



ADVANCED SYSTEMS TECHNOLOGY, INC.

**Authorized Federal Supply Service
Consolidated Schedule Pricelist
October 16, 2008**

**Advanced Systems Technology, Inc.
4111 West Gore BLVD
P.O. Box 2305
Lawton, OK 73502-2305
888-248-0321
www.astcorp.com**

**Special Item Number CR 425
Professional Engineering Services**

Sub SIN: 871-1 Strategic Planning for Technology Programs/Activities
Sub SIN: 871-2 Concept Development and Requirements Analysis
Sub SIN: 871-3 System Design, Engineering and Integration
Sub SIN: 871-4 Test and Evaluation
Sub SIN: 871-5 Integrated Logistics Support
Sub SIN: 871-6 Acquisition and Life Cycle Management

**Special Item Number CU 012
IT Software, Equipment and Telecommunications Training**

Sub SIN: 132-50 Training Courses

**Veteran Owned Small Business
Contract Number: GS-00F-0014N
Contract Period: 03 October 2008 – 02 October 2012**

General Services Administration Federal Supply Service

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!TM, a menu-driven database system. The Internet address for GSA Advantage!TM, is <http://www.gsaadvantage.gov>. For more information on ordering from Federal Supply Schedules click on the "GSA Schedules" button at <http://www.gsa.gov>.



Table of Contents

Paragraph.....	Page
Section 1 – Customer Information.....	3 of 33
1a. Awarded Special Item Numbers (SINS).....	4 of 33
1b. Identification of Lowest Priced Model.....	4 of 33
1c. Available Labor Categories Client Site	4 of 33
1d. Available Labor Categories AST Site	5 of 33
1e. Allowable Substitutions of Education and Experience	5 of 33
1d. Available Labor Categories AST Site	7 of 33
1f. Labor Category Titles and Descriptions	8 of 33
2. Maximum Order.....	29 of 33
3. Minimum Order	29 of 33
4. Geographic Scope for Services	29 of 33
5. Points of Production.....	29 of 33
6. Discounts From Service	29 of 33
7. Quantity Discounts.....	29 of 33
8. Prompt Payment Terms.....	29 of 33
9. Government Purchase Cards	29 of 33
10. Foreign Items	29 of 33
11a. Time of Delivery	29 of 33
11b. Expedited Delivery	29 of 33
11c. Overnight and 2 Day Delivery	29 of 33
12. F.O.B. Points.....	29 of 33
13a. Ordering Addresses	30 of 33
13b. Ordering Procedures.....	30 of 33
14. Payment Address.....	30 of 33
15. Warranty Provisions.....	29 of 33
16. Export Packing Charges	30 of 33
17. Terms and Conditions of Government Purchase Card Acceptance.....	30 of 33
18a. Special Attributes	30 of 33
18b. Section 508 Compliance.....	30 of 33
19. Statistical Data	30 of 33
 Section 2 – Pricing for Training Courses	 31 of 33

SECTION 1. CUSTOMER INFORMATION

1a. Awarded Special Item Numbers (SINs)

SIN: CR421 – Professional Engineering Services

Sub-SIN: 871-1: Strategic Planning For Technology Programs/Activities

Services required involve the definition and interpretation of high-level organizational engineering performance requirements such as projects, systems, missions, etc., and the objectives and approaches to their achievement. Typical associated tasks include, but are not limited to an analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing.

Sub-SIN: 871-2: Concept Development and Requirements Analysis

Services required involve abstract or concept studies and analysis, requirements definition, preliminary planning, the evaluation of alternative technical approaches and associated costs for the development or enhancement of high level general performance specifications of a system, project, mission or activity. Typical associated tasks include, but are not limited to requirements analysis, cost/cost-performance trade-off analysis, feasibility analysis, regulatory compliance support, technology conceptual designs, training, privatization and outsourcing.

Sub-SIN: 871-3: System Design, Engineering and Integration

Services required involve the translation of a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications), performing risk identification/analysis/mitigation, traceability, and then integrating the various components to produce a working prototype or model of the system. Typical associated tasks include, but are not limited to computer-aided design, design studies and analysis, high level detailed specification preparation, configuration management and document control, fabrication, assembly and simulation, modeling, training, privatization and outsourcing.

Sub-SIN: 871-4: Test And Evaluation

Services required involve the application of various techniques demonstrating that a prototype system (subsystem, program, project or activity) performs in accordance with the objectives outlined in the original design. Typical associated tasks include, but are not limited testing of a prototype and first article(s) testing, environmental testing, independent verification and validation, reverse engineering, simulation and modeling (to test the feasibility of a concept), system safety, quality assurance, physical testing of the product or system, training, privatization and outsourcing.

Sub-SIN: 871-5: Integrated Logistics Support

Services required involve the analysis, planning and detailed design of all engineering specific logistics support including material goods, personnel, and operational maintenance and repair of systems throughout their life cycles. Typical associated tasks include, but are not limited to ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, long-term reliability and maintainability, training, privatization and outsourcing.

Sub-SIN: 871-6: Acquisition and Life Cycle Management

Services required involve all of the planning, budgetary, contract and systems/program management functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc. Typical associated tasks include, but are not limited to operation and maintenance, program/project management, technology transfer/insertion, training, privatization and outsourcing.

SIN: CU102 – Classroom Training

Sub-SIN: 132-50: Classroom Training

Services under this SIN include web based training products to educate public safety professionals including sworn and volunteer police, firefighters, emergency medical professionals, and security personnel.

1b. Identification of Lowest Priced Model

Not applicable.

1c. Available Labor Categories

Client Site

Professional Engineering Services Price List

03 October 2008 – 02 October 2009

01 October 2009 – 02 October 2010

01 October 2010 – 02 October 2011

01 October 2011 – 02 October 2012

GSA LIN	Professional Engineering Services GSA Labor Categories	2008-09	2009-10	2010-11	2011-12
GSA LIN 1	Administrative Assistant	25.07	26.02	27.01	28.04
GSA LIN 2	Administrative Manager	49.99	51.89	53.86	55.91
GSA LIN 3	Audio/Video Eng./Multimedia Specialist - Assistant	58.46	60.68	62.99	65.38
GSA LIN 4	Clerical/Data Entry/Admin/Computer Operator/Word Processor Level 2	25.07	26.02	27.01	28.04
	Clerical/Data Entry/Admin/Computer Operator/Word Processor Level 3	24.80	25.74	26.72	27.74
GSA LIN 5	Configuration Management Specialist Level 1	58.46	60.68	62.99	65.38
	Configuration Management Specialist Level 2				
	Configuration Management Specialist Level 3	43.65	45.31	47.03	48.82
GSA LIN 6	Courseware Developer Level 1	64.36	66.81	69.35	71.99
	Courseware Developer Level 2	57.65	59.84	62.11	64.47
	Courseware Developer Level 3	51.68	53.64	55.68	57.80
GSA LIN 7	Information Technology Specialist	46.26	48.02	49.84	51.73
GSA LIN 8	Database Manager	46.78	48.56	50.41	52.33
GSA LIN 9	Documentation Specialist	36.16	37.53	38.96	40.44
GSA LIN 10	Electronics/Equipment/ADPE Technician - Repair/Maintenance/Design	58.46	60.68	62.99	65.38
GSA LIN 11	Graphics Artist/Illustrator/Animator Level 1	42.87	44.50	46.19	47.95
	Graphics Artist/Illustrator/Animator Level 2	35.72	37.08	38.49	39.95
GSA LIN 12	Hardware Engineer Level 2	72.33	75.08	77.93	80.89
	Hardware Engineer Level 3	58.46	60.68	62.99	65.38
GSA LIN 13	Human Factors Engineer	68.61	71.22	73.93	76.74
GSA LIN 14	LAN/WAN Engineer Level 1	62.22	64.58	67.03	69.58
	LAN/WAN Engineer Level 2	62.22	64.58	67.03	69.58
GSA LIN15	Not Used				
GSA LIN 16	Operations Research Analyst Level 1	58.06	60.27	62.56	64.94
	Operations Research Analyst Level 2	54.46	56.53	58.68	60.91
	Operations Research Analyst Level 3	54.46	56.53	58.68	60.91
GSA LIN17	Program/Project Manager Level 3	84.96	88.19	91.54	95.02
	Program/Project Manager Level 4	84.96	88.19	91.54	95.02
GSA LIN 18	Programmer Level 1	63.27	65.67	68.17	70.76
	Programmer Level 2	57.63	59.82	62.09	64.45
	Programmer Level 3	50.19	52.10	54.08	56.14
GSA LIN 19	Project Engineer	76.75	79.67	82.70	85.84
GSA LIN 20	Quality Assurance Specialist Level 2	58.46	60.68	62.99	65.38
GSA LIN 21	Security Specialist	48.62	50.47	52.39	54.38
GSA LIN 22	Simulation Technician	42.58	44.20	45.88	47.62

GSA LIN 23	Software Engineer Level 2	68.61	71.22	73.93	76.74
	Software Engineer Level 3	58.46	60.68	62.99	65.38
GSA LIN 24	Subject Area Specialist Level 3	62.22	64.58	67.03	69.58
GSA LIN 25	Systems Engineer Level 1				
	Systems Engineer Level 2	76.48	79.39	82.41	85.54
	Systems Engineer Level 3	68.61	71.22	73.93	76.74
GSA LIN 26	Technical Publications - Editor/Writer	42.58	44.20	45.88	47.62
GSA LIN 27	Test Specialist - SW/HW/Training Level 1	58.46	60.68	62.99	65.38
	Test Specialist - SW/HW/Training Level 2	52.24	54.23	56.29	58.43
	Test Specialist - SW/HW/Training Level 3	46.06	47.81	49.63	51.52
GSA LIN 28	Training Exercise Controller/Operator	49.99	51.89	53.86	55.91
GSA LIN 29	Training Specialist/Analyst Level 1	64.36	66.81	69.35	71.99
	Training Specialist/Analyst Level 2	57.65	59.84	62.11	64.47
	Training Specialist/Analyst Level 3	51.68	53.64	55.68	57.80
GSA LIN 30	Analyst, Cost Level 1	81.00	84.08	87.28	90.60
	Analyst, Cost Level 2	68.06	70.65	73.33	76.12
	Analyst, Cost Level 3	55.97	58.10	60.31	62.60
GSA LIN 31	Analyst, Market Research	59.26	61.51	63.85	66.28
GSA LIN 32	Analyst, Military Level 1	85.51	88.76	92.13	95.63
	Analyst, Military Level 2	47.06	48.85	50.71	52.64
	Analyst, Military Level 3	42.71	44.33	46.01	47.76
GSA LIN 33	Assistant, Research	59.26	61.51	63.85	66.28
GSA LIN 34	Assistant, Security	31.38	32.57	33.81	35.09
GSA LIN 35	Consultant, Principal	111.35	115.58	119.97	124.53
GSA LIN 36	Coordinator, Product	78.90	81.90	85.01	88.24
GSA LIN 37	Engineer, Logistics	61.51	63.85	66.28	68.80
GSA LIN 38	Engineer, Maintenance	62.05	64.41	66.86	69.40
GSA LIN 39	Engineer, Production Level 1	65.32	67.80	70.38	73.05
	Engineer, Production Level 2	62.05	64.41	66.86	69.40
	Engineer, Production Level 3	53.90	55.95	58.08	60.29
GSA LIN 40	Manager/Director Facility	78.90	81.90	85.01	88.24
GSA LIN 41	Scientist, Chem-Bio Level 1	111.35	115.58	119.97	124.53
	Scientist, Chem-Bio Level 2	91.45	94.93	98.54	102.28
	Scientist, Chem-Bio Level 3	78.58	81.57	84.67	87.89
GSA LIN 42	Scientist, Computer Level 1	50.22	52.13	54.11	56.17
	Scientist, Computer Level 2	45.59	47.32	49.12	50.99
	Scientist, Computer Level 3	41.16	42.72	44.34	46.02
GSA LIN 43	Scientist, Research Level 1	82.20	85.32	88.56	91.93
	Scientist, Research Level 2	74.94	77.79	80.75	83.82
	Scientist, Research Level 3	65.32	67.80	70.38	73.05
GSA LIN 44	Technician, LAN System	39.96	41.48	43.06	44.70

1d. Available Labor Categories

AST Site

03 October 2008 – 02 October 2009
01 October 2009 – 02 October 2010
01 October 2010 – 02 October 2011
01 October 2011 – 02 October 2012

Professional Engineering Services					
GSA LIN	GSA Labor Categories	2008-09	2009-10	2010-11	2011-12
GSA LIN 1	Administrative Assistant	28.50	29.58	30.70	31.87
GSA LIN 2	Administrative Manager	56.84	59.00	61.24	63.57
GSA LIN 3	Audio/Video Eng./Multimedia Specialist - Assistant	66.45	68.98	71.60	74.32

