GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
AUTHORIZED FEDERAL SUPPLY SCHEDULE CATALOG/
PRICE LIST

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order is available through GSA Advantage!, a menu-driven database system. The internet address for GSA Advantage! is http://www.gsaadvantage.gov

SCHEDULE TITLE: MULTIPLE AWARD SCHEDULE

CONTRACT NUMBER: GS-35F-0894N

CONTRACT PERIOD: 09/09/2018 through 09/08/2023

For more information on ordering from Federal Supply Schedules click on the GSA Schedules link at www.gsa.gov

CONTRACTOR: Software Consultants Inc.
8245 Boone Blvd, Suite 630
Vienna, VA 22182

CONTRACTOR’S ADMINISTRATION SOURCE: Surya Tipparaju Naveen Hota
703 655 8123 301 442 8571
suri@scigrp.com naveen@scigrp.com

BUSINESS SIZE: Small Disadvantaged Business
CUSTOMER INFORMATION:

1a. TABLE OF AWARDED SPECIAL ITEM NUMBERS (SINs)

<table>
<thead>
<tr>
<th>SIN</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>54151S</td>
<td>Information Technology Professional Services</td>
</tr>
<tr>
<td>OLM</td>
<td>Order-Level Materials (OLM)</td>
</tr>
</tbody>
</table>

1b. LOWEST PRICED MODEL NUMBER AND PRICE FOR EACH SIN: Not applicable – services only

1c. HOURLY RATES: See labor category descriptions and hourly rates.

2. MAXIMUM ORDER FOR THE FOLLOWING SINS IS $500,000:

<table>
<thead>
<tr>
<th>SIN</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>54151S</td>
<td>Information Technology Professional Services</td>
</tr>
</tbody>
</table>

3. MINIMUM ORDER: $100

4. GEOGRAPHIC COVERAGE: Domestic, 50 states, Washington, DC, Puerto Rico, US Territories

5. POINT(S) OF PRODUCTION: N/A

6. DISCOUNT FROM LIST PRICES OR STATEMENT OF NET PRICE: All Prices offered are net.

7. Quantity discounts: None.

8. Prompt payment terms: None. Net 30

9. FOREIGN ITEMS: None

10a. TIME OF DELIVERY: As mutually agreed.

10b. EXPEDITED DELIVERY: Contact Contractor

10c. OVERNIGHT AND 2-DAY DELIVERY: Contact Contractor

10d. URGENT REQUIREMENTS: Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery.

11. FOB POINT: Destination

12a. ORDERING ADDRESS: 8245 Boone Blvd., Suite 630, Vienna, VA 22182

12b. ORDERING PROCEDURES: For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA’s) are found in FAR 8.405-3

13. PAYMENT ADDRESS: 8245 Boone Blvd., Suite 630, Vienna, VA 22182
14. **WARRANTY PROVISION:** Standard Commercial Warranty.

15. **EXPORT PACKING CHARGES:** N/A

16. **TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARD ACCEPTANCE:**
   Accepted above the micro-purchase level

17. **TERMS AND CONDITIONS OF RENTAL, MAINTENANCE, AND REPAIR (IF APPLICABLE):**
   N/A

18. **TERMS AND CONDITIONS OF INSTALLATION (IF APPLICABLE):** N/A

19. **TERMS AND CONDITIONS OF REPAIR PARTS INDICATING DATE OF PARTS PRICE LISTS AND ANY DISCOUNTS FROM LIST PRICES (IF AVAILABLE):** N/A

20a. **TERMS AND CONDITIONS FOR ANY OTHER SERVICES (IF APPLICABLE):** N/A

20b. **LIST OF SERVICE AND DISTRIBUTION POINTS (IF APPLICABLE):** N/A

21. **LIST OF PARTICIPATING DEALERS (IF APPLICABLE):** N/A

22. **PREVENTIVE MAINTENANCE (IF APPLICABLE):** N/A

24a. **SPECIAL ATTRIBUTES SUCH AS ENVIRONMENTAL ATTRIBUTES (e.g. recycled content, energy efficiency, and/or reduced pollutants):** N/A

24b. **Section 508 Compliance for EIT:** as applicable

25. **DUNS NUMBER:** 159827104

26. **NOTIFICATION REGARDING REGISTRATION IN SYSTEM FOR AWARD MANAGEMENT (SAM) DATABASE:** Registration is valid
## Labor Category Pricing

<table>
<thead>
<tr>
<th>Category Number</th>
<th>Labor Category</th>
<th>09-09-2018</th>
<th>09-09-2019</th>
<th>09-09-2020</th>
<th>09-09-2021</th>
<th>09-09-2022</th>
<th>09-09-2023</th>
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<td></td>
<td>Base Year</td>
<td>Year Two</td>
<td>Year Three</td>
<td>Year Four</td>
<td>Year Five</td>
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<td>$183.64</td>
<td>$188.60</td>
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<td>LC0032</td>
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<td>LC0033</td>
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<td>$65.38</td>
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</table>
Labor Category (LCAT) Descriptions

LC0001 PROGRAM MANAGER

Experience: Eight or more years of related experience or an equivalent combination of education and training that provides the required skills, knowledge and abilities. At least 5 years must have been in a supervisory capacity.

