

Functional Area 2

Skill Level 201: Applications Systems Analysis and Programming Supervisor (Mercer 1998 Job 011)

Description: Supervises activities of all applications systems analysis and programming personnel for a major project, several smaller projects, or a small department. Responsible for quality assurance. Makes decisions on personnel actions (hiring, terminations, promotions, etc.). Controls revenues and/or expenses within an operating unit and responsible for meeting budget goals and objectives. Provides input to policy level direction regarding standards, budget constraints, etc. Typically reports to Applications Systems Analysis and Programming Manager (010), Applications Systems Analysis and Programming Director (009) or Systems Analysis and Programming Director (008).

Skill Level 202: Applications Systems Analyst/Programmer – Lead (Mercer 1998 Job 012)

Description: Formulates/defines system scope and objectives for assigned projects. Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time and form of desired results. Prepares detailed specifications from which programs will be written. Responsible for program design, coding, testing, debugging and documentation. Has full technical knowledge of all phases of applications systems analysis and programming. Has good understanding of the business or function for which applications is designed. Also has duties instructing, directing, and checking the work of other systems analysis and programming personnel. Responsible for quality assurance review. Responsible for directing and monitoring the work of team members. May be responsible for project completion and user satisfaction.

Skill Level 203: Applications Systems Analyst/Programmer – Senior (Mercer 1998 Job 014)

Description: Under general direction, formulates/defines system scope and objectives. Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time and form of desired results. Prepares detailed specifications from which programs will be written. Designs, codes, tests, debugs and documents these programs. Competent to work at the highest technical level of all phases of applications systems analysis and programming activities. May be responsible for completion of a phase of a project. Regularly provides guidance and training to less experienced analyst/programmers.

Skill Level 204: Applications Systems Analyst/Programmer – Intermediate (Mercer 1998 Job 016)

Description: Under general supervision, formulates and defines system scope and objectives through research and fact-finding to develop or modify moderately complex information systems. Prepares detailed specifications from which programs will be written. Designs, codes, tests, debugs, documents and maintains those programs. Competent to work on most phases of applications systems analysis activities, but requires instruction and guidance in other phases.

Skill Level 205: Applications Systems Analyst/Programmer – Associate (Mercer 1998 Job 017)

Description: Under immediate supervision, assists in research and fact-finding to develop or modify information systems. Assists in preparing detailed specifications from which programs will be written. Designs, codes, tests, debugs, documents and maintains those programs. Staffed by beginners who have had sufficient educational background and/or experience to qualify them to start in applications systems analysis and programming.

Skill Level 206: Applications Programming Supervisor (Mercer 1998 Job 031)

Description: Supervises activities of applications programming personnel for a major project, several smaller projects, or a small department. Responsible for quality assurance. Makes decisions on personnel actions (hiring, terminations, promotions, etc.). Controls revenues and/or expenses within operating unit and responsible for meeting budget goals and objectives. Provides input to policy level direction regarding standards, budget constraints, etc.

Skill Level 207: Applications Programmer – Lead (Mercer 1998 Job 032)

Description: Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time and form of desired results. Responsible for program design, coding, testing, debugging and documentation. Has full technical knowledge of all phases of applications programming. Also has duties instructing, directing and checking the work of other programming personnel. Responsible for quality assurance review. Acts as project leader for projects with small budgets or limited duration. Responsible for directing and monitoring the work of team members. Note: This position does not perform systems analysis functions.

Skill Level 208: Applications Programmer – Senior (Mercer 1998 Job 034)

Description: Under general direction, devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time and form of desired results. Designs, codes, tests, debugs and documents those programs. Competent to work at the highest technical level of all phases of applications programming activities. Note: This position does not perform systems analysis functions.

Skill Level 209: Applications Programmer – Intermediate (Mercer 1998 Job 036)

Description: Under general supervision, modifies moderately complex applications programs from detailed specification. Codes, tests, debugs and documents and maintains those programs. Competent to work on most phases of applications programming activities, but requires instruction and guidance in phases. Note: This position does not perform systems analysis functions.

Skill Level 210: Applications Programmer – Associate (Mercer 1998 Job 037)

Description: Under immediate supervision, modifies applications programs from detailed specifications. Codes, tests, debugs, documents and maintains those programs. This level is staffed by beginners who have had sufficient educational background and/or experience to qualify them to start in applications programming. Note: This position does not perform systems analysis functions.