GSA LIN 4	Clerical/Data Entry/Admin/Computer Operator/Word Processor Level 2	28.50	29.58	30.70	31.87
	Clerical/Data Entry/Admin/Computer Operator/Word Processor Level 3	29.66	30.79	31.96	33.17
GSA LIN 5	Configuration Management Specialist Level 1	64.97	67.44	70.00	72.66
	Configuration Management Specialist Level 2	64.97	67.44	70.00	72.66
	Configuration Management Specialist Level 3	64.97	67.44	70.00	72.66
GSA LIN 6	Courseware Developer Level 1				
	Courseware Developer Level 2	64.97	67.44	70.00	72.66
	Courseware Developer Level 3	61.71	64.05	66.48	69.01
GSA LIN 7	Information Technology Specialist				
GSA LIN 8	Database Manager	53.15	55.17	57.27	59.45
GSA LIN 9	Documentation Specialist	43.17	44.81	46.51	48.28
GSA LIN 10	Electronics/Equipment/ADPE Technician - Repair/Maintenance/Design	66.45	68.98	71.60	74.32
GSA LIN 11	Graphics Artist/Illustrator/Animator Level 1	50.23	52.14	54.12	56.18
	Graphics Artist/Illustrator/Animator Level 2	40.59	42.13	43.73	45.39
GSA LIN 12	Hardware Engineer Level 2				
	Hardware Engineer Level 3	66.45	68.98	71.60	74.32
GSA LIN 13	Human Factors Engineer	77.98	80.94	84.02	87.21
GSA LIN 14	LAN/WAN Engineer Level 1	65.21	67.69	70.26	72.93
	LAN/WAN Engineer Level 2	65.21	67.69	70.26	72.93
GSA LIN15	Not Used				
GSA LIN 16	Operations Research Analyst Level 1	76.44	79.34	82.35	85.48
	Operations Research Analyst Level 2	76.44	79.34	82.35	85.48
	Operations Research Analyst Level 3	65.82	68.32	70.92	73.61
GSA LIN17	Program/Project Manager Level 3	92.34	95.85	99.49	103.27
	Program/Project Manager Level 4	92.34	95.85	99.49	103.27
GSA LIN 18	Programmer Level 1	69.78	72.43	75.18	78.04
	Programmer Level 2				
	Programmer Level 3	66.22	68.74	71.35	74.06
GSA LIN 19	Project Engineer				
GSA LIN 20	Quality Assurance Specialist Level 2	64.97	67.44	70.00	72.66
GSA LIN 21	Security Specialist				
GSA LIN 22	Simulation Technician	48.40	50.24	52.15	54.13
GSA LIN 23	Software Engineer Level 2	77.98	80.94	84.02	87.21
	Software Engineer Level 3	66.45	68.98	71.60	74.32
GSA LIN 24	Subject Area Specialist Level 3	86.16	89.43	92.83	96.36
GSA LIN 25	Systems Engineer Level 1	95.08	98.69	102.44	106.33
	Systems Engineer Level 2				
	Systems Engineer Level 3	77.98	80.94	84.02	87.21
GSA LIN 26	Technical Publications - Editor/Writer	48.40	50.24	52.15	54.13
GSA LIN 27	Test Specialist - SW/HW/Training Level 1	66.45	68.98	71.60	74.32
	Test Specialist - SW/HW/Training Level 2				
	Test Specialist - SW/HW/Training Level 3				
GSA LIN 28	Training Exercise Controller/Operator	56.84	59.00	61.24	63.57
GSA LIN 29	Training Specialist/Analyst Level 1				
	Training Specialist/Analyst Level 2	64.97	67.44	70.00	72.66
	Training Specialist/Analyst Level 3	61.71	64.05	66.48	69.01
GSA LIN 30	Analyst, Cost Level 1	98.12	101.85	105.72	109.74
	Analyst, Cost Level 2	82.45	85.58	88.83	92.21
	Analyst, Cost Level 3	67.80	70.38	73.05	75.83
GSA LIN 31	Analyst, Market Research	68.07	70.66	73.35	76.14
GSA LIN 32	Analyst, Military Level 1	96.92	100.60	104.42	108.39
	Analyst, Military Level 2	54.05	56.10	58.23	60.44
	Analyst, Military Level 3	49.07	50.93	52.87	54.88

GSA LIN 33	Assistant, Research	68.07	70.66	73.35	76.14
GSA LIN 34	Assistant, Security	36.05	37.42	38.84	40.32
GSA LIN 35	Consultant, Principal	126.20	131.00	135.98	141.15
GSA LIN 36	Coordinator, Product	90.62	94.06	97.63	101.34
GSA LIN 37	Engineer, Logistics	69.70	72.35	75.10	77.95
GSA LIN 38	Engineer, Maintenance	71.26	73.97	76.78	79.70
GSA LIN 39	Engineer, Production Level 1	75.03	77.88	80.84	83.91
	Engineer, Production Level 2	71.26	73.97	76.78	79.70
	Engineer, Production Level 3	61.91	64.26	66.70	69.23
GSA LIN 40	Manager/Director Facility	90.62	94.06	97.63	101.34
GSA LIN 41	Scientist, Chem-Bio Level 1	126.20	131.00	135.98	141.15
	Scientist, Chem-Bio Level 2	103.67	107.61	111.70	115.94
	Scientist, Chem-Bio Level 3	89.05	92.43	95.94	99.59
GSA LIN 42	Scientist, Computer Level 1	57.67	59.86	62.13	64.49
	Scientist, Computer Level 2	52.36	54.35	56.42	58.56
	Scientist, Computer Level 3	47.29	49.09	50.96	52.90
GSA LIN 43	Scientist, Research Level 1	94.42	98.01	101.73	105.60
	Scientist, Research Level 2	86.07	89.34	92.73	96.25
	Scientist, Research Level 3	75.02	77.87	80.83	83.90
GSA LIN 44	Technician, LAN System	45.90	47.64	49.45	51.33

1e Allowable Substitutions of Education and Experience:

The information in this section is designed to supplement the detailed AST Labor Categories.

- a. Required educational achievements in excess of requirements can be substituted for experience requirements:

Required Education	Actual Education Obtained	Additional Years of Experience Credited the AST employee
MA/MS	Ph.D.	4
BA/BS	Ph.D.	6
BA/BS	MA/MS	2
HS/GED	BA/BS	4

Allowable Substitutions of Education

- b. Additional experience in excess of requirements can be substituted for educational requirements:

Actual Education	Required Education	Additional Years of Experience Needed for Educational Requirements Equivalency
HS/GED	BA/BS	4
HS/GED	MA/MS	6
HS/GED	Ph.D.	No equivalency
BA/BS	MA/MS	2
BA/BS	Ph.D.	No equivalency
MA/MS	Ph.D.	4

Allowable Substitutions of Experience

1f. Labor Category Titles and Descriptions

GSA LIN 1 Title	Administrative Assistant
Commercial Job Titles	Administrative Assistant, Administrative Analyst, Administrative Officer
Functional Responsibility:	Assistant to the ADMINISTRATIVE MANAGER. Completes supporting tasks necessary for the orderly conduct of the project and fulfillment of contract requirements. Within assigned functional area, e.g., personnel, financial management, or procurement, completes tasks with a minimum of supervision. Aids executive in staff capacity by coordinating office services, such as personnel, budget preparation and control, housekeeping, records control, and special management studies: Studies management methods in order to improve workflow, simplify reporting procedures, or implement cost reductions. Analyzes unit operating practices, such as record keeping systems, forms control, office layout, suggestions systems, personnel and budgetary requirements, and performance standards to create new systems or revise established procedures. Analyzes jobs to delimit position responsibilities for use in wage and salary adjustments, promotions, and evaluation of workflow. Studies methods of improving work measurements or performance standards. Coordinates collection and preparation of operating reports, such as time-and-attendance records, terminations, new hires, transfers, budget expenditures, and statistical records of performance data. Prepares reports including conclusions and recommendations for solution of administrative problems. Issues and interprets operating policies. Reviews and answers correspondence. May assist in preparation of budget needs and annual reports of organization. May interview job applicants, conduct orientation of new employees, and plan training programs. May direct services, such as maintenance, repair, supplies, mail, and files.
Minimum/General Experience:	Must have two years of work experience in a relevant field, plus specific skill or education that may be required by the assigned functional area of responsibility.
Minimum Education:	High School diploma or GED equivalent.

GSA LIN 2 Title	Administrative Manager
Commercial Job Titles	Executive Assistant, Assistant Manager
Functional Responsibility:	Assistant to the PROJECT MANAGER. Delegated responsibility for routine operations of a large project or program by the PROJECT MANAGER. Manages personnel in-processing, out-processing, performance reports, files, notifications of changes in benefits, financial and tax requirements, rosters, suspense dates, time sheets, expense reports, and prepares certificates of service. Supervises the execution of Government requirements, such as Equal Opportunity programs, as issued by various Agencies (OSHA, EPA, DOL, IRS, SSA, etc.). Consolidates equipment, facilities, and parts requirements on a periodic basis for submission to the PROJECT MANAGER. Equipment and parts include, but are not limited to, all ADPE, vehicles, buildings, office equipment, office supplies, and serves as a point of contact for external resources such as contracted maintenance support
Minimum/General Experience:	Must have six years of directly related management work experience. Must have demonstrated leadership skills.
Minimum Education:	BA in business or a directly related technical field.

GSA LIN 3 Title	Audio/Video Engineer/Multimedia Specialist - Assistant
Commercial Job Titles	Supervising Film or Videotape Editor
Functional Responsibility:	Analyzes, designs, develops, and evaluates computer-based training packages. Performs component and system analysis, technical evaluations, information research, and writes technical reports. Uses ADPE scripting tools to design and develop multimedia packages. Provides guidance to developers on script design, limitations, possible approaches, and realism. Integrates customer requirements with vignettes and written materials. Assigns file names for all computer-based training files. Produces internal wave files. Analyzes requirements and resources needed to accomplish modifications, upgrades, and new positions with the responsible SYSTEM ENGINEER or COURSEWARE DEVELOPER. For motion picture; radio-TV broadcast, supervises and coordinates activities of workers engaged in editing and assembling filmed scenes photographed by others: Reviews edited and assembled film on screen or edited videotape on monitor, to detect errors. Studies script and confers with producers and directors concerning layout or editing techniques to increase dramatic or entertainment value of production. Trims film segments to specified lengths and assembles segments in sequence that presents story with maximum effect, or edits videotape to correct errors, using editing equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May operate studio or portable, shoulder-mounted camera [CAMERA OPERATOR (motion picture; radio-TV broadcast) 143.062-022]. May be designated according to specialty as Supervising Editor, Feature (motion picture; radio-TV broadcast); Supervising Editor, News Reel (radio-TV broadcast); Supervising Editor, Trailer (motion picture; radio-TV broadcast).
Minimum/General Experience:	Must have two years work experience developing instructional materials using a systems approach for training development, plus one-year experience developing computer-based instructional materials. Must have three years work experience developing instructional materials using a systems approach

GSA LIN 3 Title	Audio/Video Engineer/Multimedia Specialist - Assistant
	for training development, or if no Bachelor's degree, three years work experience developing computer-based instructional materials is required.
Minimum Education:	Bachelor's degree in a related area or High school diploma or GED equivalent.

GSA LIN 4 Title	Clerical/Data Entry/Administrative/Computer Operator/Word Processor/Test Examiner
Commercial Job Titles	Word Processing Machine Operator (clerical), Data Entry Clerk or Operator (clerical), Computer Operator (clerical and technical), Office Clerk
Functional Responsibility:	<p>Performs varied duties requiring knowledge of established methods and procedures. Operates applicable office equipment including reproductive equipment. Performs duties as directed by the supervisor. Handles normal technical office administrative tasks and demonstrated ability to type highly specialized technical work statements, specifications, and reports rapidly and accurately. Operates word processing equipment to compile, type, revise, combine, edit, print, and store documents: Compiles material to be typed, following written or oral instructions. Reads instructions accompanying material, or follows verbal instructions from supervisor or person requesting document, to determine format and content required. Enters commands, flips switches, and presses buttons to establish spacing, margins, type size, style, color, and other parameters, using computer and word processing software or other word processing equipment. Types, revises, and combines material, such as correspondence, reports, records, forms, minutes of meetings, scientific or technical material, numerical data, and tabular information, from rough draft, corrected copy, recorded voice dictation, or previous version displayed on screen. Checks completed document on screen for spelling errors using software. Proofreads and edits document for grammar, spelling, punctuation, and format. Corrects errors. Stores completed document in machine memory or on data storage medium, such as disk. Enters commands to print document. May load paper in printer and change printer ribbon, print wheel, or fluid cartridges. May keep record of work performed. May input data for revision or editing, using data entry device other than keyboard, such as optical scanner. Variations in means by which tasks are accomplished result from brand of computer, printer, other word processing equipment, and software used. Operates keyboard or other data entry device to enter data into computer or onto magnetic tape or disk for subsequent entry: Enters alphabetic, numeric, or symbolic data from source documents into computer, using data entry device, such as keyboard or optical scanner, and following format displayed on screen. Compares data entered with source documents, or re-enters data in verification format on screen to detect errors. Deletes incorrectly entered data and re-enters correct data. May compile, sort, and verify accuracy of data to be entered. May keep record of work completed. Monitors and controls electronic computers to process data, according to operating instructions. Sets control switches on computer and peripheral equipment, such as external memory, to facilitate data communications and synchronization of input and output recording or display devices. Integrates and operates equipment according to the computer programs' routines, subroutines, and data requirements specified in written operating instructions. Selects and loads input and output units with materials, such as tapes, disks, and printout forms for operation of equipment. Moves switches to clear systems and start operation of equipment. Observes machine control panel for error lights. Verifies printouts, Types alternate commands into computer console, according to predetermined instructions, to correct error or failure and resume operations. Notifies supervisor of equipment stoppage. Clears unit at end of operating run and reviews schedule to determine next assignment. Records operating and down times. Performs backup as scheduled. Works from pencil draft, edited or previously typed material to record, update, and print required documentation. Maintains records of work accomplished, files, and documents completed work, and works in cooperation with other operators on large, complex, publication efforts. At senior level, trains new operators, establishes standards, and supervises and reviews the work of assigned personnel. Recommends techniques and approaches to most efficiently accomplish the required publication assignment.</p>
Minimum/General Experience:	<p>Level 1: Must meet the Level 3 qualifications plus have three additional years of relevant work experience.</p> <p>Level 2: Must meet the Level 3 qualifications plus have one additional year of relevant work experience.</p> <p>Level 3: Must have one year of work experience relevant to the position's requirements. Must be computer literate. Must be able to achieve 45 WPM, 1 error maximum (final analysis), on a typing test if a particular position requires typing. Must be able to obtain a commercial driver's license if a particular position requires driving. If the individual has a bachelor's degree, must have one year of relevant experience, be computer literate, have two years experience in a relevant field, plus specific skill or education that may be required by the assigned function area of responsibility.</p>
Minimum Education:	High School diploma, GED equivalent, or a bachelor's degree.

GSA LIN 5 Title	Configuration Management Specialist
Commercial Job Titles	Configuration Management Analyst
Functional	Interprets guidance and directives from higher authorities and prepares, publishes and enforces

GSA LIN 5 Title	Configuration Management Specialist
Responsibility:	configuration management procedures to ensure compliance, assuring system software and documentation configuration. Prepares studies, plans, and other documentation. Receives, records, and processes documentation concerning changes to the baseline configuration items. Maintains records of change status. Prepares status reports of system changes. Monitors and enforces documentation change procedures. Ensures that all documentation pertaining to the system is current and correct. Processes software and documentation problem reports. Issues status reports. Supervises the establishment and maintenance of all configuration management files contained on magnetic media, and ensures their integrity. Confers with system and software engineering personnel in the establishment of system design specification and the configuration process during early development cycle and throughout system life. Analyzes proposed changes of product design to determine effect on overall system, and coordinates recording of modifications for management control. Confers with manufacturer or customer representatives to establish change-reporting procedure and prepares directives for change authorization and documentation by company and subcontractor personnel. Analyzes proposed part-design changes and exhibits to prepare report of effect on overall product for management action, using knowledge of engineering, manufacturing, and procurement activities. Confers with department managers to obtain additional information or to interpret policies and procedures for reporting changes in product design. Audits subcontractor's inspection or technical documents preparation procedure to verify compliance with contract requirements. Coordinates activities of personnel preparing manual or automated records of part-design change documents and first-article configuration inspection.
Minimum/General Experience:	<p>Level 1: Must meet the Level 3 requirements and have five additional years of relevant work experience.</p> <p>Level 2: Must meet the Level 3 requirements and have two additional years of relevant work experience.</p> <p>Level 3: Must have three years of work experience in a related field. Must be proficient in oral and written communications. If the individual has an associate's degree, must have one year of relevant work experience.</p>
Minimum Education:	High School diploma or GED equivalent plus nine semester hours of computer science or data processing courses or an associate's degree, including nine semester hours of computer science or data processing courses.