Key Responsibilities:
- Management, performance and completion of projects.
- Responsible, with full authority, for management, performance and completion of projects such as computer applications, systems development, facilities management, network operations, and engineering studies.

Duties include:
- Establishes and monitors master plans and schedules.
- Oversees the development of design concepts, test and acceptance criteria, and directs integration and installation activities.
- Establishes and maintains contact with client, business partners, and project team members to ensure conformance to customer requirements.
- Provides administrative oversight, handles contractual matters and serves as a liaison between the Contracting Officer's Technical Representative (COTR), the Contracting Officer (CO), and corporate management.
- Consults with COTR and users to reduce costs and maximize efficiency in achieving the stated requirements.
- Plans, organizes, and controls the overall activities of the project, i.e., project management, technical work, quality of work, schedule, and costs associated with various task orders issued under the contract.
- Ensure that all activities conform to the Terms and Conditions of the contract and task order procedures.
- Coordinates activities and seeks resolution of contractual and technical problems while working with the CO, the COTR and the Government project manager.

Education: Baccalaureate Degree in an associated discipline.

LC0002 PROJECT MANAGER

Experience: Minimum of 6 years of directly related professional experience including 2 years of management and/or supervisory experience. Ability to oversee the project, provide leadership and motivate the employees. Excellent writing and oral communication skills and ability to interact with the customer/client are necessary.

Key Responsibilities:
- Performance of a group of employees, provides direction and review, assigns work, develops timelines.

Responsibility: Provides direction to and is responsible for the performance of a group of employees functioning as an integral part of a larger project organization.

Duties include:
- Provides work direction and review for subordinates.
- Takes work direction and report to upper management on a regular basis.
- Develops detailed work control plans with milestone schedules for all assigned tasks within section.
- Assigns work; monitors performance to ensure satisfactory work progress.
- Provides input to cost estimates and resource requirements for all assigned tasks.
- Performs periodic reviews of all assigned tasks within section.
- Conducts section/staff performance evaluations.
• Prepares status reports as required
• Performs work in area of specialty
Education: BS/BA degree preferably in area of supervisory responsibility or related disciplines

LC0003 PRINCIPAL SYSTEMS ARCHITECT

Experience: Ten or more years of experience in multiple areas of information technology, in-depth knowledge of the technology landscape, strong design and programming skills in JAVA, C and C++. Capable of taking responsibility for the technology baseline for the project and using best practices for system development and delivering it on time within the budgetary constraints. Possess excellent writing and oral communication skills and ability to interact with the customer/client.
Key Responsibilities: Analysis of system, design of architecture, ensures compatibility & compliance, Supervises staff, Assists with budgeting & strategizing
Responsibility: Establishes system information requirements by analyzing the system for the development of enterprise-wide or large-scale information systems. Designs architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Evaluates analytically and systematically problems of workflows, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff and interacts with other teams and project manager. Responsible for System Architecture, System Specifications and standards. Helps in budget planning, strategy formation. Coordinates with the contractor representatives and or vendors and defines the software development methodology. Follows standards / committees / working groups / industry trends and identifies new technological areas to prototype with and or apply.
Education: BS/BA in Engineering, Computer Science, or related academic field. 2 years related experience may be substituted for degree.

LC0004 SENIOR SYSTEMS ARCHITECT

Experience: Over 8 years of experience in multiple areas of information technology, in-depth knowledge of the technology landscape. Strong design and programming skills in JAVA, C and C++. Capable of taking responsibility for the technology baseline for the project and using best practices for system development and delivering it on time within the budgetary constraints. Excellent writing and oral communication skills and ability to interact with the customer/client.
Key Responsibilities: System requirement in a single technical area, defines interfaces (internal & external), implements processes
Responsibility: Analyses and establishes the requirements of the system in the development of enterprise-wide or large-scale information systems. Designs architecture to include the software to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Evaluates analytically and systematically problems of workflows, organization, and planning and develops appropriate corrective
action. Helps Principal Architect in supervising and providing daily supervision and direction to staff. Responsible for the system requirements, interface definitions (internal as well as external). Typically responsible for systems in a single discipline / technical area. Manages prototypes, activities, and teams. Responsible to implement processes and conducts various trade studies.

