk analysis, threat analysis, vulnerability assessments and scans, and assurance evidence) to determine if the software/system being assessed is sufficiently secure within tolerances.
- Able to execute multiple phases of test, including system, regression and user acceptance testing.
- Able to establish and specify the required or desired level of assurance for a specific software application, set of applications, or software-reliant system.

**Examples of the types of work that is allied with the Quality Assurance job family:**

- Analyzes business requirements, design documents for completeness and testability. Develops test plans, test scenarios, test cases, test data and test scripts for different types of testing activities.
- Develops quality assurance plans by conducting hazard analyses; identifying critical control points and preventive measures; establishing critical limits, monitoring procedures, corrective actions, and verification procedures; monitoring inventories.
- Manage source code control and stored procedures between development lifecycles utilizing TFS. Manages application control through whitelisting, SCCM packages, updates and version control. Partners with test leads and architects to develop and establish Quality Assurance standards and best practices.