GSA LIN 6 Title	Courseware Developer
Commercial Job Titles	Instructional Technologist
Functional Responsibility:	Designs, modifies, reviews, and tests course materials for any private or public purpose. Materials include course development documents, programs of instruction (POIs), visual presentation materials, handouts, practical exercises, tests, graduation or certification standards, and assessments of student texts. May work with the Audio/Video Engineer/Multimedia Specialist to develop multi-media courseware. Reports to the PROJECT MANAGER. Designs and develops all instructional materials in accordance with the customer's requirements and a system for training development. Analyzes, designs, develops, and evaluates written, oral, or computer-based training packages. Designs and maintains a database tool for extraction of summative evaluation connections. Trains developers in the use of [ADPE] scripting tools, accompanying vignette maps, and printouts. Provides guidance on script design, possible approaches, realism, and validity. Performs quality control by reviewing completed vignette scripts for completeness, evaluation of connections, proper order of operations, sensibility of dialogs, and spelling. As needed, maintains configuration management books.
Minimum/General Experience:	<p>Level 1: Must meet the Level 2 requirements and have three additional years relevant work experience or have eight additional years of relevant work experience with a bachelor's degree.</p> <p>Level 2: Must meet the Level 3 requirements and have two additional years of relevant work experience.</p> <p>Level 3: Must have one year of directly related work experience or have one year of relevant work experience in developing instructional materials using a systems approach to training development with a bachelor's degree. Must possess an understanding of a systems approach to training development, such as DOD's Instructional System Design (ISD) or similar civilian model for training development, which includes task analysis, course design, course development, and evaluation. Must have knowledge of the basic principles of adult education and adult learners. Must be proficient in oral and written communications. A preferential qualifier is hands-on subject area expertise directly related to the program or project. A preferential qualifier is demonstrated experience in the use of a commercial authoring package.</p>
Minimum Education:	Master's degree in education or directly related technical field plus six semester hours of college-level computer science or data processing courses or a bachelor's degree with a major in a training-related subject area.

GSA LIN 7 Title	Information Technology Specialist
Commercial Job Titles	Librarian
Functional Responsibility:	Creates, maintains, configures, and accesses all information files within an ADPE system. The work is ADPE related and includes stand-alone, mainframe, and client-server systems.
Minimum/General Experience:	Three years of relevant work experience.
Minimum Education:	Bachelor's degree in information technology, management information systems, library science, or a related field.

GSA LIN 8 Title	Database Manager
Commercial Job Titles	Database Analyst, Data Processing Manager or Director, Management Information Systems
Functional Responsibility:	Creates, maintains, and accesses database files within the simulation models and assists in continuous simulation operation with the SIMULATION TECHNICIAN. Assists training of military personnel in database data requirements. Designs logical and physical databases and coordinates database development within project team. Applies knowledge of database design standards and database management system. Reviews project requests describing database user needs. Estimates time and cost required for a project. Determines if a project requires new programs or if existing programs that access data stored in databases can be modified. Attends meetings with project team workers to determine scope and limitations of project specifications. Reviews workflow chart developed by PROGRAMMER-ANALYST to understand tasks computer will perform, such as updating records. Reviews procedures in database management system manuals for making changes to database. Revises definition of data as defined in the data dictionary (including name, description, source of data item, and key words for categorizing and searching for data item descriptions). Determines and enters changes to data dictionary descriptions, including type, structure, and intended use of data within a system. Develops a data model describing data elements and use. Creates a description to enable PROGRAMMER-ANALYST to understand how programs should access data. Writes descriptions of how users access data, referred to as logical database. Writes physical database description, such as location, space requirements, and access method, to protect company data resources against unauthorized access and accidental destruction. May specialize in adding, deleting, and modifying data items in data dictionary and be designated Data Dictionary Administrator. Workers typically specialize in one or more types of database management systems. Directs and coordinates development and production activities of data processing department: Consults with management to determine information requirements of management, scientists, or engineers, determine boundaries and priorities of new projects and discuss system capacity and equipment acquisitions. Confers with department heads involved with proposed projects to ensure cooperation and further define nature of project. Consults with COMPUTER SYSTEMS HARDWARE ANALYST to define equipment needs. Reviews project feasibility studies. Establishes work standards. Assigns and schedules work, or delegates work to subordinate managers and supervisors, and reviews work. Interprets policies, purposes, and goals of organization to subordinates. Prepares progress reports to inform management of project status and deviation from goals. Contracts with management specialists, technical personnel, or vendors to solve problems. Directs COMPUTER PROCESSING SCHEDULER to change computer-operating scheduling to meet department priorities. Reviews reports of computer and peripheral equipment production, malfunctions, and maintenance to ascertain costs and plan department-operating changes. Analyzes department workflow and workers' job duties to recommend reorganization or departmental realignment within company. Participates in decisions concerning staffing and promotions within data processing department. Directs training of subordinates. May prepare proposals and solicit sale of systems analysis, programming, and computer services to outside firms. May assist staff to diagnose and solve computer equipment problems. May participate in technical projects, such as writing equipment specifications or developing computer programs for specified applications.
Minimum/General Experience:	Must possess work experience in database preparation programs and an extensive knowledge of agency requirements, organizations, equipment, supplies, locations, and external interfaces. Actual agency work experience may be substituted (two for one in the targeted agency department) for a degree as long as the work experience requirement level is met. A preferred qualifier is seven years work experience with automated simulation systems and four years work with data preparation programs.
Minimum Education:	Bachelor's degree.

GSA LIN 9 Title	Documentation Specialist - Librarian
Commercial Job Titles	Documentation Engineer, Librarian, Archivist
Functional Responsibility:	Responsible for controlling and maintaining the baseline version of all software modules and documents. Prepares job control statements to change and manipulate the source and object files of each module or document. Compiles new versions after the source is changed, maintaining listings of each module, assembling modules into complete fieldable systems and ensuring integrity of the system using configuration management techniques and procedures. Responsibilities include the training of new personnel requiring software control library (SCL) experience and interface with group leaders when required. Plans, directs, and coordinates preparation of project documentation, such as engineering drawings, production specifications and schedules, and contract modifications, to ensure customer contract requirements are met: Reviews contract to determine documentation required for each phase of project, applying knowledge of engineering and manufacturing processes. Schedules due dates for drawings, specifications, software, technical manuals, and other documents. Monitors status of project to ensure documentation is submitted according to schedule. Reviews and verifies project documents for completeness, format, and compliance with contract requirements. Submits project documentation to management for approval, and transmits approved documents to customer. Confers with engineers, managers, customers, and others to discuss project, prepare documents, or modify contract schedules. Maintains and operates media libraries. Accounts for storage, cataloging, issuing, reception, and access of information materials.
Minimum/General Experience:	Must possess two years of relevant work experience or If no Associate's degree, must possess three years of business or relevant documentation or library work experience.
Minimum Education:	High School diploma, GED equivalent, or an Associate's degree in computer science, business, library science, or data processing.

GSA LIN 10 Title	Electronics/Equipment/ADPE Technician – Repair/ Maintenance/Design
Commercial Job Titles	Electronics Engineer, Electronics Technician, Computer-Laboratory Technician, Development-Instrumentation Technician, Electronic- Communications Technician, Experimental Electronics Developer, Systems-Testing-Laboratory Technician, Products Design Engineer, Test Engineer
Functional Responsibility:	Designs telecommunications, computer network, packet switching, protocol, microprocessor applications, RF analysis, design of hardware for electronics applications, trade-off analyses, and cost estimates for the purpose of organizing, directing, and leading technical efforts in analyzing and specifying distributed interactive simulation integration and networking requirements. Fabricates special-purpose cabling. Knows proper methods of soldering, crimping, and tying cable, wire bundles, or wire harnesses. Must demonstrate strong written communication skills. Researches, develops, designs, and tests electronic components, products, and systems for commercial, industrial, medical, military, and scientific applications. Applies principles of electronic engineering; designs electronic circuits, components, and integrated systems. Uses nonlinear, dielectric, phosphorescent, photo-conductive, and thermoelectric properties of materials. Designs test control apparatus and equipment, determines procedures for testing products, and directs engineering personnel in fabrication of test control apparatus and equipment. Develops new applications of conductive properties of metallic and nonmetallic materials used in components, and in application of components to products or systems. May direct field operations and maintenance of electronic installations. May evaluate operational systems and recommend design modifications to eliminate causes of malfunctions. May specialize in development of electronic principles and technology, such as telecommunications, telemetry, high-frequency heating, computers, radiation detection, encephalography, electron optics, and biomedical research. May use computer-assisted engineering and design software and equipment to perform engineering tasks. Lays out, builds, tests, troubleshoots, repairs, and modifies developmental and production electronic components, parts, equipment, and systems, such as computer equipment, missile control instrumentation, electron tubes, test equipment, and machine tool numerical controls. Applies principles and theories of electronics, electrical circuitry, engineering mathematics, electronic and electrical testing, and physics. Discusses layout and assembly procedures and problems with ELECTRONICS ENGINEER and draws sketches to clarify design details and functional criteria of electronic units. Assembles experimental circuitry (breadboard) or complete prototype model according to engineering instructions, technical manuals, and knowledge of electronic systems and components. Recommends changes in circuitry or installation specifications to simplify assembly and maintenance. Sets up standard test apparatus or devises test equipment and circuitry to conduct functional, operations, environmental, and life tests to evaluate performance and reliability of prototype or production model. Analyzes and interprets test data. Adjusts, calibrates, aligns, and modifies circuitry and components and records effects on unit performance. Writes technical reports and develops charts, graphs, and schematics that describe and illustrate system's operating characteristics, malfunctions, deviations from design specifications, and functional limitations for consideration by engineers in broader determinations affecting system design and laboratory procedures. May operate bench lathes, drills, or other machine tools to fabricate parts, such as coils,

GSA LIN 10 Title	Electronics/Equipment/ADPE Technician – Repair/ Maintenance/Design
	terminal boards, and chassis. May check functioning of newly installed equipment in aircraft, ships, and structures to evaluate system performance under operating conditions. May instruct and supervise technical personnel.
Minimum/General Experience:	Must possess five years of professional electronics engineering work experience in electronics analysis, design, development, cost estimating, and testing.
Minimum Education:	Bachelor’s degree or advanced degree in electrical, electronics, or related engineering field. An advanced degree in engineering operations research or computer science may be substituted for one year of work experience.

GSA LIN 11 Title	Graphics Artist/Illustrator/Animator
Commercial Job Titles	Illustrator, Artist
Functional Responsibility:	Produces in technical pen or with computer graphics hardware and software illustrations and line art suitable for publication. Prepares draft and final artwork for publication in technical documents. Uses computers, standard drafting, and art equipment to produce illustrations from photographs, rough sketches, or observations of the actual item to be illustrated. Prepares for technical illustration using Leroy lettering and other techniques graphs, charts, flow diagrams, and illustrations. Designs page layout for technical documentation. Provides recommendations on art-related matters. May plan and coordinate illustration workload, assign, work, and directly supervise and review the work of assigned personnel.
Minimum/General Experience:	Level 1: Must meet the Level 2 requirements and possess four additional years of relevant work experience. Level 2: Must have 6 months of relevant work experience, or if no degree, must have two years of relevant work experience. Assessment of applicants includes review of his or her portfolio.
Minimum Education:	Associate’s degree in graphics arts, art, or a design field, High School diploma, or GED equivalent.

GSA LIN 12 Title	Hardware Engineer – Electronics/Electrical – Design/ Development
Commercial Job Titles	Electronics/Electrical Engineer
Functional Responsibility:	Provides technical support for the project software developers and to the customers in matters dealing with system hardware for all of the system under development. Merges electronic expertise and programming languages to resolve whether hardware or software requires adjustment to achieve desired results. Assists in resolution of questions when system failure must be traced to hardware or software. Submits guidance to system developers concerning impact hardware changes may have on new software developments.
Minimum/General Experience:	Level 1: Must meet the Level 3 requirements plus have six additional years of directly related work experience. Level 2: Must meet the Level 3 requirements plus have three additional years of directly related work experience. Level 3: Must have four years of directly related work experience, or If no master’s degree, must have six additional years of directly related work experience or If no bachelor’s degree, must have ten additional years of directly related work experience.
Minimum Education:	Master’s degree in electrical engineering or directly related technical field, bachelor’s degree in electrical engineering or directly related technical field, High School equivalent technical courses of instruction at an accredited technical school

GSA LIN 13 Title	Human Factors Engineer
Commercial Job Titles	Psychologist, Engineering, Job Analyst, Human Factors Specialist
Functional Responsibility:	Plans, coordinates, and conducts studies and investigations using human factors engineering principles and related engineering psychology to assure maximum compatibility of systems engineering with human behavior and physical characteristics to effect most efficient utilization of systems by personnel under a wide variety of operational and environmental conditions. Develops and applies data to man-machine relationships of systems, subsystems, components, and other items in development. Evaluates systems for limitations of current approaches. Conducts research, development, application, and evaluation of psychological principles relating human behavior to characteristics, design, and use of environments and systems within which human beings work and live. Collaborates with equipment designers in design, development, and utilization of man-machine systems to obtain optimum efficiency in terms of human capabilities. Advises on human factors to be considered in design of man-machine systems, military equipment, and industrial products. Participates in solving such problems as determining numbers and kinds of workers required to operate machines, allocation of functions to machines and operators, and layout and arrangement of work sites. Analyzes jobs to establish requirements for use in classification, selection, placement, and training of personnel. Develops training methods and materials, such as curriculums, lectures, and films, and prepares handbooks of human engineering data for use by equipment and system designers. May conduct research to develop

GSA LIN 13 Title	Human Factors Engineer
	psychological theories concerning such subjects as effects of physical factors (temperature, humidity, vibration, noise, and illumination) on worker's behavior. May research functional design of dials, scales, meters, and other instruments to minimize sensory requirements; specifications for optimal size, shape, direction, speed of motion, location of equipment controls, and effects of environmental, organismic, and task or job variables on work behavior and life quality.
Minimum/General Experience:	Must possess two years work experience in positions related to evaluating human factors and man-machine impacts on agency functions and computerized or industrial systems.
Minimum Education:	Bachelor's degree in engineering.