Education: BS/BA in Engineering, Computer Science, or related academic field. 2 years related experience may be substituted for degree.

LC0005 SENIOR STAFF MEMBER

Experience: 8 years with 4 years directly related experience. Add'l education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. Experience or MA/MS = 3 yrs.

Key Responsibilities: Implements SW development methodology, Designs & develops complex software solutions, Conducts design reviews

Responsibility: Analyst/engineer in communications, hardware, software, systems, data analysis, facilities planning, or resource management. Work may include full life cycle support, analysis, design, programming, testing, training, and documentation. Provides expertise in disciplines such as information security, IT planning, GIS or computer graphics. Implements software development methodology, and manages lifecycle management. Responsible to design and develop complex software solutions. Defines and implements various tools for: CASE, CM, I&T, QA. Co-ordinates with other system leads for integration and design. Conducts design reviews.

Education: BS/BA in Engineering, Computer Science, or related academic field. 2 years related experience may be substituted for degree.

LC0006 STAFF MEMBER

Experience: 4 years with 2 years directly related experience. Additional education may be substituted for years of experience. Ph.D./Sc.d. = 4 yrs. MA/MS = 3 yrs.

Key Responsibilities: Assists with design & development of components to a software solution, participates in design reviews

Responsibility: Junior analyst/engineer in communications, hardware, software, systems, data analysis, facilities planning, or resource management. Work may include full life cycle support, analysis, design, programming, testing, training, and documentation. Provides expertise in disciplines such as information security, IT planning, GIS or computer graphics. Helps senior staff member in designing and developing components. Participates in design reviews

Education: BS/BA in Engineering, Computer Science, or related academic field. 2 years related experience may be substituted for degree.

LC0007 ASSOCIATE STAFF MEMBER

Experience: 0-2 years directly related experience. Additional education may be substituted for years of experience. BS/BA = 2 yrs.

Key Responsibilities: Technical writing, system/LAN administration, help desk support, office automation.

Responsibility: Technician, technical writing, editing, analytical tools, training, design, testing, implementation, system/LAN administration, resource management, help desk support, spreadsheets, graphics, office automation. Entry level position providing technical support for the development and testing of software.

Education: AS/AA in Engineering, Computer Science, or related academic field, or relevant trade school diploma. 1 year related experience may be substituted for degree.

LC0008 DATABASE TECHNOLOGIST II
Experience: Three years of general experience in database design, database implementation, and database administration using database management systems (DBMS) in a complex mainframe or network-based environment, similar in size and complexity to the client environment, where skills in problem analysis, testing, and performance tuning were obtained. Of these three years at least one year must include technical expertise in using at least one of the following DBMS products relevant to the specific task: IMS, DB2, ADABAS, ORACLE, SYBASE, SQL Server, INGRES. In addition, work experience must include at least two years of concurrent experience in technical writing in the form of status reports and documentation of problems and problem resolution as well as presenting verbal reports.

Key Responsibilities: Defines database organizations & indexing methods, establishes standards, specifies & controls SW enhancements

Responsibility: Design, develop, implement, and administer databases. Provides technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support use requirements. Defines database organization and indexing methods for specific user applications. Working closely with security systems specialist, defines security procedures for backup and recovery and to control user access. Monitors and fine tunes database performance. Establishes standards for data definition and access. Specifies and controls implementation of software enhancements and problem solutions to the operational system. Establishes testing requirements for systems under development. Supports design reviews and conducts prototype developments.

Education: BS degree in Computer Science, Information Science, Engineering, or a related field.

LC0009 DATABASE TECHNOLOGIST III

Experience: Four (4) years general experience including two (2) years specialized experience. Requires some supervisory responsibility and management interface. Two of the four years of experience must include providing direction to personnel performing database administration tasks and technical expertise in using at least one of the following DBMS products relevant to the specific task: IMS, DB2, ADABAS, ORACLE, SYBASE, SQL Server, INGRES.

Key Responsibilities: Evaluates & recommends available DBMS products, determines existing file organization, indexing methods & security, Defines policies.

Responsibility: Provides highly technical expertise and guidance in the design, implementation, operation and maintenance of database management systems (DBMS). Evaluates and recommends available DBMS products after matching requirements with system capabilities. Determines file organization, indexing methods, and security procedures for specific applications. Controls the design and use of databases. Controls the global view of databases, controls the access to the databases, assures the safekeeping of the databases (from accidental or intentional damage or loss), and monitors the use of databases. Must be capable of defining all required database administration policies, procedures, standards, and guidelines. Is an authority on the design of databases and the use of database management systems. Evaluates and recommends available DBMS products after matching requirements with system capabilities. Prepares and delivers presentations on DBMS concepts. Supports system design and software development. Prototypes designs and conducts design reviews.