Skill Level 211: Software Systems Engineering Supervisor (Mercer 1998 Job 041)

Description: Supervises activities of all software systems programming personnel for a major project, several smaller projects, or a small department. Responsible for quality assurance. Makes decisions on personnel actions (hiring, terminations, promotions, etc.). Controls revenues and/or expenses within operating unit and responsible for meeting budget goals and objectives. Provides input to policy level direction regarding standards, budget constraints, etc.

Skill Level 212: Software Systems Engineer – Lead (Mercer 1998 Job 042)

Description: Formulates/defines specifications for complex software programming applications or modifies/maintains complex existing applications using engineering releases and utilities from the manufacturer. Responsible for program design, coding, testing, debugging and documentation. Usually responsible for applications dealing with the overall operation system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting and advanced mathematical/scientific software packages. Has full technical knowledge of all phases of software systems programming applications. Also has duties instructing, directing and checking the work of other operating systems programming personnel. Responsible for quality assurance review and the evaluation of new and existing software products. Acts as project leader for projects with small budgets or limited duration.

Skill Level 213: Software Systems Engineer – Senior (Mercer 1998 Job 044)

Description: Under general direction, formulates/defines specifications for complex operating software programming applications or modifies/maintains complex existing applications using engineering releases and utilities from the manufacturer. Designs, codes, tests, debugs and documents those programs. Usually responsible for applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting and advanced mathematical/scientific software packages. Competent to work at the highest

technical level on all phases of software systems programming. May assist other systems programmers to effectively utilize the system's technical software.

Skill Level 214: Software Systems Engineer – Intermediate (Mercer 1998 Job 046)

Description: Under general supervision, works from specifications to develop or modify moderately complex software programming applications. Assists with design, coding, benchmark testing, debugging and documentation of programs. Applications generally deal with utility programs, job control language, macro, subroutines and other control modules. Competent to work on most phases of software systems programming applications, but requires instruction and guidance in other phases.

Skill Level 215: Software Systems Engineer – Associate (Mercer 1998 Job 047)

Description: Under immediate supervision, works from specifications to assist in developing and modifying operating software programming applications. Assists with design, coding, benchmark testing, debugging and documentation of programs. Applications generally deal with utility programs, job control language, macros, subroutines and other control modules. May customize purchased applications and assist in maintaining program libraries and technical manuals. Staffed by beginners who have had sufficient educational background and/or experience to qualify them to start in operating systems programming.

Skill Level 216: Scientist/Engineer – Senior (Mercer 1998 Job 9000)

- Ten (10) years of intensive and progressive experience in the areas of a specified discipline. Three (3) of the seven (7) years must reflect current technologies and have occurred within the last five (5) calendar years.
- Four (4) years with the last eight (8) calendar years of intensive and progressive experience in independent or supervisory performance on substantive scientific/engineering projects.
- One (1) year within the last two (2) calendar years of intensive and progressive experience in managing complex engineering/scientific projects.
- If proposed as a Task Leader, 18 months experience in supervising engineers/scientists/technical personnel in an environment of significant systems development activity.

Education and Other Requirements.

Additional Degree requirements and/or specialized experience may be cited in the individual Task Order. A masters or doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted on the basis on one (1) year experience for a Masters Degree and two (2) years experience for a doctorate Degree.

Duties.

Performs high-level systems analysis, evaluation, design, integration, documentation, and implementation of very complex application which require a thorough knowledge of administrative, and technical skills. Directs and participates in all phases of system development with emphasis on planning, analysis, evaluation, integration, testing and acceptance phases (IV&V and DT&E). Applies higher level business or technical principles and methods to very difficult technical problems to arrive at automated engineering solution. Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepare and deliver presentations and briefings as required by the Task Order. May be required to serve as Task Leader. Responsible for ensuring the quality and services delivered for particular task(s) for which this skill is performing the Task Leader position.

Skill Level 217: Scientist/Engineer – Intermediate (Mercer 1998 Job 9001)

- Five (5) years experience in scientific/engineering projects. One (1) year within the last three (3) calendar years of experience in the specific area noted in the Task Order. A masters or doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted on the basis of one (1) year experience for a Masters Degree and two (2) years experience for a Doctorate Degree.

Education and Other Requirements.

Additional Degree requirements and/or specialized experience may be cited in the individual Task Order. A masters or doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed.

Duties.