GSA LIN 14 Title	LAN/WAN Engineer
Commercial Job Titles	Supervisor, Network Control Operator, Data Communications Analyst, System Administrator, Data Communications Technician Supervisor
Functional Responsibility:	Supervises and coordinates activities of workers engaged in monitoring or installing data communication lines and resolving user data communication problems: Distributes work assignments and monitors daily logs of NETWORK CONTROL OPERATORS, using microcomputer. Explains data communications diagnostic and monitoring procedures to operators, using computer terminal and following vendor's equipment and software instructions. Explains and demonstrates installation of data communication lines and equipment to operators, using hand tools and following vendor manuals. Enters diagnostic commands into computer and determines nature of problem to assist operators to resolve data communication problems. Enters record of actions taken to resolve problem in daily log, using microcomputer. Attends staff meetings to report on and resolve recurrent data communications problems. Attends vendor seminars to learn about changes in data communications technology. Performs other duties as described under SUPERVISOR. Researches, tests, evaluates, and recommends data communications hardware and software: Identifies areas of operation that need upgraded equipment, such as modems, fiber optic cables, and telephone wires. Conducts survey to determine user needs. Reads technical manuals and brochures to determine equipment which meets establishment requirements. Visits vendors to learn about available products or services. Tests and evaluates hardware and software to determine efficiency, reliability, and compatibility with existing system, using equipment such as computer terminal and modem. Analyzes test data and recommends hardware or software for purchase. Develops and writes procedures for installation, use, and communications hardware and software problem solving. Monitors system performance. Trains users in use of equipment. Assists users to identify and solve data communication problems. May write technical specifications to send to vendors for bid, oversee or assist in installation of communications hardware, and perform minor equipment repairs. Monitors data communications network to ensure that network is available to all system users and resolves data communications problems: Receives telephone calls from users with data communications problems. Reviews procedures user followed to determine if specified steps were taken. Explains user procedures necessary to transmit data. Monitors modems and display screen of terminal to mainframe computer to detect error messages that signal malfunction in communications software or hardware. Enters diagnostic commands into computer to determine nature of problem, and reads codes on screen to diagnose problem. Attaches diagnostic equipment to phone line to learn if line meets specification. Reads technical reference manuals for communications hardware and software to learn cause of problem. Calls service technician for service when problem cannot be resolved. Enters operating commands into computer to restart program. Records number of daily data communications transactions and number of problems and actions taken, using computer terminal. Updates documentation to record new equipment installed, new sites, and changes to computer configurations. May inspect communications wires and cables. May train staff and users to use equipment. May coordinate installation or install communications lines. Monitors local area networks, wide area networks, internet and intranet links, equipment, cabling, software, servers, and workstations during usage. Mounts and dismounts magnetic media, recovers files, performs backups, upgrades COTS software as new releases are issued, boots and shuts down systems, maintains systems logs, performs preventive maintenance. Responsible for security and backup procedures for project or office. Troubleshoots and repairs hardware and software problems. Trains new individuals in the standard operating procedures governing a network.
Minimum/General Experience:	Level 1: Must have five years of relevant work experience. Level 2: Must have two years of relevant work experience in network operation, analysis, design, and installation, excluding academic training and exercise time. Relevant systems include: UNIX, NT, NetWare, Banyan Vines, etc., or if no bachelor's degree, must have five years of relevant work experience. NOTE: A current Certified Network Engineer certificate from Microsoft or Novell from an accredited training institute may be substituted for one year of work experience or two years of relevant work experience.
Minimum Education:	Bachelor's degree or advanced degree in computer science, computer engineering, management information systems, or a relevant technical field, High School diploma, or GED equivalent.

GSA LIN 15 Title	Not Used
-------------------------	-----------------

GSA LIN 16 Title	Operations Research Analyst (ORSA)
Commercial Job Titles	Operations Research-Analyst
Functional Responsibility:	Applies formal mathematical optimization techniques, decision tree modeling and analysis, the performance of trade studies, and computer-aided systems simulation modeling, as required to improve the engineering decision process in the support of the planning, development, acquisition, and modification phases of the a hardware's, software's, or system's life cycle. Uses formal analyses to determine the impact and sensitivity of system parameter variations on cost, risk, and performance to support the selection of an optimal systems design approach. Serves as custodian of all Task Assignment Memos (TAMs) to include: logging new memos, preparing task analyses, assigning project work order numbers to tasks and monitoring task progress through closing or withdrawal. Develops manpower and cost estimates and projections, and prepares actual versus allocated reports. Prepares Project Status Reports and all other such reports for the Project Manager. Monitors milestones to identify possible short falls. Recommends solutions to prevent short falls from impacting the effort. Conducts analyses of management and operational problems and formulates mathematical or simulation models of problem for solution by computers or other methods: Analyzes problem in terms of management information, conceptualizes, and defines problem. Studies information and selects plan from competitive proposals that afford maximum probability of profit or effectiveness in relation to cost or risk. Prepares model of problem in form of one or several equations that relates constants and variables, restrictions, alternatives, conflicting objectives and their numerical parameters. Defines data requirements and gathers and validates information applying judgment and statistical tests. Specifies manipulative or computational methods to be applied to model. Performs validation and testing of model to ensure adequacy, or determines need for reformulation. Prepares reports to management defining problem, evaluation, and possible solution. Evaluates implementation and effectiveness of research. May design, conduct, and evaluate experimental operational models where insufficient data exists to formulate a model. May specialize in research and preparation of contract proposals specifying competence of organization to perform research, development, or production work. May develop and apply time and cost networks, such as Program Evaluation and Review Techniques (PER), to plan and control large projects. May work in association with engineers, scientists, and management personnel in business, government, health, transportation, energy, manufacturing, environmental sciences, or other technologies.
Minimum/General Experience:	Level 1: Must meet the Level 3 position qualifications plus have four additional years of relevant work experience. Level 2: Must meet the Level 3 position qualifications plus have two additional years of directly related work experience. Level 3: Must have two years of relevant work experience, or If no bachelor's degree, must have five years of directly related work experience. Must be proficient in oral and written communications. Must be proficient in analytical problem solving.
Minimum Education:	Bachelor's degree in math, engineering, business, accounting, or computer science or twelve college level semester hours of data processing and management courses.

GSA LIN 17 Title	Program/Project Manager
Commercial Job Titles	Project Director, Project Manager
Functional Responsibility:	Supervises all aspects of a project or program. Directly responsible to the contracting agency for the execution and completion of all requirements set forth in the contract. Plans, organizes, directs, coordinates, and controls the activities of a project to ensure that aims, goals, or objectives specified by contract are accomplished in accordance with prescribed priorities, time limitations, and funding conditions. Reviews project proposal or plan to ascertain time frame and funding limitations, and to determine methods and procedures for various phases of project. Oversees development of staffing plan, and establishment of work plans and schedules for each phase of project in accordance with time limitations and funding. Recruits or requests assignment of, personnel according to staffing plan. Confers with staff to outline project plans, designate personnel who will have responsibilities for phases of project, and establish scope of authority. Directs and coordinates activities of project through delegated subordinates and established budget control system for controlling expenditures. Reviews project reports on status of each phase and modifies schedules as required. Prepares project status reports. May coordinate project activities with Government regulatory agencies. This is the point of contact for a Government Contracting Officer. Plans, directs, and coordinates activities of designated project to ensure that goals or objectives of project are accomplished within prescribed time frame and funding parameters: Reviews project proposal or plan to determine time frame, funding limitations, procedures for accomplishing project, staffing requirements, and allotment of available resources to various phases of project. Establishes work plan and staffing for each phase of project, and arranges for recruitment or assignment of project personnel. Confers with project staff to outline work plan and to

GSA LIN 17 Title	Program/Project Manager
	assign duties, responsibilities, and scope of authority. Directs and coordinates activities of project personnel to ensure project progresses on schedule and within prescribed budget. Reviews status reports prepared by project personnel and modifies schedules or plans as required. Prepares project reports for management, client, or others. Confers with project personnel to provide technical advice and to resolve problems. May coordinate project activities with activities of government regulatory or other governmental agencies. See PROJECT ENGINEER for engineering projects.
Minimum/General Experience:	Level 3: Must have ten years of directly related management work experience. One year of work experience must be related to post software deployment support. Must have demonstrated leadership skills. Level 4: Must have ten years of directly related management work experience. Must demonstrate work experience in problem solving, personnel management, planning, operation, and control of projects. Must have demonstrated leadership skills. May require one year of work experience in Post-Software Deployment Support.
Minimum Education:	Bachelor's degree in a directly related technical field.

GSA LIN 18 Title	Programmer
Commercial Job Titles	Programmer, Computer Programmer, Programmer-Analyst, Applications Programmer
Functional Responsibility:	Performs analysis of system requirements. Converts the functional design requirements to detailed logic for coding into computer language for any ADPE system. Analyzes all or part of work flowchart or diagram representing the problem, then uses knowledge of the computers abilities and symbolic logic to develop sequences of program steps. Converts the program steps to a computer programming language and devises sample input data to test for program adequacy. Prepares written instructions to guide operating personnel during production runs to increase operating efficiency or to adapt new requirements. Creates or builds system as required. Develops and executes unit tests of developed code. Compiles documentation of program development and subsequent revisions. Documents program listing to assure compatibility to relevant specifications and the Software Design Document. Converts data from project specifications and statements of problems and procedures to create or modify computer programs: Prepares, or receives from SYSTEMS ANALYST, detailed workflow chart and diagram to illustrate sequence of steps that program must follow and to describe input, output, and logical operations involved. Analyzes workflow chart and diagram, applying knowledge of computer capabilities, subject matter, and symbolic logic. Confers with supervisor and representatives of departments concerned with program to resolve questions of program intent, data input, output requirements, and inclusion of internal checks and controls. Converts detailed logical flow chart to computer programming language. Enters program codes into computer system. Inputs test data into computer. Observes computer monitor screen to interpret program operating codes. Corrects program errors, using methods such as modifying program or altering sequence of program steps. Writes instructions to guide operating personnel during production runs. Analyzes, reviews, and rewrites programs to increase operating efficiency or to adapt program to new requirements. Compiles and writes documentation of program development and subsequent revisions. May train workers to use program. May assist COMPUTER OPERATOR to resolve problems in running computer program. May work with SYSTEMS ANALYST to obtain and analyze project specifications and flow charts. May direct and coordinate work of others to write, test, and modify computer programs. Plans, develops, tests, and documents computer programs, applying knowledge of programming techniques and computer systems. Evaluates user request for new or modified program. Consults with user to identify current operating procedures and clarify program objectives. Reads manuals, periodicals, and technical reports to learn ways to develop programs that meet user requirements. Formulates plan outlining steps required to develop program, using structured analysis and design. Submits plans to user for approval. Prepares flowcharts and diagrams, into sequence of detailed instructions and logical steps for coding into computer programming language. Enters program codes into computer system. Enters commands into computer to run and test program. Reads computer printouts or observes display screen to detect syntax or logic errors during program test, or uses diagnostic software to detect errors. Replaces, deletes, or modifies codes to correct errors. Analyzes, reviews, and alters program to increase operating efficiency or adapt to new requirements. Writes documentation to describe program development, logic, coding, and corrections. Writes manual for users to describe installation and operating procedures. Assists users to solve operating problems. Recreates steps taken by user to locate source of problem and rewrites program to correct errors. May use computer-aided software tools, such as flowchart design and code generation, in each stage of system development. May train users to use program. May oversee installation of hardware and software. May provide technical assistance to program users. May install and test program at user site. May monitor performance of program after implementation. May specialize in developing programs for business or technical applications.
Minimum/General Experience:	Level 1: Must meet the Level 2 position qualifications plus have two additional years of directly related work experience, or if no Master's degree, must meet the Level 3 position qualifications plus have four additional years of directly related work experience. Experience may require two years of

GSA LIN 18 Title	Programmer
	direct work experience as a programmer analyst. Level 2: Must meet the Level 3 position qualifications plus have one additional year of directly related work experience, or if no Master's degree, must have two additional years of directly related work experience. Level 3: A preferential qualifier is hands-on work experience with hardware and software directly related to the program or project.
Minimum Education:	Master's degree or bachelor's degree in computer science, math, business, data processing, or a directly related field. If the candidate does not possess a bachelor's degree, two additional years of directly related work experience may be substituted for 30 credits of college coursework.

GSA LIN 19 Title	Project Engineer
Commercial Job Titles	Project Engineer, Chief Engineer
Functional Responsibility:	Direct subordinate and special assistant to the PROJECT MANAGER on complex projects. Coordinates all activities in a large, subordinate, critical system that is a component of the overall project. Designs, integrates, tests, and evaluates system architectures. Decompose technical design approaches into representative Work Breakdown Structures. Directs the efforts of engineers and professionals from allied scientific and technical fields that contribute to system analysis, design, development, modification, and production. Directs, coordinates, and exercises functional authority for planning, organization, control, integration, and completion of engineering project within area of assigned responsibility; Plans and formulates engineering program and organizes project staff according to project requirements. Assigns project personnel to specific phases or aspects of project, such as technical studies, product design, preparation of specifications and technical plans, and product testing, in accordance with engineering disciplines of staff. Reviews product design for compliance with engineering principles, company standards, customer contract requirements, and related specifications. Coordinates activities concerned with technical developments, scheduling, and resolving engineering design and test problems. Directs integration of technical activities and products. Evaluates and approves design changes, specifications, and drawing releases. Controls expenditures within limitations of project budget. Prepares project reports.
Minimum/General Experience:	Must have ten years of work experience that demonstrates skills in problem solving, management, organization, independent judgment, communications, and decision making.
Minimum Education:	Bachelor's degree in engineering, computer science, physics, mathematics, business, or a directly related field.