Education: Bachelor’s degree in computer science or related discipline.

LC0010 DATABASE TECHNOLOGIST IV

Experience: Six (6) years of general experience in systems analysis or programming including three (3) years of specialized experience in DBMSs. Two of the six years of experience must include providing direction to personnel performing database administration tasks and technical expertise in using at least one of the following DBMS products relevant to the specific task: IMS, DB2, ADABAS, ORACLE, SYBASE, SQL Server, INGRES.
Key Responsibilities: Coordinates integration and testing of SW with other computer sub-systems
Responsibility: Provides highly technical expertise and guidance in the design, implementation, operation and maintenance of database management systems (DBMS). Evaluates and recommends available DBMS products after matching requirements with system capabilities. Determines file organization, indexing methods, and security procedures for specific applications. Controls the design and use of databases. Controls the global view of databases, controls the access to the databases, assures the safekeeping of the databases (from accidental or intentional damage or loss), and monitors the use of databases. Must be capable of defining all required database administration policies, procedures, standards, and guidelines. Is an authority on the design of databases and the use of database management systems. Evaluates and recommends available DBMS products after matching requirements with system capabilities. Prepares and delivers presentations on DBMS concepts. Works closely with the architectural team and co-ordinates other integration and test activities with other sub-systems.

Education: Bachelor's Degree in Computer Science or related discipline.

LC0011 DATABASE TECHNOLOGIST V

Experience: Ten years of experience in database design and database administration using database management systems (DBMS) in a complex mainframe or network-based environment, similar in size and complexity to the client’s environment, where skills in problem analysis, testing, and performance tuning were obtained. Four of the ten years of experience must include providing direction to personnel performing database administration tasks and technical expertise in using at least one of the following DBMS products relevant to the specific task: IMS, DB2, ADABAS, ORACLE, SYBASE, SQL Server, INGRES. Four of the ten years of experience must be in leading a technical project that includes at least two other technical personnel. This experience must include planning and coordinating the work of others as required for achieving the project goals. The project must have been formally recognized, with periodic status reviews, written or oral, provided to management. In addition, work experience must include at least two years of concurrent experience in technical writing in the form of status reports and documentation of problems and problem resolution as well as presenting verbal reports.

Key Responsibilities: Supervisory; ensures customer satisfaction; Makes recommendations for changes in architecture; Proposal development; budgeting
Responsibility: Design, develop, implement, and administer databases. Provides technical expertise in the use of DBMSs. Evaluates and recommends available DBMS products to support user requirements. Defines database organization and indexing methods for specific user applications. Working closely with security systems specialist, defines security procedures for backup and recovery and to control user access. Monitors and fine tunes database performance. Establishes standards for data definition and access. Specifies and controls implementation of software enhancements and problem solutions to the operational system. Establishes testing requirements for systems under development. Provides leadership for staff performing technical support, problem resolution, and installation of hardware and software; including the review of work products for correctness and progress in accordance with schedules. Coordinates with the Program Manager to ensure problem resolution and user satisfaction. Makes recommendations, if needed, for changes in the supported technical architecture. Prepares status reports and formal presentations on the supported technical architecture to colleagues, subordinates, and end user representatives. Serves as senior DBMS Specialist on complex applications projects in the DBMS design, implementation and administration area. May supervise other DBMS specialists on project teams. Serves as consultant and advisor to system designers to develop DBMS options for system implementation proposals. Evaluates database design tradeoffs, impacts, user expectations, performance levels, and space allocation requirements, balancing ease of use with performance. Responsible for the operation and maintenance of the central encyclopedia which will serve as the repository for all systems information entered through the use of CASE tools. Serves as the liaison with the central encyclopedia vendor and as the liaison with the mainframe facility running the encyclopedia. Identifies areas where
standards are appropriate and proposes standards, guidelines, controls and procedures to ensure efficient, disciplined usage of the encyclopedia. Gains and continually develops a thorough understanding of the encyclopedia and its security and management. Identifies new technologies for DBMS. Works closely with the senior architect. Assures software engineering process is applied for DBMS design and development. Helps senior management in budget planning.

Education: BA degree in Computer Science or a related discipline.

LC0012 SENIOR TESTER

Experience: 6-8 years of experience in the software and IT industry. Ability to analyze business requirements and business process models to generate test cases for integration and systems testing. Familiarity with various programming languages and operating environments. Ability to manage the system testing process according to a predefined schedule. Plan and budget the testing activity. Familiar with industry testing standards and tools and stimulation test techniques.