Performs assigned portions of engineering/scientific projects such as analysis, design, integration, applications which require a thorough knowledge of higher mathematics and related engineering/scientific skills and knowledge. Participates in all phases of scientific & engineering projects such as design, development, testing, training, documentation. May have responsibility for assisting in planning and have individual responsibility for portions of a engineering/scientific project.

Skill Level 218: Scientist/Engineer - Associate (Mercer 1998 Job 9002)

- Entry level position

Education and Other Requirements.

Baccalaureate in a closely related field to the requirement in the Task Order.

Duties.

Under the supervision of a senior or associate engineer performs assigned portions of engineering/scientific projects such as analysis, design, integration, applications which require a thorough knowledge of higher mathematics and related engineering/scientific skills and knowledge. Participates in all phases of scientific & engineering projects such as design, development, testing, training, documentation.

Skill Level 219: Documentation Specialist (Mercer ____ Job 2030)

Under general supervision, prepares and/or maintains systems, programming and operations documentation, including user manuals. Maintains a current internal documentation library. Competent to work on most phases of documentation.

Skill Level 220: Documentation Clerk (Mercer ____ Job 2050)

Under immediate supervision, carries out the clerical aspects of the documentation function. This level is staffed by beginners who have sufficient educational background and/or experience to qualify them to start in documentation. May report to information systems department of Word Processing Supervisor.

Skill Level 221: Graphics Specialist (Mercer ____ Job 2060)

Responsible for graphics design and use, operation and setup of computer graphic systems for business communications. Executes graphic projects and assists in coordination of all graphic production scheduling; coordinates production support with outside vendors, as needed. Ensures that graphic projects are completed on time, within budget and to user's satisfaction. Interfaces with users to determine scope of project and best graphic medium. Trains other personnel in proper use of computer graphic equipment. Trouble shoots computer equipment problems and performs minor preventative maintenance. Typically reports to department manager or information systems management.

Skill Level 222: Systems Administrator – Senior (Mercer ____ Job 4000)

Responsible for activities related to system administration. Assigns personnel to various projects, directs their activities, and evaluates their work. Ensures long-term requirements of systems operations and administration are included in the overall information systems planning of the organization. Responsible for the installation, maintenance, configuration, and integrity of computer software. Implements operating system enhancements that will improve the reliability and performance of the system.

Skill Level 223: Database Analyst/Programmer – Senior (Mercer ____ Job 4210)

Under general direction, designs, implements and maintains complex databases with respect to JCL, access methods, access time, device allocation, validation checks, organization, protection and security, documentation and statistical methods. Includes maintenance of database dictionaries, overall monitoring of standards and procedures, and integration of systems through database design. Competent to work at the higher level of all phases of database management.

Skill Level 224: Database Analyst/Programmer – Intermediate (Mercer ____ Job 4220)

Under general supervision, designs, implements and maintains moderately complex databases. Includes maintenance of database dictionaries and integration of systems through database design. Competent to work on most phases of database administration but may require some instruction and guidance in other phases.

Skill Level 225: Information Systems Training Specialist – Senior (Mercer ____ Job 4810)

Under general direction, organizes prepares and conducts complex training and educational programs for information systems or user personnel. May design and develop in-house programs. Maintains records of training activities, employee progress and program effectiveness. Competent to work the highest level of all phases of information systems training.

Skill Level 226: Information Systems Training Specialist (Mercer ____ Job 4820)

Under general supervision, organizes and conducts moderately complex training and educational programs for information systems or user personnel. Maintains records of training activities, employee progress and program effectiveness. Competent to work on most phases on information systems training.

Skill Level 227: Help Desk Coordinator – Senior (Mercer ____ Job 5210)

Under general direction of the Help Desk Manager, is responsible for ensuring the timely process though which problems are controlled. Includes problem recognition, research, isolation, resolution and follow-up steps. Requires experience and understanding of MIS environment. Is able to resolve less complex problems immediately, while more complex problems are assigned to second level support or supervisor. Typically involves use of problem management database and help desk system. May provide guidance/training for less experienced personnel.

Skill Level 228: Help Desk Coordinator (Mercer ____ Job 5220)

Under immediate direction of the Help Desk Manager or senior help desk personnel. Respond to and diagnoses problems through discussions with users. Includes problem recognition, research, isolation and resolution steps. Typically is able to resolve less complex problems immediately, while more complex problems are assigned to second level support, senior operator or supervisor. May involve use of problem management database and help desk.