GSA LIN 20 Title	Quality Assurance Specialist
Commercial Job Titles	Manager, Quality Control; Quality Control Engineer; Quality Control Technician; Director, Quality Assurance; Director, Product Assurance
Functional Responsibility:	Receives specific guidance for resolution of unusual or complex problems and general guidance on objectives, policy, and scope of the quality assurance (QA) program. Interprets guidance and directives and prepares QA policies and procedures. Plans, prioritizes, organizes, schedules, and performs assigned activities to ensure efficient accomplishment and satisfaction of QA objectives. Performs assigned activities to ensure efficient accomplishment and satisfaction of QA objectives. Performs reviews and audits to evaluate compliance of organizational activities with established policies and procedures. Reviews products for technical accuracy, compliance with established policies and procedures, and completeness. Provides guidance pertaining to QA practices to other organizational elements and assures incorporation of quality attributes into software activities. Plans, coordinates, and directs quality control program designed to ensure continuous production of products consistent with established standards: Develops and analyzes statistical data and product specifications to determine present standards and establish proposed quality and reliability expectancy of finished product. Formulates and maintains quality control objectives and coordinates objectives with production procedures in cooperation with other plan managers to maximize product reliability and minimize costs. Directs, through intermediate personnel, workers engaged in inspection and testing activities to ensure continuous control over materials, facilities, and products. Plans, promotes, and organizes training activities related to product quality and reliability. May investigate and adjust customer complaints regarding quality. Plans and directs activities concerned with development, application, and maintenance of quality standards for industrial processes, materials, and products: Develops and initiates standards and methods for inspection, testing, and evaluation, utilizing knowledge in engineering fields such as chemical, electrical, or mechanical. Devises sampling procedures and designs and develops forms and instructions for recording, evaluating, and reporting quality and reliability data. Establishes program to evaluate precision and accuracy of production equipment and testing, measurement, and analytical equipment and facilities. Develops and implements methods and procedures for disposition of discrepant material and devises methods to assess cost and responsibility. Directs workers engaged in measuring and testing product and tabulating data concerning materials, product or process quality and reliability. Compiles and writes training material and conducts training

GSA LIN 20 Title	Quality Assurance Specialist
	<p>sessions on quality control activities. May specialize in areas of quality control engineering, such as design, incoming material, process control, product evaluation, product reliability, inventory control, metrology, automated testing, software, research and development, and administrative application. May manage quality control program. Tests and inspects products at various stages of production process and compiles and evaluates statistical data to determine and maintain quality and reliability of products. Interprets engineering drawings, schematic diagrams, or formulas and confers with management or engineering staff to determine quality and reliability standards. Selects products for tests at specified stages in production process, and tests products for variety of qualities, such as dimensions, performance, and mechanical, electrical, or chemical characteristics. Records test data, applying statistical quality control procedures. Evaluates data and writes reports to validate or indicate deviations from existing standards. Recommends modifications of existing quality or production standards to achieve optimum quality within limits of equipment capability. May set up and perform destructive and nondestructive tests on materials, parts, or products to measure performance, life, or material characteristics. May prepare graphs or charts of data or enter data into computer for analysis. May specialize in particular area of quality control engineering, such as design, incoming material, process control, product evaluation, inventory control, product reliability, research and development and administrative application. Participates, as member of the management team, in formulating and establishing organizational policies and operating procedures for the project or company. Develops, implements, and coordinates, through support staff and lower echelon managers, product assurance program to prevent or eliminate defects in new or existing products. Analyzes, evaluates, and presents information concerning factors, such as business situations, production capabilities, manufacturing problems, economic trends, and design and development of new products for consideration by other members of management team. Suggests and debates alternative methods and procedures in solving problems and meeting changing market opportunities. Cooperates with other top management team personnel in formulating and establishing company policies, operating procedures, and goals. Develops modifications of product assurance program to delineate areas of responsibility, personnel requirements, and operational procedures within program, according to and consistent with company goals and policies. Evaluates contents of reports from product assurance program department heads and confers with top management personnel preparatory to formulating fiscal budget for product assurance program. Conducts management meetings with product assurance program department heads to establish, delineate, and review program organizational policies, to coordinate functions and operations between departments, and to establish responsibilities and procedures for attaining objectives. Reviews technical problems and procedures of departments and recommends solutions to problems or changes in procedures. Confers with representatives of material and component vendors to obtain supply quality, capacity of vendor to meet orders, and vendor quality standards. Confers with engineers about QA of new products designed and manufactured products on market to rectify problems. Reviews technical publications, articles, and abstracts to stay current of technical developments.</p>
Minimum/General Experience:	<p>Level 1: Must meet the Level 2 qualifications plus have five additional years of directly related work experience. Level 2: Must have one year of relevant work experience, or if no master's degree, must have a bachelor's degree plus three years of relevant work experience. Must be proficient in analytical problem solving and oral and written communication.</p>
Minimum Education:	Master's degree or bachelor's degree in computer science or a directly related field.

GSA LIN 21 Title	Security Specialist
Commercial Job Titles	Administrative Assistant - Security
Functional Responsibility:	<p>Provides security and ADPE security advice to the PROJECT MANAGER. Assists with risk assessments for individual computer systems, LANs, and WANs. Applies Government regulations to provide, maintain, upgrade, and downgrade security clearances for personnel. Where required, provides facility security procedures and inspections. Maintains current personnel security rosters. Aids executive in activities concerning contractor security issues and tasks. Performance of tasks is in accordance with Government regulations and commercial practices. Maintains security records and files, in-processes new employees, submits security clearance requests, assists in dissemination of security awareness information, correspondence, report generation, report writing, and planning. Examines daily security processes. Inspects secure facility sites. May coordinate with LAN/WAN ENGINEER for ADP equipment and networking security.</p>
Minimum/General Experience:	Must have a working knowledge of computer data storage, retrieval, and communications, plus two years work experience directly related to physical, personnel, or ADPE security.
Minimum Education:	Associate's degree.

GSA LIN 22 Title	Simulation Technician
Commercial Job Titles	Computer Simulation Analyst
Functional Responsibility:	Instructs military and Government site personnel on the operation of the simulation model; directs research into the battlefield operating system areas for inclusion into training materials and assists Training Exercise Controller or Operator in scenario preparation, training plans, and simulation execution and evaluation. Sets up, operates, and breaks down the workstation and communications operational equipment.
Minimum/General Experience:	Must have five years of relevant work experience in battlefield tactics, and experience and training in automated systems, database files for simulations, and network management. Must have military experience. Military experience must include a demonstrated ability in using tactics, techniques, and procedures to organize a force, plan an offensive or defensive operation, and execute command and control, movement and maneuver, fire support, and other military battle aspects. Must have a working knowledge of military operational orders, organizations, equipment, supplies, locations, and unit boundaries.
Minimum Education:	Bachelor's degree. A major or minor in military history in undergraduate education from an accredited college or university may be used as a substitute for military experience.

GSA LIN 23 Title	Software Engineer
Commercial Job Titles	Programmer/Analyst, Software Engineer
Functional Responsibility:	Relates general requirements against a particular software system to analyze and develop the design of a software package that operates within that system. Develops lower level requirements and translates written requirements into the design of that software package. Interfaces with system engineering and programmer personnel. Confers with SYSTEM ENGINEERS to ascertain specific processing requirements, such as types of inputs, data file contents, and report formats. Studies existing system to evaluate correctness and develops new systems to improve or correct system operation as required. Specifies logical or mathematical operations to be performed by various equipment units or comprehensive computer programs and operations to be performed by personnel in system. Develops, executes, and reviews results of unit level, integration, and interoperability tests. Develops and maintains interfaces for systems interoperability, and develops automated test scenarios. Develops, implements and trains policies and procedures for performance of duties within the software engineering process. Researches, designs, and develops computer software systems, in conjunction with hardware product development, for medical, industrial, military communications, aerospace, and scientific applications, applying principles and techniques of computer science, engineering, and mathematical analysis: Analyzes software requirements to determine feasibility of design within time and cost constraints. Consults with hardware engineers and other engineering staff to evaluate interface between hardware and software, and operational and performance requirements of overall system. Formulates and designs software system, using scientific analysis and mathematical models to predict and measure outcome and consequences of design. Develops and directs software system testing procedures, programming, and documentation. Consults with customer concerning maintenance of software system. May coordinate the installation of a software system.
Minimum/General Experience:	Level 1: Must meet the Level 2 position qualifications plus have two additional years of directly related work experience. Level 2: Must meet the Level 3 position qualifications plus have three additional years of directly related work experience. Level 3: Must have three years of directly related work experience, or if no master's degree, must have five additional years of directly related work experience.
Minimum Education:	Master's degree or bachelor's degree in computer science, math, business, or a directly related field. If the candidate does not have a bachelors degree, two additional years of directly related work experience may be substituted for 30 credits of college coursework.

GSA LIN 24 Title	Subject Area Specialist
Commercial Job Titles	Subject Matter Expert, Consultant
Functional Responsibility:	Maintains thorough, current, functional knowledge of a subject or process. Generates reports, reviews documentation, recommends alternatives, and provides input to a program or project. Reduces project time and costs through the application of specialized knowledge to the executive and staff.
Minimum/General Experience:	Level 1: Must meet the Level 2 requirements plus two additional years of related work experience. Level 2: Must meet the Level 3 requirements plus three additional years of related work experience. Level 3: Must have three years work experience in the particular specialty field or if no master's degree, must have a bachelor's degree plus six years of related, practical work experience or if no bachelor's degree, must have 14 years of professional level work experience in the required specialty field. The specialist must be considered knowledgeable in the required specialty as evidenced by external sources, such as, contemporary testimonials, reputation with peers, related patents and awards, and a high standing in the professional or special interest organizations.

GSA LIN 24 Title	Subject Area Specialist
Minimum Education:	Master's degree or bachelor's degree in the required specialty area, High School diploma, or GED equivalent.

GSA LIN 25 Title	System Engineer – Software, Hardware, Integration, Test, Safety, Cost, Development, Information
Commercial Job Titles	Safety Engineer; Programmer, Engineering and Scientific; Systems Programmer; Chief, Computer Programmer; Coordinator, Computer Programming; Systems Analyst; Computer Systems Hardware Analyst; Computer Systems Engineer; Information processing Engineer; Methods Analyst; Quality Assurance Analyst
Functional Responsibility:	<p>A senior technical position requiring experience in all aspects of hardware and software integration. Duties include, but are not limited to, performing software testing, developing and scheduling program resources, performing evaluations, integration and testing of software segments through systems interoperability, review documentation, maintain and diagnose software problems, conduct special studies, prepare reports. Integrates hardware, software, and all associated requirements, e.g. cost, safety, testing, development, information, and training. Develops and implements safety program to prevent or correct unsafe environmental working conditions, utilizing knowledge of industrial processes, mechanics, chemistry, psychology, and industrial health and safety laws. Examines plans and specifications for new machinery or equipment to determine if all safety precautions have been included. Determines amount of weight that can be safely placed on plant floor. Tours plant to inspect fire and safety equipment, machinery, and facilities to identify and correct potential hazards and ensure compliance with safety regulations. Determines requirements for safety clothing and devices, and designs, builds, and installs, or directs installation of safety devices on machinery. Conducts or coordinates safety and first aid training to educate workers about safety policies, laws, and practices. Investigates industrial accidents to minimize recurrence and prepares accident reports. May conduct air quality tests for presence of harmful gases and vapors. Converts scientific, engineering, and other technical problem formulations into computer programs. Resolves symbolic formulations, prepares flow charts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding and technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing. Enters programs into computer systems. Reviews results of computer runs with interested personnel to determine necessity for modifications or reruns. Develops new subroutines or expands program to simplify statement, programming, or coding of future problems. May direct and coordinate activities of COMPUTER PROGRAMMERS. Coordinates installation of computer operating system software and tests, maintains, and modifies software, using computer terminal: Reads loading and running instructions for system software, such as task scheduling, memory management, computer file system, or controlling computer input and output, and loads tapes into tape drive or transfers software to magnetic disk. Initiates tests of the system program and observes readouts to correct errors. Analyzes performance indicators, such as system's response time, number of transactions per second, and number of programs being processed at once, to ensure that system is operating efficiently. Changes system software so that system performance will meet objectives. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested changes to operating system are possible. Writes descriptions of steps taken to modify systems and procedures required to implement new software. Assists users having problems with use of system software. May train users, COMPUTER OPERATOR, and COMPUTER PROGRAMMER to use system software. May prepare workflow charts and diagrams to modify system software. May visit vendors to observe demonstration of systems software. May administer and monitor computer program that controls user access to system. May review productivity reports and problem records to evaluate performance of computer system. Plans, schedules, and directs the preparation of programs to process data and solve problems by use of computers: Consults with managerial and systems analysis personnel to clarify program intent, identify problems, suggest changes, and determine extent of programming and coding required. Assigns, coordinates, and reviews work of programming personnel. Develops programs from workflow charts or diagrams, considering factors, such as computer storage capacity and speed, extent of peripheral equipment, and intended use of output data. Converts workflow charts into computer programs. Enters program code into computers. Enters test data into computers. Analyzes test runs on computers to correct or direct correction of the computer programs and input data. Revises or directs revision of existing computer programs to increase operating efficiency or adapt to new requirements. Compiles documentation of computer program development and subsequent revisions. Trains subordinates in programming and program coding. Prescribes standards for terms and symbols used to simplify interpretation of programs. Collaborates with computer manufacturers and other users to develop new programming methods. Prepares records and reports. Analyzes user requirements, procedures, and problems to automate processing or to improve existing computer system: Confers with personnel of organizational units involved to analyze current operational procedures, identify problems, and learn specific input and output requirements, such as</p>