Key Responsibilities: Supervisory; identifies and develops test cases; generation of custom SW tools to test backed processes; Planning & Budgeting

Responsibility: Analyses the requirements and understand the high level system integration needs and application interactions. Identifies and methodically develops test cases and help testers generate various test cases. Responsible to see the test cases cover all aspects of application, system and integration tests. Besides using commercial tools, generate custom software tools to test backend processes. Configure various applications and identify data sets to cover all aspects of testing. Guide testers in load/performance/unit/integration/system level testing. Plan and budget testing activity and resources. Interfaces with development and IV&V teams and provide status reporting and trouble ticket tracking. Defines test configuration baselines. Identifies new tool sets for test automation. Supports design reviews and coordinates with QA, CM, IV&V and subsystem teams. Defines and manages test bed and help senior management in budget planning. Implements test processes and procedures. Responsible for testing reports.

Education: BA degree in Computer Science or a related discipline

LC0013 TESTER

Experience: 4-6 years of experience in software and application testing. Ability to configure and execute application programs. Familiarity with various programming languages and operating environments. Ability to document software and system defects.

Key Responsibilities: Documents test cases; creates test data; analyzes inputs and outputs to find semantic discrepancies.

Responsibility: Primarily responsible to document and develop test cases, testing applications as well as system software using both manual as well as automated testing techniques. Testing should include black box testing, white box testing, branch validation and by writing scripts as well as by using various industry tools. Should track and manage defects using tools like Rational ClearQuest/PVCS Bug tracking. Create test data and or provide background stubbing to test various external interfaces. Analyze inputs and outputs to find semantic discrepancies. Configure applications. Interface with development groups and contribute to test reports. Conducts toolset trade studies. Responsible for test case execution and analyzing result sets.

Education: BA degree in Computer Science or a related discipline

LC0014 JUNIOR TESTER

Experience: 2-4 years of experience in software and application testing. Ability to configure and execute application programs. Familiarity with various programming languages and operating environments. Ability to document software and system defects.
Key Responsibilities: Writes up test cases and test application software; configures and maintains test lab baseline; supports report generation
Responsibility: Responsible to write test cases and test application software. Help senior testers in identifying and documenting test cases. Configure and maintain test lab baseline (CM). Support report generation, coordinate with CM team to keep the test bed in sync with the stated environments.
Education: BA degree in Computer Science or a related discipline. 2 years of industry experience in relevant field can be substituted for degree.

LC0016 ASSOCIATE IT ENGINEER

Experience: 5 years directly related experience. Additional education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. Exp. MA/MS = 3 yrs.
Key Responsibilities: Full life-cycle support; conducts training, develops document for information security, IT planning, GIS & computer graphics
Responsibility: Analyst/engineer in communications, hardware, software, systems, data analysis, facilities planning, or resource management. Work may include full life cycle support, analysis, design, programming, design, training, and documentation. Provides expertise in disciplines such as information security, IT planning, GIS or computer graphics.
Education: BS/BA in Engineering, Computer Science, or related academic field. 2 years related experience may be substituted for degree.

LC0017 IT ENGINEER I

Experience: 3 years exper. directly related to responsibilities below. Add’l education may be substituted for years of experience. Ph.D./Sc.d. = 4 yrs., MA/MS = 3 years.
Key Responsibilities: Application programming, application maintenance, bug fixes and documenting the system changes
Responsibility: The IT Engineer provides support in communications, hardware, software, systems, security, data analysis, facilities planning, or resource management. Work may include application programming, application maintenance, bug fixes, and documenting the system.
Education: BS/BA in Engineering, Computer Science, or related academic field. Two years related experience may be substituted for degree.

LC0019 IT ENGINEER III

Experience: 6 years exper. directly related to responsibilities below. Add’l education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs., MA/MS = 3 yrs.
Key Responsibilities: Generates Data analysis, system design, programming, documentation
Responsibility: The IT Engineer III provides life cycles support for areas such as system hardware, software, security, operating systems, distributed computing. Primarily responsible for data analysis, requirements gathering, system design, programming, and documentation, trade studies and selection of IT tools.
Education: BS/BA in Engineering, Computer Science, or related academic field. Two years related experience may be substituted for degree.