Skill Level 229: LAN Support Technician – Senior (Mercer ____ Job 5800)

Monitors and responds to complex technical control facility hardware and software problems utilizing a variety of hardware and software testing tools and techniques. Provides primary interface with vendor support service groups or provides internal analysis and support to ensure proper escalation during outages or periods of degraded system performance. May provide LAN server support. Requires extensive knowledge of PC/LAN communications hardware/software in a multi-protocol environment, and network management software. May function as lead job providing guidance and training for less experienced technicians. Requires a minimum of 4 years experience on data communications troubleshooting.

Skill Level 230: LAN Support Technician – Intermediate (Mercer ____ Job 5810)

Monitors and responds to technical control facility hardware and software problems utilizing hardware and software testing tools and techniques. May interface with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance. May assist with installation or terminals and associated hardware. May provide LAN server support. Requires strong knowledge of PC/LAN communications hardware/software, in a multi-protocol environment, and network management software. Usually requires 2 –4 years experience in data communications troubleshooting.

Skill Level 231: LAN Support Technician – Associate (Mercer ____ Job 5820)

Assists in monitoring and responding to technical control facility hardware and software problems utilizing hardware and software testing tools and techniques. May provide LAN server support. May assist with installation of terminals and associated hardware. Requires knowledge of data scopes, patch panels, modem, concentrators, and associated terminals and network management software. Usually requires a minimum of 1 year experience in data communications troubleshooting or network control activities.

Skill Level 232: Web Designer (Mercer ____ Job 6230)

Designs and builds web pages using a variety of graphics software applications, techniques and tools. Designs and develops user interface feature, site animation and special effects elements. Contributes to the design group's efforts to enhance the look and feel of the organizations online offerings. Designs the website to support the organization's strategies and goals relative to external communication. Typically requires a college degree in fine arts or graphic design. Requires understanding of web-based technologies and through knowledge of HTML, PhotoShop, Illustrator, and/or other design-related applications.

Skill Level 233: Web Software Developer (Mercer ____ Job 6240)

Designs, develops, troubleshoots, debugs, and implements software code (such as HTML, CGI, and JavaScript) for a component of the website. Works with graphic designers and other members of a project team to develop the site concept, interface design, and architecture of the website. Responsible for interface implementation. Integrates web applications with backend databases. Deploys large web-based transaction systems using application servers. Researches, tests, builds and coordinates the integration of new products per production and client requirements. Requires strong navigation and site-design instincts. Typically requires college degree in computer science or related field, and development experience in web-based languages.

Skill Level 234: Information Services Consultant (Mercer ____ Job 6480)

Top level technical expert supporting unlimited end user groups. Works with user groups to solve business problems with available technology including advise, hardware, software, databases, and peripherals. Has high level of diverse technical experience related to studying and analyzing systems needs, systems development, and systems process analysis, design, and re-engineering. Has skills and experience related to business management, systems engineering, operations research, and management engineering. Typically has specialization in particular software or business application utilized in an end user environment. Keeps abreast of technological developments and applicants.

Skill Level 235: Business Systems Analyst – Senior (Mercer ____ Job 8220)

Under general direction, formulates and defines systems scope and objectives based on both user needs and a good understanding of applicable business systems and industry requirements. Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results. Includes analysis of business and user needs, documentation of requirements, and translation into proper system requirement specifications. Guides and advises less experienced Business Systems Analysts. Competent to work at the highest technical level of most phases of systems analysis while considering the business implications of the application of technology to current and future business environment systems

Skill Level 236: Business Systems Analyst – Intermediate (Mercer ____ Job 8230)

Under general supervision, formulates and defines systems scope and objectives through research and fact-finding combined with an understanding of applicable business systems and industry requirements. With this knowledge, develops or modifies moderately complex information systems. Includes analysis of business and user needs, documenting requirements, and revising existing system logic difficulties as necessary. Guides and advises less experience Business Systems Analysts. Competent to work in some phases of analysis and considers the business implications of the application of technology to the current business environment.

Skill Level 237: Business System Analyst – Associate (Mercer ____ Job 8240)

Under direct supervision, assists in formulating and defining systems scope and objectives through research and fact-finding combined with a basic understanding of business systems and industry requirements. Includes analysis of business and user needs, documenting requirements, and revising existing system logic difficulties as necessary under direction of experienced Business System Analysts. Competent to consider most business implications of the application of technology to the current business environment.