GSA LIN 25 Title	System Engineer – Software, Hardware, Integration, Test, Safety, Cost, Development, Information
	<p>forms of data input, how data is to be summarized, and formats for reports. Writes detailed description of user needs, program functions, and steps required to develop or modify computer program. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested program or program change is possible within existing system. Studies information processing systems to evaluate effectiveness. Develops new systems to improve production or workflow. Prepares workflow charts and diagrams to specify in detail operations to be performed by equipment and computer programs and operations to be performed by personnel. Conducts studies pertaining to development of new information systems to meet current and projected needs. Plans and prepares technical reports, memoranda, and instructional manuals as documentation of program development. Upgrades system and corrects errors to maintain system after implementation. May assist COMPUTER PROGRAMMER in resolution of work problems related to flowcharts, project specifications, or programming. Prepares time and cost estimates for project completion. Analyzes data processing requirements to plan a data processing system that will provide the system capabilities required for projected workloads. Plans layout and installation of new systems or modification of existing systems. Confers with data processing and project managers to obtain information on limitations and capabilities of existing system and capabilities of existing system and capabilities required for data processing projects and projected workload. Evaluates factors such as number of departments serviced by data processing equipment, reporting formats required, volume of transactions, time requirements and cost constraints, and need for security and access restrictions to determine hardware configurations. Recommends layout for type of computers and peripheral equipment or modifications to existing equipment and system to provide capability for proposed project or workload, efficient operation, and effective use of allotted space. Enters data into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements. Specifies power supply requirements and configuration. May specialize in one area of system application or in one type or make of equipment. May train users to use new or modified equipment. May monitor functioning of equipment to ensure system operates in conformance with specifications. Evaluates and tests new or modified software programs and software development procedures used to verify that programs function according to user requirements and conform to establishment guidelines: Writes, revises, and verifies quality standards and test procedures for program design and product evaluation to attain quality of software economically and efficiently. Reviews new or modified program, including documentation, diagram, and flow chart, to determine if program will perform according to user request and conform to guidelines. Recommends program improvements or corrections to programmers. Reviews computer-operating log to identify program-processing errors. Enters instructions into computer to test program for validity of results, accuracy, reliability, and conformance to establishment standards. Observes computer monitor screen during program test to detect error codes or interruption of program and correct errors. Identifies differences between establishment standards and user applications and suggests modifications to conform to standards. Sets up tests at request of user to locate and correct program-operating error following installation of program. Conducts compatibility tests with vendor-provided programs. Monitors program performance after implementation to prevent reoccurrence of program operating problems and ensure efficiency of operation. Writes documentation to describe program evaluation, testing, and correction. May evaluate proposed software or software enhancement for feasibility. May develop utility program to test, track, and verify defects in software program. May write programs to create new procedures or modify existing procedures. May train software program users.</p>
Minimum/General Experience:	<p>Level 1: Must meet the Level 2 qualifications plus have four additional years of directly related work experience. Level 2: Must meet the Level 3 qualifications plus have four additional years of directly related experience. Level 3: Must have five years of directly related work experience or if no master's degree with bachelor's degree, must have seven additional years of directly related work experience.</p>
Minimum Education:	<p>Master's degree or bachelor's degree in computer science, math, electrical engineering, or a directly related technical field. If the candidate does not possess a bachelor's degree, two additional years of directly related work experience may be substituted for 30 credits of college coursework.</p>
GSA LIN 26 Title	Technical Publications – Editor/Writer
Commercial Job Titles	Editor, Technical and Scientific Publications; Manager, Technical and Scientific Publications; Supervisor, Publications
Functional Responsibility:	<p>Performs a variety of writing, editing and research duties in connection with the preparation of technical manuals and publications for publication. Evaluates and extrapolates technical and engineering source data associated with software changes and presents information tailored to users needs considering training, education, readability and comprehensibility. Organizes material in accordance with governing format standards and edits to ensure consistencies in style and terminology.</p>

GSA LIN 26 Title	Technical Publications – Editor/Writer
	Works with handwritten or typed material. Ensures published documents are grammatically correct, clear, concise, and free of typographical errors. Works closely with TRAINING SPECIALISTS to ensure page layout and artwork is effective and supports the purpose of the technical document being produced. Directs and coordinates of writers engaged in preparing technical, scientific, medical, or other material for publication in conjunction with or independent from manufacturing, research, and related activities. Analyzes developments in specific field to determine need for revisions, corrections, and changes in previously published materials and development of new material. Confers with customer representatives, vendors, plan executives, or publisher to establish technical specifications, determine specific or general subject material to be developed for publication, and resolve problems concerned with developing and publishing subject material. Assigns staff writer or contracts with specialist in subject area to produce draft of manuscript. Supervises staff writers and delineates standard procedures for gathering data and writing. Reviews drafts of manuscripts and makes recommendations for changes. May edit and correct final draft to prepare for typesetting. May perform similar duties to those supervised. May select or recommend graphics, such as drawings, diagrams, pictures, and charts to illustrate manuscript. May specialize in particular type of publication, such as manuals, handbooks, articles, or proposals.
Minimum/General Experience:	Must have one year work experience as an editor or proofreader. Must be computer literate. Must be proficient in oral and written communications.
Minimum Education:	Bachelor’s degree in journalism or English.

GSA LIN 27 Title	Test Specialist – Software/Hardware (SW/HW)
Commercial Job Titles	Software Test Specialist - Operational
Functional Responsibility:	Defines requirements to test systems based on system requirements specifications. Develops automated and manual test procedures, and develops test parameter requirements based on a review of the system’s design. Must be capable of analyzing and defining interface requirements, performing timing analyses/studies on system performance, and establishing benchmark test scenarios. Must be capable of developing and performing walkthroughs on the computer programs to include defining data structures, and inputs an outputs processed by the systems. Implements design and debugging code as required to test. Prepares and develops all test products (plans, cases, procedures, reports) in accordance with applicable standards. Analyzes, records results, recommends solutions, and prepares reports of test results to the PROJECT MANAGER. Prepares and reviews detailed test plans, procedures, and reports for new or revised computer programs. Identifies potential problems in testing, data collection, analysis, and test reporting.
Minimum/General Experience:	Level 1: Must meet the Level 2 requirements, plus two additional years of relevant work experience. Level 2: Must meet the Level 3 requirements, plus two additional years of relevant work experience. Level 3: Must have two years of relevant work experience. Must be computer literate. Must be proficient in oral and written communications.
Minimum Education:	High school diploma or GED equivalent.

GSA LIN 28 Title	Training Exercise Controller/Operator
Commercial Job Titles	Technical Training Coordinator
Functional Responsibility:	Coordinates all facets of training and technical documentation released to customers, provides cost estimates on all training requirements, and ensures all in-house training meets field service requirements. Develops and establishes procedures/processes to accomplish all training transactions. Prepares training event materials, train-up for TRAINING SPECIALIST, supervises execution, and prepares after action reports on training events with the SUBJECT AREA SPECIALIST. Coordinates activities of instructors engaged in training employees or customers of industrial or commercial establishment: Confers with managers, instructors, or customer’s representative to determine training needs. Assigns instructors to conduct training. Schedules classes, based on availability of classrooms, equipment, and instructors. Evaluates training packages, including outline, text, and handouts written by instructors. Assigns instructors to in-service or out-service training classes to learn new skills as needed. Monitors budget to ensure that training costs do not exceed allocated funds. Writes budget report listing training costs, such as instructors’ wages and equipment costs, to justify expenditures. Attends meetings and seminars to obtain information useful to training staff and to inform management of training programs and goals. Monitors instructors during lectures and laboratory demonstrations to evaluate performance. May perform other duties as described under SUPERVISOR (any industry) Master Title. May develop and conduct training programs for employees or customers of an industrial or commercial establishment.
Minimum/General Experience:	Must have three years exercise experience in a leadership position or if no Bachelor’s degree, must have six years exercise experience.
Minimum Education:	Bachelor’s degree in a related field or High school diploma or GED equivalent.

GSA LIN 29 Title	Training Specialist/Analyst
Commercial Job Titles	Instructor, Technical Training; Training Specialist
Functional Responsibility:	Assists the COURSEWARE DEVELOPER in the design and delivery of both private and public sector training. Conducts training needs assessments, writes training policies. Coordinates written and non-written training materials with the COURSEWARE DEVELOPER, assists in the hiring of INSTRUCTORS and SUBJECT AREA SPECIALISTS for any aspect of training development or execution. Develops, implements and delivers various training programs. Identifies and defines the learning objectives for training programs required to support introduction of new systems or capabilities. Uses available documentation, learning system design techniques and system requirements to perform job and task analyses for training products and systems. Maintains quality control for training documents through coordination with the software development and testing personnel to evaluate the accuracy and completeness of technical training documents. May design and develops system technical manuals, student materials, instructor materials, extension training materials, and other related technical training documents with the COURSEWARE DEVELOPER. Develops and conducts programs to train employees or customers of industrial or commercial establishment in installation, programming, safety, maintenance, and repair of machinery and equipment, such as robots, programmable controllers, and robot controllers, following manuals, specifications, blueprints, and schematics, and using hand tools, measuring instruments, and testing equipment: Confers with management and staff to determine training objectives. Writes training program, including outline, text, handouts, and tests, and designs laboratory exercises, applying knowledge of electronics, mechanics, hydraulics, pneumatics, and programming, and following machine, equipment, and tooling manuals. Schedules classes based on classroom and equipment availability. Lectures class on safety, installation, programming, maintenance, and repair of machinery and equipment, following outline, handouts, and texts, and using visual aids, such as graphs, charts, slides, and videotape. Demonstrates procedures being taught, such as programming and repair, applying knowledge of electrical wire color coding, programming, electronics, mechanics, hydraulics, and pneumatics, using hand tools, measuring instruments, and testing equipment, and following course outline. Observes the trainees while in the laboratory and answers trainees' questions. Administers written and practical exams and writes performance reports to evaluate trainees' performance. Participates in meetings, seminars, and training sessions to obtain information useful to training facility and integrates information into training program. May repair electrical and electronic components of robots in industrial establishments. May install, program, maintain, and repair robots in customer's establishment. May be designated according to subject taught as Instructor, Programmable Controllers (education); Instructor, Robotics (education).
Minimum/General Experience:	Level 1: Must meet Level 2 requirements plus have a master's degree and three additional years of relevant work experience or if no master's degree with bachelor's degree, must have eight additional years of relevant work experience. Level 2: Must meet Level 3 requirements and have two additional years of relevant work experience. Level 3: Must have a bachelor's degree and one year of relevant work experience in training development. Must have an understanding of Instructional System Design (a DoD standard) or similar model for training development. Must have knowledge of the basic principles of adult education and adult learners. Must be proficient in oral and written communications.
Minimum Education:	Master's degree or bachelor's degree in an education or training related subject area, plus six semester hours of college-level computer science or data processing courses.

GSA LIN 30 Title	Analyst, Cost
Commercial Job Titles	Financial/Cost Analyst
Functional Responsibility:	Develops and updates cost estimates and analyses. Prepares life cycle cost analyses. Provides cost estimating and analysis support in the development of Life Cycle Cost Estimates (LCCE), Economic Analyses (EAs), Independent Cost Estimates, and supporting methodologies and assumptions. Supports the development and tracking of Cost as an Independent Variable (CAIV) application. Provides cost management analysis and Earned Value Management Systems (EVMS) support including analysis of cost performance reports and participation as team member in Integrated Baseline Reviews and other EVMS reviews. These efforts involve data research, data collection, and development of the cost estimates utilizing various cost models. Responsible for data research and collection. Provides technical support in tracking funding across multiple units and fund codes. Conducts technical analysis on financial reports and advises others on problem resolution. Develops Baseline Cost Estimates (BCEs). Prepares program standard reports. Resolves sensitive program costing issues. Defends positions before review panels. Establishes and maintains an accurate Acquisition Program Baseline. Reviews and analyzes cost/schedule data submitted in monthly reports. Determines costs for all alternatives. Uses PC based applications such as spreadsheets and word processing.
Minimum/General Experience:	Level 1: Requires seven years of progressively more responsible experience in all aspects of life-cycle cost estimating methods and techniques for majors systems or training devices and Government

GSA LIN 30 Title	Analyst, Cost
	<p>accounting, financial management, DoD planning, Programming and Budgeting System financial analysis, or equivalent financial experience. Requires at least two recent years of experience in the development and preparation of LCCEs, EAs, BCEs, EVMSs and CAIVs. Must have extensive experience using standard automated accounting systems and mandated automated cost estimating tools.</p> <p>Level 2: Requires five years of progressively more responsible experience in financial cost, Government accounting, budgeting, planning, cost estimating, financial management, Programming and Budgeting System financial analysis, or equivalent financial experience. Requires at least two recent years of experience in the development and preparation of LCCEs, EAs, EVMSs and CAIVs. Must have extensive experience using standard automated accounting systems and automated cost estimating tools.</p> <p>Level 3: Requires three years experience in financial cost, accounting, budgeting, planning, cost estimating, financial management, and forecasting. Must be knowledgeable of cost analysis, scheduling, budget planning, and documentation. Knowledge of standard automated accounting systems is required. Requires extensive experience using automated cost estimating tools.</p>
Minimum Education:	Must have a Bachelor's or higher degree in accounting, finance, operations research, mathematics, or engineering.

GSA LIN 31 Title	Analyst, Market Research
Commercial Job Titles	Economist/Social Scientist/Sociologist
Functional Responsibility:	Responsible for researching market conditions in local, regional, or national areas to determine potential sales of a product or service. Assist in the creation of a marketing campaign based on regional preferences and buying habits. Provides the information that is used to identify and define marketing opportunities; generate, refine, and evaluate marketing actions; and monitor marketing performance. Devises the methods and procedures for obtaining the data needed. Ability to develop professional relationships. Requires excellent communication skills. Responsible for making recommendations based upon findings and suggesting a course of action. Requires a thorough knowledge of basic statistical procedures.
Minimum/General Experience:	Requires eight years of progressively more responsible experience in marketing. Requires a thorough knowledge of preparing concise, clearly written reports, summarizing conclusions, making recommendations, and proposing alternate courses of action when possible. Requires the ability to use computers to compile and generate these reports. Requires the ability to present verbal reports to management. Demonstrated ability to develop professional relationships as a command representative, consultant, or advisor. Demonstrated knowledge of basic statistical procedures is required.
Minimum Education:	Bachelor's or higher degree in marketing, economics, operations research, or a closely related field. A Master's degree may be substituted for five years of required experience.

GSA LIN 32 Title	Analyst, Military
Commercial Job Titles	Military Analyst/Subject Matter Expert
Functional Responsibility:	Serves as subject matter expert for the development, analyses and implementation of: training, training systems, requirements, doctrine, logistics, and test and evaluation. Has a broad understanding of military command relationships at the joint, unified and specified command level and operational force employment. Conducts analyses, prepares reports, and provides recommendations. Uses PC applications such as word processing and other automated tools in the PC and workstation environments.
Minimum/General Experience:	<p>Level 1: Must meet level 3 requirements and have an additional 11 years experience. Also requires a broad understanding of military command relationships at the joint, unified and specified command level and operational force employment.</p> <p>Level 2: Must meet the level 3 requirements. Must have an additional 6 years experience.</p> <p>Level 3: Requires specific and detailed knowledge of, and at least 10 years of experience in, the deployment and employment of military combat, combat support, or combat service support systems. Requires detailed knowledge of military doctrine and tactics and an understanding of the military planning process. Requires a broad knowledge of doctrine, logistics, requirements analysis, the development and acquisition processes, training development, training systems, and test and evaluation.</p>
Minimum Education:	<p>Level 1: Must have a Bachelor's preferably in operations research, mathematics, or engineering.</p> <p>Level 2 and 3: Must have a Bachelor's preferably in operations research, mathematics, or engineering.</p>

GSA LIN 33 Title	Research, Assistant
Commercial Job Titles	Assistant, Research
Functional Responsibility:	Inputs, updates, and checks the content of technical and quantitative information held in internal databases. Assists with other work as required. Works under the supervision of the Senior Research Assistant or Principal Investigator. Provides assistance on research studies. Assists in providing quantitative and qualitative technical assessments and recommendations to program management on the state of future technologies, trends, and requirements that may affect the customers' mission(s). Assists in accessing the impacts of future technologies and systems on the customer's organization and mission areas by performing technical interchanges of information with affected agencies, to include industry, academia, and other services, as necessary. Must have Team working and communication skills. Uses applications such as word processing and other automated tools in the PC and workstation environments.
Minimum/General Experience:	Requires three years of experience.
Minimum Education:	Must have a Bachelor's degree.