LC0020 IT ENGINEER IV

Experience: 8 years exper directly related to responsibilities below. Addl education may be substituted for years of experience. Ph.D./Sc. = 4 yrs., MA/MS = 3 yrs.
Key Responsibilities: Under the direction of Engineer V conducts performance tuning, business process analysis and reporting.
Responsibility: The IT Engineer IV provides life cycle support for areas such as system architecture, hardware, software, operating systems, distributed computing, data analysis, programming, system performance, communications, or networking. Work may include analysis, design, programming, testing, training, and documentation and facilitate planning. Supports IT Engineer V in architecture, performance tuning, and business process analysis, and reporting.

Education: BS/BA in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.

LC0021 IT ENGINEER V

Experience: 10 years experience directly related to responsibilities below. Additional education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. or MA/MS = 3 yrs.

Key Responsibilities: Resp. for overall system analysis; Defines metrics for system performance; Evaluates system sizing; Implements system development; Planning

Responsibility: Provides program leadership and full life cycle support for areas such as system architecture, hardware, software, operating systems, distributed computing, data analysis, facilities planning, resource management, programming, system performance, communications, or networking.

Duties include:
- Responsible for the overall system analysis, design, programming, testing, training, and documentation.
- Provide expertise in disciplines such as information security, IT planning.
- Defines metrics for system performance
- Evaluate system sizing requirements and assumptions
- Identify new technologies
- Implement system development methodologies/processes, security policies and supports transition planning.
- Provide project planning, coordination, scheduling, reporting, and briefings.
- Responsible for segment architecture and supports the architectural team in the enterprise architecture.

Education: BS/BA in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.

LC0022 Junior Systems Engineer

Experience: 3 years of directly related experience in use of structured analysis, design methodologies and design tools, and object oriented principles.

Key Responsibilities: Collects and documents systems specifications; Reviews system interface specifications, test plans and reports.

Responsibility: Collection and documentation of systems specifications and requirements. Review of systems interface specifications, test plans, and test reports. Conduct of trade studies and presenting results to Sr. Systems Engineer.

Education: BS/BA in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.

LC0023 Systems Engineer

Experience: 7 years of directly related experience in use of structured analysis, design methodologies and design tools, and object oriented principles. Additional education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. or MA/MS = 3 yrs.

Key Responsibilities: Develops system documentation, interface control document and system requirements documents.

Education: BS/BA in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.

LC0024 Senior Systems Engineer

Experience: 10 years of directly related experience in systems engineering, use of structured analysis, design methodologies and design tools, object oriented principles, and experience with the logical and physical functional, operational, and technical architecture of large and complex information systems. Additional education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. or MA/MS = 3 yrs.

Key Responsibilities: Determines needs of user community; coordinates activities of modelers; Evaluates workflow, organization and planning problems; Defines corrective action

Responsibility: Specification, design and test of systems for complex Information Systems. Determination of the needs of the user community that includes algorithm developers, system & test engineers, software/hardware developers, and provision of day to day support. Coordination of the activities of the modelers to assure that subsystem models have the appropriate structure and level of fidelity to meet high-level system requirements. Establish system information requirements and interface specifications. Design architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensure these systems are compatible and in compliance with the applicable standards. Evaluate analytically and systematically problems of work flows, organization, and planning and develop appropriate corrective action. Review systems design and requirements documentation for compliance and integrity.

Education: BS/MS in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.

LC0025 Principal Systems Engineer

Experience: 15 years of directly related experience in supervision of system engineers, use of structured analysis, design methodologies and design tools, object oriented principles, and experience with the logical and physical functional, operational, and technical architecture of large and complex information systems. Additional education may be substituted for years of experience. Ph.D./Sc.D. = 4 yrs. or MA/MS = 3 yrs.

Key Responsibilities: Supervisory; Plans, directs and conducts research and implementation work on complex tasks.

Responsibility: This position requires specification, design and test of systems for complex Information Systems. It requires determining the needs of the user community that includes algorithm developers, system & test engineers, software/hardware developers, and providing them day to day support. It also requires coordinating the activities of the modelers to assure that subsystem models have the appropriate structure and level of fidelity to meet high-level simulation requirements. Plans, directs and/or personally conducts the research, development and/or implementation work on specialized and/or complex tasks necessitating the organization and application of innovative approaches. Documents work for presentation to Senior Level Staff and Customer Managers. Establishes system information requirements and interface specifications. Designs architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the applicable standards. Evaluates analytically and systematically problems of work flows, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff.
LC0026  Program Technologist I