GSA LIN LIN 34 Title	Assistant, Security
Commercial Job Titles	Security Specialist
Functional Responsibility:	Serves as subject matter expert for the development of training materials. Uses automated tools in the personal computer (PC) and workstation environments, which include a broad knowledge of database preparation and manipulation. Applies general knowledge of security rules, regulations, and procedures.
Minimum/General Experience:	Assistant to the ADMINISTRATIVE MANAGER. Completes supporting tasks necessary for the orderly conduct of the project and fulfillment of contract security requirements. Within functional area of security completes tasks with a minimum of supervision. Aids executive in staff capacity by coordinating office security services. Analyzes security administrative and operational practices, such as record keeping systems, forms control, office layout, security budgetary requirements, performance standards and to create new security systems or revise established security procedures. Coordinates collection and preparation of security reports. Prepares security reports including conclusions and recommendations for solution of security problems. Issues and interprets security policies as required. Reviews and answers correspondence. May assist in preparation of security budget needs and annual security reports of organization. May conduct security orientation of new employees, and plan security training programs. May perform all personnel security support functions involving the maintenance of security clearances to include in and out processing of personnel, processing periodic reinvestigations, verifying security clearances for visit requests, maintaining the security rosters, and verifying need-to-know of contractor visitors to other DOD sites. May perform information security functions involving the receipt, storage, reproduction, transmission, or destruction of classified material.
Minimum/General Experience:	Requires two years of work experience in a relevant field. Must have experience and demonstrate ability in the use of PC applications such as word processing. As Security Assistant must be a US citizen and be able to acquire a Secret level personnel security clearance.
Minimum Education:	Must have a High School diploma or GED equivalent.

GSA LIN 35 Title	Consultant, Principal
Commercial Job Titles	Facilitator/Efficiency Engineer
Functional Responsibility:	Responsible for applying business improvement and reengineering principles to organizational development and process modernization projects. Responsible for effectively transitioning existing project teams, and facilitating project teams in the accomplishment of project activities and objectives. Identifies client issues and likely solutions and approaches. Establishes critical client relationships as credible thought-partners and key influencers. Understands dynamics and interrelationships that affect performance. Provides scientific and technical skills in conceptualizing, designing, obtaining support for, conducting, managing, and dissemination results of strategic technology research or portions of small or large scale research studies or programs. Provides quantitative and qualitative technical assessments and recommendations to program management on the state of future technologies, trends, and requirements that may affect the customers' mission. Requires the ability to develop professional relationships as a command representative, consultant, or advisor to external advisory and policy boards and councils, research organizations, military educational institutions, and educators. Requires the ability to contribute to planning for the development of new products and services to the customer's mission area and its customers. Modifies existing technology research processes to effect more efficient results as required. Provides integrated input and management of reporting of research results.
Minimum/General Experience:	Requires eight years of progressively more responsible.
Minimum Education:	Bachelor's or higher degree in operations research, systems management, or a closely related field. A Master's degree may be substituted for five years of required experience.

GSA LIN 36 Title	Coordinator, Product
Commercial Job Titles	Project/Team Leader
Functional Responsibility:	Reviews and makes recommendations to the Product Manager regarding the efforts of the project team so that the proposed efforts are consistent with program cost, schedule, and performance requirements. Makes recommendations to the Product Manager for the resolution of divergent viewpoints. Provides input to the Product Manager regarding critical program decisions. Establishes processes and procedures to facilitate program management and administration. Reviews products requested by the Program Manager for quality and timeliness, and assesses results in terms of schedule, cost and risk involved. Ascertains the status of projects, identifies difficulties being encountered, and recommends solutions. Reviews periodic reports from Project Directors to maintain current status of projects. Documents the results from program reviews to assist in identifying program cost, schedule and performance risks. Assists the Product Manager to develop the correct approach to ensure program milestones are met. Provides information and data to respond to ad hoc requests from Government personnel. Develops financial plans including supporting documentation. Reviews program contract documentation to support acquisition strategies and plans, statements of work, and system operational performance requirements documents.
Minimum/General Experience:	Shall have a total of 12 years military/professional experience in program management related positions including at least 3 years of direct management support to a Government acquisition office. Shall be familiar with generation and analysis of financial data using automated spreadsheets.
Minimum Education:	A Bachelor's or higher degree from an accredited university or college, which includes at least introductory courses in accounting, business, and management, is required.

GSA LIN 37 Title	Engineer, Logistics
Commercial Job Titles	Logistics Engineer/Logistician/Logistic Planner
Functional Responsibility:	Supports logistic tasking as a member of a technical team. Familiar with Integrated Logistics Support (ILS) process. Supports task that require logistics planning preparation on systems and subsystems. Provides support to programmatic multi-discipline logistics issues. Performs as lead logistician on task assignments, provides direction to other logisticians. May design and conduct research or technical studies to support logistic functions. Knowledgeable of the development and management of logistics data, such as Technical Manuals, Allowance Parts List (APL) and Planned Maintenance (PM) documents. May develop and deliver briefings on logistics operations and issues. Provides reports as required. Uses applications such as word processing and other automated tools in the PC and workstation environments.
Minimum/General Experience:	Requires five years of progressively more responsible experience in the ILS process.
Minimum Education:	Bachelor's degree or graduation from an accredited Logistics Intern Program.

GSA LIN 38 Title	Engineer, Maintenance
Commercial Job Titles	Maintenance Engineer/Maintenance Supervisor
Functional Responsibility:	Performs "hands-on" engineering, scientific, or analytical functions in support of engineering and technical tasks. Works under supervision to perform a variety of engineering tasks which are broad in nature and are concerned with the design and implementation, including support facilities and/or equipment.
Minimum/General Experience:	Requires six years of progressively more responsible experience in the maintenance field, to include supervision of other maintenance and logistics personnel.
Minimum Education:	Journeyman license, a high school diploma or equivalent.

GSA LIN 39 Title	Engineer, Production
Commercial Job Titles	Production Engineer, Electronics/Electrical Engineer
Functional Responsibility:	Provides technical support for the project developers and to the customers in matters dealing with system hardware for all of the system under development. Merges electronic expertise and programming languages to resolve whether hardware or software requires adjustment to achieve desired results. Assists in resolution of questions when system failure must be traced to hardware or software. Submits guidance to system developers concerning impact hardware changes may have on new software developments. Uses PC applications such as word processing and other automated tools in the PC and workstation environments.
Minimum/General Experience:	Level 1: Must meet the Level 3 requirements plus have six additional years of directly related work experience. Level 2: Must meet the Level 3 requirements plus have three additional years of directly related work experience. Level 3: Requires four years of directly related work experience,
Minimum Education:	Level 1: Master's degree in electrical engineering or directly related technical field.

GSA LIN 39 Title	Engineer, Production
	Level 2: Bachelor's degree in electrical engineering or directly related technical field. Level 3: High School equivalent technical courses of instruction at an accredited technical school.

GSA LIN 40 Title	Manager/Director, Facility
Commercial Job Titles	Facility Engineer/Facilities Supervisor
Functional Responsibility:	Performs a variety of different actions and activities in support of each assigned system, project, or program. Functional duties primarily are to plan direct, organize, control, and coordinate facility support for technical efforts, contractor manpower and team activities. Includes areas of administration, program control, and technical supervision of facility support personnel involved in systems engineering, integration, in support of assigned tasks. Plans and coordinates the activities of administration, program control and technical supervision of facility support personnel involved in systems engineering integration support efforts. Interfaces with the Government personnel. Ensures compliance with all management policies, plans, and procedures. Provides recommendations for resolution of technical problems. Establishes processes and procedures to facilitate the use of the facility. Defines the standards for quality and timeliness of facility support and assesses results in terms of schedule, cost, and risk. Analyzes facility support issues to help develop the correct approach to ensure user requirements are met.
Minimum/General Experience:	Requires six years of progressively more responsible experience in the facilities management field.
Minimum Education:	Must have a Bachelor's degree from an accredited college.

GSA LIN 41 Title	Scientist, Chem-Bio
Commercial Job Titles	Chem-Bio Scientist
Functional Responsibility:	Level 1: Provides supervision, guidance and scientific and managerial leadership to Senior and Staff Scientists. Evaluates and resolves client needs and problems. Recommends solutions and proposed changes based on personal knowledge of biological principles and practices. Performs scientific functions that include studies, analyses, and implementations. Identifies, evaluates, and implements biological and biomedical studies and application development. Provides quantitative and qualitative technical assessments and recommendations to program management on the state of future chemical and biological related technologies, trends, and requirements that may affect the customers' mission(s). Modifies existing technology research processes to effect more efficient results as required. Evaluates functions from an enterprise and strategic perspective. Effects and maintains liaison with the client, and other pertinent governmental and private agencies to insure that ample and necessary information is available for the planning of all investigations. Level 2: Provides guidance and scientific leadership to evaluate/resolve client needs and problems. Provides supervision and guidance to staff scientists, technicians or aids and other assigned support personnel. Coordinates the efforts of multiple teams/persons to achieve optimum overall results in a timely manner and at minimum cost. Assists Principal Scientist in performing scientific functions that include studies, analyses, and implementations. Provides quantitative and qualitative technical assessments and recommendations to program management on the state of future chemical and biological related technologies, trends, and requirements that may affect the customers' mission(s). Recommends methodologies and tools to be used in biological and biomedical studies and application development. Effects and maintains liaison with the client other pertinent governmental and private agencies to insure that ample and necessary information is available for the planning of all investigations. Level 3: Assists in the conduct of scientific studies. Analyzes scientific studies, and/or approaches, proposed solutions, and implementations. Effects and maintains liaison with the client, and other pertinent governmental and private agencies to insure that ample and necessary information is available for the planning of all investigations.
Minimum/General Experience:	Level 1: Requires 10 years experience. Level 2: Requires Level 3 position qualifications plus have 4 additional years of directly related work experience. Level 3: Requires at least 2 years of years of experience.
Minimum Education:	Level 1: PhD in Chemistry or Microbiology or related biological or physical science. Level 2: Master's Degree in Chemistry or Microbiology or related biological or physical science. Level 3: Bachelors Degree in Chemistry or Microbiology or related biological or physical science

GSA LIN 42 Title	Scientist, Computer
Commercial Job Titles	Computer Scientist
Functional Responsibility:	Conducts independent software validation and verification. Defines requirements to test systems based on system requirements specifications. Develops automated and manual test procedures, and develops test parameter requirements based on a review of the system's design. Must be capable of analyzing and defining interface requirements, performing timing analyses and studies on system performance,

GSA LIN 42 Title	Scientist, Computer
	and establishing benchmark test scenarios. Capable of developing and performing walkthroughs on the computer programs to include defining data structures, inputs, and outputs processed by the systems. Implements design and debugging code as required for testing. Prepares and develops all test products (plans, cases, procedures, reports) in accordance with applicable standards. Analyzes, records results, recommends solutions, and prepares reports of test results to the PROJECT MANAGER. Prepares and reviews detailed test plans, procedures, and reports for new or revised computer programs. Identifies potential problems in testing, data collection, analysis, and test reporting. Conducts trade off studies.
Minimum/General Experience:	Level 1: Must meet the Level 2 requirements, plus two additional years of relevant work experience. Level 2: Must meet the Level 3 requirements, plus two additional years of relevant work experience. Level 3: Requires two years of relevant work experience. Must be proficient in oral and written communications. Must be knowledgeable of phases of computer system design and computer software acquisition processes. Requires knowledge in design, development and demonstration of computer systems, software, and databases for application to office automation systems using higher order language(s) and database development tools.
Minimum Education:	Must have a High School diploma or GED equivalent. For Scientist, Computer, Level 1, must have a Bachelor's or higher degree in Computer Science, Mathematics, or related science that includes coursework related to computer system design, computer programming, and database design.

GSA LIN 43 Title	Scientist, Research
Commercial Job Titles	Research Scientist
Functional Responsibility:	Provides scientific and technical skills in conceptualizing, designing, obtaining support for, conducting, managing, and disseminating the results of strategic technology research in the chemical and biological areas or portions of research studies or programs. Provides quantitative and qualitative technical assessments and recommendations to program management on the state of future chemical and biological related technologies, trends, and requirements that may affect the customers' mission(s). Assesses the impacts of future chemical and biological related technologies and systems on the customer's organization and mission areas. Formulates technical assessments and recommendations in support of customers. Attends and presents papers at outside seminars and conferences, reads technical literature to stay abreast of existing and emerging hardware and software technology. Conducts research in designated customer areas of interest. Reviews, justifies, and recommends the acquisition of hardware and software or upgrades to existing systems. Modifies existing technology research processes to effect more efficient results as required. Provides integrated input and management of reporting of research results.
Minimum/General Experience:	Level 1: Must meet the Level 3 position qualifications. Requires 15 years of years of progressively more responsible experience in management of military research, development, and acquisition programs. Requires a thorough knowledge of complex simulation computer architectures. Level 2: Must meet the Level 3 position qualifications plus have two additional years of directly related work experience. Familiar with complex simulation computer architectures. Level 3: Requires five years experience in research, development, and acquisition programs. Requires knowledge of current and emerging technologies and methodologies to assist in identifying and developing mission objectives. Requires the ability to communicate effectively about technology, both orally and in writing, to present seminars, advise management, write documentation, and represent needs to management and customers. Requires the ability to contribute to planning for the development of new products and services to the customer's mission area and its customers. Requires the ability to conceptualize research problems, design studies, conduct studies, and interpret the results of studies and theoretical and practical applications.
Minimum Education:	Level 1: Must have a Master's degree in operations research, systems management, or a closely related field. Levels 2 and 3: Must have a Bachelor's degree in operations research, systems management, or a closely related field.