Experience: 5 years of broad-based automated data processing and/or management experience.
Key Responsibilities: Re-engineering; Enterprise data & functional design; Defines primitive & advanced models
Responsibility: This individual has broad experience in Program Management and System acquisition of Information and Automated Data Processing (IT) systems. A multi-disciplinary individual with experience in analyzing and conducting Program Management activities and services. The individual must have experience in program/project/engineering planning, acquisition, tracking and management, including the use and analysis of earned value reporting. This position requires specific knowledge to the extent necessary to understand, design, develop, test, select, implement, manage and enhance a total, integrated system. It also requires the knowledge of procedures and activities required to manage such a program. Work includes:
- Business process breakdown and re-engineering
- Enterprise data design
- Enterprise functional design
- Define primitive models and meta models
- Supporting higher level program technologist

Education: Bachelor’s degree

LC0027 PROGRAM TECHNOLOGIST II

Experience: Ten (10) years of broad-based automated data processing and/or management experience.
Key Responsibilities: Business process breakdown & re-engineering; Enterprise data & functional design; Defines primitive & meta models
Responsibility: This individual has broad experience in Program Management and System acquisition of Information and Automated Data Processing (IT) systems. A multi-disciplinary individual with experience in analyzing and conducting Program Management activities and services. The individual must have experience in program/project/engineering planning, acquisition, tracking and management, including the use and analysis of earned value reporting. This position requires specific knowledge to the extent necessary to understand, design, develop, test, select, implement, manage and enhance a total, integrated system. It also requires the knowledge of procedures and activities required to manage such a program. Work includes:
- Assist lower level program technologist
- Business process breakdown and re-engineering
- Enterprise data design
- Enterprise functional design
- Define primitive models and meta models
- Supporting higher level program technologist

Education: Bachelor’s degree

LC0028 PROGRAM TECHNOLOGIST III

Experience: Twelve (12) years of broad-based IT experience or ten (10) years experience in systems analysis, planning, and system acquisitions.
Key Responsibilities: Under general supervision develops, designs and tests custom databases using an existing database program; conducts use training

Education: MS/PhD in Computer Science, Engineering, or related academic field. Two years related experience may be substituted for degree.
Responsibility: This individual has broad experience in Information Resource Management, Communications, and Automated Data Processing (IT). A multi-disciplinary individual with experience in analyzing and managing information technology programs and services. The individual must have experience in information planning and IT acquisitions. This position requires specific knowledge to understand, design, develop, test, select, implement, manage and enhance a total, integrated information processing system. Work includes

- Assist lower level program technologist
- Monitor and implement processes and procedures
- Capacity planning
- Defining and monitoring Implementation terms and schedules
- Analysis and design of broad based IT systems in various technical areas
- Presentations, briefings, reviews
- Supporting higher level program technologist

Education: Bachelor’s degree

LC0031 PROGRAMMER/ANALYST I

Experience: Has two (2) years of general systems programmer/analyst experience. Develops program specifications for application software development under general supervision. Defines the logic, performs the coding, tests and debugs the programs. Prepares system and program specifications and documentation that includes designing report formats, record layouts, screen layouts and algorithms. Implements modifications to existing systems. Documents program and system logic. Defines and designs data capture forms, data conversion procedures, data validation/correction steps, and database definition tables.

Key Responsibilities: Designs report formats, record layouts, screen layouts and algorithms

Responsibility: Develops program specifications for application software development under general supervision. Defines the logic, performs the coding, tests and debugs the programs. Prepares system and program specifications and documentation that includes designing report formats, record layouts, screen layouts and algorithms. Implements modifications to existing systems. Documents program and system logic. Defines and designs data capture forms, data conversion procedures, data validation/correction steps, and database definition tables.

Education: Bachelor’s Degree in Computer Science, Mathematics, Engineering, or equivalent.

LC0032 PROGRAMMER/ANALYST II

Experience: Four years of experience in requirements analysis, software development, installation, integration, evaluation, enhancement, maintenance, testing, problem diagnosis/resolution or multi-level security using facilities provided by at least one of the following systems: Desktop operating systems including DOS and WINDOWS, Macintosh Operating Systems, or UNIX or depending upon client agency environments experience in the MVS operating system including JCL, utilities, TSO, and ISPF or the VM and VSE operating system, including C shell, Bourne shell, or Korn shell; X Windows; and utilities. Database Management Systems including IMS, DB2, ORACLE, and SYBASE. In addition, work experience must include one year experience, which may be concurrent, using a programming language (Assembler, COBOL, FORTRAN, PL-1, or C) and at least one years of concurrent experience in technical writing in the form of status reports and documentation of problems and problem resolution, as well as presenting verbal reports.

Key Responsibilities: Analyzes problems & develops plans for new automated systems; Translates designs into SW; prepares flow charts; writes code

Responsibility: Analyzes the problem and the information to be processed and develops detailed plans for the development of a new or modified automated system. Designs, develops, and maintains computer software for moderately complex to highly complex computer systems. Duties relate to the large systems,
distributed systems, real time systems, or network applications that are currently used or announced for use at client. Translates detailed design into computer software, preparing detailed flow charts, writing program code, and testing and implementing systems. Prepares test data and systems, user and program documentation. Duties may include the creation or modification of administrative, scientific, or systems software, on central and distributed systems; and development, testing, maintenance, and problem resolution for security systems (firewalls, network access control mechanisms, encryption devices, etc.) for host and distributed systems, and security product evaluation.

Education: BS degree in Computer Science, Information Science, Engineering or a related field.

LC0033 PROGRAMMER/ANALYST III

Experience: Has seven (6) years of general systems programmer/analyst experience including two (3) years of specialized experience. Requires extensive experience in C, C++, and Solaris, and relational database programming. Must be familiar with computer graphics fundamentals, and be knowledgeable in relational data base fundamentals and concepts. Should have extensive experience with relational databases including ORACLE, Paradox, and Dbase, and be proficient in programming in C and C++ languages in a UNIX environment and fluent in writing code under various UNIX shells. Must have ability to effectively communicate technical information to non-technical computer users, both orally and in writing.

Key Responsibilities: Under general supervision develops, designs and tests custom databases using an existing database program; conducts use training.

Responsibility: Develops program specifications for application software development under general supervision. Defines the logic, performs the coding, tests and debugs the programs. Prepares system and program specifications and documentation that includes designing report formats, record layouts, screen layouts and algorithms. Implements modifications to existing systems. Documents program and system logic. Defines and designs data capture forms, data conversion procedures, data validation/correction steps, and database definition tables. Works closely with agency technical user community to determine specific data base properties, requirements and specifications. Develops, designs, tests and implements custom data bases using an appropriate combination of programming tools found in the data base management application development suite, and the UNIX programming environment. Develops documentation and user training materials for each application. Conducts use training sessions for applications; provides use support.

Education: B.S. in Computer Science, Engineering, or applied scientific discipline with UNIX.

LC0034 PROGRAMMER/ANALYST IV

Experience: Eight (8) years of general experience in systems engineering including four (4) years of specialized experience in the area of expertise. Concurrent experience in multiple categories is acceptable. Four years of programming experience using scientific applications packages, including at least one of the following: but not limited to FORTRAN, C, C++, or a combination thereof. Two years programming experience as part of a team of programmers. Demonstrated ability to work with other programmers and computer scientists, including joint projects, sharing of software developed, and providing assistance to scientists who use the software developed by the programmer/Analyst. Two years of experience in making effective formal and informal presentations as demonstrated by presentation to a scientific or technical audience.

Key Responsibilities: Develops application & system software using modeling, sequence analysis, structural analysis & time series analysis.

Responsibility: Duties include development of information technology applications and systems software. Computing platforms include the agency scientific computing environment including, but not limited to, parallel processing systems, supercomputers, real time systems, and scientific workstations. Project
areas will include, but are not limited to, modeling, sequence analysis, structural analysis, time series analysis, network, prototyping, simulation, and database interface and image processing. Education: MS degree in Physical Science, Computer Science, Engineering, or related field. Experience may be substituted for education.

LC0035 Programmer/Analyst V

Experience: Ten (10) years of general experience in systems engineering including five (5) years of specialized experience in the area of expertise. As an expert programmer/analyst, consults with clients to learn and define their business requirements or problem areas and use technical expertise to provide solutions to clients' needs. Prepares program specifications, assists with the preparation of user documentation and system implementation. Analyzes, designs, develops, implements and maintains client server applications over distributed networks and related protocols for various systems. Converts and/or ports fully developed code over to other platforms using different processor architectures or operating systems. May guide programmer/analysts at a lower level and other technical personnel on assigned work.

Key Responsibilities: Programming functions related to overall operating system or complex subsystems of the operating system; Prepares recommendations.
Responsibility: Responsible for systems programming functions dealing with the overall operating system or complex subsystems of the operating system. Develops specifications for extremely complex systems programming activities. Works at the highest technical level on all phases of system programming controlling the operating system with considerable freedom to make decisions on the techniques to be used. Prepares recommendations for system improvement for management and user consideration. Acts as a consultant to the technical staff and user community.

Education: Bachelor's Degree in Computer Science, Engineering, Mathematics, or equivalent

LC0037 Technical Writer

Experience: Minimum of 5 years experience in Technical writing, preparing technical documents, training materials, user manuals and online documents.

Key Responsibilities: Prepares technical documentation and training materials; edits functional descriptions, system specs, manuals
Responsibility: Prepares Technical Documentation and training materials. Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents.

Education: BS/BA or equivalent knowledge and experience.