GSA LIN 44 Title	Technician, LAN System
Commercial Job Titles	LAN Systems Technician
Functional Responsibility:	Assists more senior LAN personnel in the performance of their duties. which includes installation, troubleshooting, maintenance and upgrades. Knowledgeable of different network protocols, different LAN and work station hardware and software and various cable types and cable plant management.
Minimum/General Experience:	Requires two years of experience. Must be familiar with different network protocols to include but not limited to TCP/SPX. Must be familiar with different LAN and workstation hardware and software. Must be familiar with different cable types and cable plant management.
Minimum Education:	Must have a Bachelor's degree with emphasis in computer hardware and software related courses or appropriate industry certification.

2. Maximum Order

There is no maximum dollar value per order for all AST provided services or products.

3. Minimum Order

The minimum order value of orders for services to be issued is \$10,000 and the minimum order value for products is \$10.00.

4. Geographic Scope for Services

The geographic scope of this contract is the 48 contiguous states and the District of Columbia, Alaska, Hawaii, Commonwealth of Puerto Rico, US Virgin Islands, Guam and the US Combined Arms Training Center at Hohenfels, Germany.

5. Points of Production (City, County, and State or Foreign Country)

Advanced Systems Technology, Inc. Lawton, Comanche County, Oklahoma.

6. Discounts on Services

Discount from list prices or statement of net price. Prices shown are NET prices; basic discounts have been deducted.

- a. Quantity: AST reserves the right to offer discounts based upon the number and composition of personnel necessary to perform the work. The threshold for this negotiated discount applies to activities whereby AST personnel use AST furnished equipment or facilities.
- b. Dollar Volume: AST reserves the right to offer discounts in instances where the value of the order exceeds \$500,000 or as negotiated.
- c. Government Educational Institutions: Government Educational Institutions are offered the same discounts as all other Government customers.
- d. Other:
 - (1) AST reserves the right to offer discounts when AST personnel use Government furnished equipment or facilities.
 - (2) AST reserves the right to offer discounts based upon local, area, or regional costs of living.

7. Discounts on Products. Prices shown are NET prices; basic discounts have been deducted.

- a. Dollar Volume: AST reserves the right to offer discounts in instances where the value of the order exceeds \$5,000 or as negotiated.
- b. Government Educational Institutions: Government Educational Institutions are offered the same discounts as all other Government customers.

8. Prompt Payment Terms

Payment terms are net 30 days.

9. Government Purchase Cards

Government commercial credit cards will be accepted for purchases below, equal to, or in excess of the micro-purchase level.

10. Foreign Items (List items by country of origin)

None.

11a. Time of Delivery

As required by ordering agencies in individual task orders.

11b. Expedited Delivery

Not applicable.

11c. Overnight and 2 Day Delivery

Not applicable for services. Additional charges apply to Training Courses.

12. F.O. B. Point(s)

Not applicable.

13a. Ordering Addresses

Services

Frantzie Couch contract@astcorp.com
1-888-248-0321 or Fax 1-580-355-8947
P.O. Box 2305
Lawton, OK 73502-2305

Products via Email Orders
gsahits@astcorp.com

Products via Faxed Orders
1-888-735-5395

Products via Mailed Orders

AST- HITS™ Customer Service
Advanced Systems Technology
P.O. Box 2305
Lawton, OK 73502-2305

13b. Ordering Procedures

For supplies and services, the ordering procedures and information on Blanket Purchase Agreements (BPAs) are found in Federal Acquisition Regulation (FAR) 8.405.

14. Payment Address

Address payments to:
Advanced Systems Technology, Inc.
P.O. Box 2152
Duncan, OK 73534-2152

15. Warranty Provisions

Not applicable.

16. Export Packing Charges

Not applicable.

17. Terms and Conditions of Government Purchase Card Acceptance

There are no additional terms and conditions for acceptance of government Purchase Cards above the micro purchase threshold.

18a. Special Attributes

Not applicable.

18b. Section 508 Compliance

Services – Not Applicable. Products Yes.

19. Statistical Data

Data Universal Numbering System (DUNS) Number: 12-259-0797

Type of Contractor: Veteran Owned Small Business

Contractor's Taxpayer Identification Number (TIN): 73-1233324

CAGE Code: 3J515

Contractor, Advanced Systems Technology, Inc. is registered with the Central Contractor Registration Database.

SECTION 2. PRICING FOR TRAINING COURSES

GSA Training Courses		
ASTGSA 209-10XX	Expectations Evaluation Software http://www.hits.astcorp.com/gsa/telecomm/expectations.html	\$949.00
ASTGSA 209-12XX	Expectations Software Maintenance Service Warranty http://www.hits.astcorp.com/gsa/telecomm/expectations.html	\$139.00
ASTGSA 210-00XX	APCO Call Center Supervisor http://www.hits.astcorp.com/gsa/telecomm/24supervisor.html	\$368.07
ASTGSA 215-00XX	Telecommunicator Series 16-Hour Refresher Training (2 CD Set) CBT http://www.hits.astcorp.com/gsa/telecomm/16recert.html	\$157.60
ASTGSA 218-01XX	Telecommunicator Series 40-Hour Basic Training Single User CBT http://www.hits.astcorp.com/gsa/telecomm/40.html	\$306.00
ASTGSA 218-50XX	Telecommunicator Series 40-Hour Basic Training Multi User License CBT http://www.hits.astcorp.com/gsa/telecomm/40.html	\$1,454.00
ASTGSA 352-21XX	DNA Part 1 - First Responder- WBT http://www.hits.astcorp.com/gsa/law/dna.html	\$38.00
ASTGSA 352-06XX	DNA First Responder Certificate http://www.hits.astcorp.com/gsa/law/dna.html	\$9.97
ASTGSA 352-22XX	DNA Part 2 – Evidence Collector – WBT http://www.hits.astcorp.com/gsa/law/dna.html	\$38.00
ASTGSA 352-07XX	DNA Evidence Collector Certificate http://www.hits.astcorp.com/gsa/law/dna.html	\$9.97
ASTGSA 352-20XX	DNA Series Parts 1 & 2 – WBT http://www.hits.astcorp.com/gsa/law/dna.html	\$67.00
ASTGSA 352-08XX	DNA Evidence Certificate (All) http://www.hits.astcorp.com/gsa/law/dna.html	\$14.96
ASTGSA 354-20XX	Complete Series Officer Ethics (3 modules) - WBT certificate included http://www.hits.astcorp.com/gsa/law/ethics.html	\$192.00
ASTGSA 505-00XX	ELPO Entry Level Protection Officer WBT http://www.hits.astcorp.com/gsa/security/elpo.html	\$22.94
ASTGSA 505-06XX	ELPO Entry Level Protection Officer Certificate http://www.hits.astcorp.com/gsa/security/elpo.html	\$9.97
ASTGSA 512-00XX	Legal Concepts WBT http://www.hits.astcorp.com/gsa/security/legal.html	\$18.95
ASTGSA 512-03XX	Legal Concepts Certificate http://www.hits.astcorp.com/gsa/security/legal.html	\$9.97
ASTGSA 571-00XX	Physical Security I: WBT http://www.hits.astcorp.com/gsa/security/physical.html	\$18.95
ASTGSA 571-02XX	Physical Security I: Certificate http://www.hits.astcorp.com/gsa/security/physical.html	\$9.97
ASTGSA 573-00XX	Physical Security II: WBT http://www.hits.astcorp.com/gsa/security/physical.html	\$18.95
ASTGSA 573-02XX	Physical Security II: Certificate http://www.hits.astcorp.com/gsa/security/physical.html	\$9.97
ASTGSA 575-00XX	Physical Security III: WBT http://www.hits.astcorp.com/gsa/security/physical.html	\$18.95
ASTGSA 575-02XX	Physical Security II: Certificate http://www.hits.astcorp.com/gsa/security/physical.html	\$9.97
ASTGSA 543-00XX	Physical Security IV: WBT http://www.hits.astcorp.com/gsa/security/physical.html	\$18.95
ASTGSA 543-06XX	Physical Security IV: Certificate http://www.hits.astcorp.com/gsa/security/physical.html	\$9.97
ASTGSA 514-00XX	Physical Security V: WBT http://www.hits.astcorp.com/gsa/security/physical.html	\$18.95
ASTGSA 514-04XX	Physical Security V: Certificate http://www.hits.astcorp.com/gsa/security/physical.html	\$9.97
ASTGSA 571-CWBT	Physical Security Complete Series Certificate Included http://www.hits.astcorp.com/gsa/security/physical.html	\$96.00
ASTGSA 516-00XX	Public Events I WBT http://www.hits.astcorp.com/gsa/security/public.html	\$18.95
ASTGSA 516-03XX	Public Events I Certificate http://www.hits.astcorp.com/gsa/security/public.html	\$9.97
ASTGSA 516 CERT	Complete Series Public Events Certificate http://www.hits.astcorp.com/gsa/security/public.html	\$19.00

ASTGSA 517-00XX	Public Events II WBT http://www.hits.astcorp.com/gsa/security/public.html	\$18.95
ASTGSA 517-03XX	Public Events II Certificate http://www.hits.astcorp.com/gsa/security/public.html	\$9.97
ASTGSA 548-00XX	Public Events III WBT http://www.hits.astcorp.com/gsa/security/public.html	\$18.95
ASTGSA 548-03XX	Public Events III Certificate http://www.hits.astcorp.com/gsa/security/public.html	\$9.97
ASTGSA 550-00XX	Public Events IV WBT http://www.hits.astcorp.com/gsa/security/public.html	\$18.95
ASTGSA 550-03XX	Public Events IV Certificate http://www.hits.astcorp.com/gsa/security/public.html	\$9.97
ASTGSA 516 CWBT	Complete Series Public Events WBT Certificate Included http://www.hits.astcorp.com/gsa/security/public.html	\$77.00
ASTGSA 537 CERT	Complete Series Executive Protection Certificate http://www.hits.astcorp.com/gsa/security/executive.html	\$19.00
ASTGSA 537 CWBT	Complete Series Executive Protection WBT http://www.hits.astcorp.com/gsa/security/executive.html	\$58.00
ASTGSA 537-00XX	Executive Protection I WBT http://www.hits.astcorp.com/gsa/security/executive.html	\$18.95
ASTGSA 537-06XX	Executive Protection I Certificate http://www.hits.astcorp.com/gsa/security/executive.html	\$9.97
ASTGSA 539-00XX	Executive Protection II WBT http://www.hits.astcorp.com/gsa/security/executive.html	\$18.95
ASTGSA 539-06XX	Executive Protection II Certificate http://www.hits.astcorp.com/gsa/security/executive.html	\$9.97
ASTGSA 541-00XX	Executive Protection III WBT http://www.hits.astcorp.com/gsa/security/executive.html	\$18.95
ASTGSA 541-06XX	Executive Protection III Certificate http://www.hits.astcorp.com/gsa/security/executive.html	\$9.97
ASTGSA 551-00XX	Home Land Security (HLS) I: Emerging Threats WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 551-02XX	HLS I: Emerging Threats Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 551-CERT	Complete Series Homeland Security Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$19.00
ASTGSA 551-CWBT	Complete Series Homeland Security WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$154.00
ASTGSA 552-00XX	HLS II: Weapons of Mass Destruction I WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 552-02XX	HLS II: Weapons of Mass Destruction I Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 553-00XX	HLS III: Weapons of Mass Destruction II WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 553-02XX	HLS III: Weapons of Mass Destruction II Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 564-00XX	HLS IV: Weapons of Mass Destruction III WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 564-02XX	HLS IV: Weapons of Mass Destruction III Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 565-00XX	HLS V: Bombs & Bomb Threat Management WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 565-02XX	HLS V: Bombs & Bomb Threat Management Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 566-00XX	HLS VI: Domestic Terrorism WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASGSAT 566-02XX	HLS VI: Domestic Terrorism Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 567-00XX	HLS VII: Crisis Management WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 567-02XX	HLS VII: Crisis Management Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 568-00XX	HLS VIII: Infrastructure and Security Concepts WBT http://www.hits.astcorp.com/gsa/security/homeland.html	\$18.95
ASTGSA 568-02XX	HLS VIII: Infrastructure and Security Concepts Certificate http://www.hits.astcorp.com/gsa/security/homeland.html	\$9.97
ASTGSA 569-00XX	First Aid WBT http://www.hits.astcorp.com/gsa/security/firstaid.html	\$18.95

ASTGSA 569-02XX	First Aid Certificate http://www.hits.astcorp.com/gsa/security/firstaid.html	\$9.97
ASTGSA 570-00XX	Fire Safety Basics WBT http://www.hits.astcorp.com/gsa/security/firstaid.html	\$18.95
ASTGSA 570-02XX	Fire Safety Basics Certificate http://www.hits.astcorp.com/gsa/security/firesafety.html	\$9.97
ASTGSA 579-00XX	HAZMAT WBT http://www.hits.astcorp.com/gsa/security/hazmat.html	\$18.95
ASTGSA 579-03XX	HAZMAT Certificate http://www.hits.astcorp.com/gsa/security/hazmat.html	\$9.97
ASTGSA 596-01XX	Officer Basic Training (OBT) WBT Certificate Included http://www.hits.astcorp.com/gsa/security/obt.html	\$159.60

Reduced Prices		
ASTGSA 597-01XX	OST Public Events Specialty Program WBT Certificate Included http://www.hits.astcorp.com/gsa/security/peps.html	\$115.20 \$185.53
ASTGSA 597-04XX	OST Retail Loss Prevention Specialty Program WBT Certificate Included http://www.hits.astcorp.com/gsa/security/rlpsp.html	\$115.20 \$185.53
ASTGSA 597-07XX	OST Physical Security Specialty Program WBT Certificate Included http://www.hits.astcorp.com/gsa/security/pss.html	\$115.20 \$185.53
ASTGSA 597-10XX	OST Homeland Security Specialty Program WBT Certificate Included http://www.hits.astcorp.com/gsa/security/hlss.html	\$132.48 \$204.48

Additional Training Products and Services

ASTGSA 400-000X	Single User Annual iKe Subscription http://ike.astcorp.com/order.html	\$2395.00
For iKe Customized Training Options, please call 1-888-248-0321 x 177 or x199		

ASTGSA 901-00XX	First Responder Annual Subscription http://www.astcorp.com/first/	\$199.00
For Additional First Responder Information, please call 1-888-903-5387		