Skill Level 238: Project Manager – Senior (Mercer ____ Job 9020)

Responsible for all aspects of the development and implementation of assigned projects and provides a single point of contact for those projects. Takes projects from original concept through final implementation. Interfaces with all area affected by the project including end users, computer services, and client services. Defines project scope and objectives. Develops detailed work plans, schedules, project estimates, resource plans, and status reports. Conducts predict meetings and is responsible for project tracking and analysis. Ensures adherence to quality standards and reviews project deliverables. Manages the integration of vendor tasks, and tracks and reviews vendor deliverables. Provides technical and analytical guidance to project team. Recommends and takes action to direct the analysis and solutions of problems.

Skill Level 239: LAN/WAN Integrator (Mercer ____ Job 6000)

Responsible for the overall integration of the enterprise-wide network including the planning, design, installation, maintenance, management, and coordination of the corporate LAN/WAN (may include local, metropolitan, and wide area networks). Has responsibility for technical architecture and recommendations related to LAN/WAN. Is typically a top level technical contributor and advance knowledge and experience in the area local and wide area networking, communications, and related hardware/software. Maintains high level of technical expertise and studies vendor products to determine those, which best meet company needs. Presents information to management, which may result in the purchase and installation of hardware, software, and telecommunication equipment. Recommends network security procedures and policies. Knowledgeable in a multi-platform operating environment. May work with Voice and/or Data Communications Analysts.

Skill Level 240: Communications Analyst – Senior (Mercer ____ Job 6450)

Under general direction, assists in the planning, design and implementation of communications networks. Responsible primarily for the assessment and optimization of network design through review and assessment of user needs, conducts feasibility studies for large projects, develops requests for proposal, evaluates vendor products and makes recommendation on selection. Usually has a minimum of 5 years experience in telecommunications, with strong emphasis in network design, traffic engineering, equipment vendors, and carries. May function as lead position providing guidance and training to less experience analysts. Typically reports to Data/Voice Communications Management (6810,6610) or Internal Communications Systems Consultant (6490).

Skill Level 241: Internal Communications Systems Consultant (Mercer ____ Job 6490)

Provides systems guidance for current and proposed investments in telecommunications and network facilities and/or services from the development of communications software through financial implementation review. Researchers present and future communication technologies. Works closely with system users to provide direction/assistance in identification and resolution of user problems. May supervise a group of planning analysts responsible for research for research/technical assistance for the user group. Usually has 8-10 years experience in telecommunications with emphasis on systems analysis, LAN/WAN telecommunications network design, and traffic engineering.

Skill Level 242: Telecommunications Analyst/Technician – Senior (Mercer ____ Job 7000)

Typically found in organizations providing maintenance on an internal basis. Under general direction, responsible for maintenance of the switching equipment. Has high degree of technical expertise. Performs more complex activities for routine maintenance on switch. Reads and interprets circuit diagrams and electrical schematics. Acts as liaison for vendors during installation, rearrangement, and/or removal equipment. Works with personnel at remote locations to identify system/network problems at those locations. May provide technical assistance/guidance to less experienced technicians. Usually has a minimum of 4 years of telecommunications experience. May report to Operations Management (6800, 6000,6430), Network Operations Supervisor/Project Manager (7620), or Network Control Supervisor (7810).

Skill Level 243: Telecommunications Technician – Senior (Mercer ____ Job 7040)

Responsible, under general supervision, for complex tasks typically relating to network monitoring, operations, installation, and/or maintenance for local, off-site, and/or remote locations. May function as lead job on the absence of the Supervisor, but would not have ongoing lead responsibility. Usually has from 4 –8 years network experience supplemented with continuing education network/telecom courses/technical seminars.

Skill Level 244: Telecommunications Engineer/Analyst – Senior (Mercer ____ Job 7230)

An individual contributor job, under general direction, which is responsible for complex engineering and/or analytical task and activities associated with one or more technical area within the telecom function (such as, but not limited to, network design, engineering implementation, or operations/user support). Would usually have minimum of 6-8 years technical telecom experience (assuming a minimum of a related degree or equivalent technical training in addition to the years of experience), supplemented with continuing education network/telecom courses/technical seminars.

Skill Level 245: Network Planning Manager (Mercer ____ Job 7600)

Responsible for long-term strategic planning to ensure network capacity meets current and future network requirements including planning for remote hardware and communications facilities; development and implementation of methodologies for system analysis, installation and support. Defines and develops methodology to ensure compatibility of all software and hardware products at each facility. Provides ongoing coordination in the analysis, acquisition and installation of remote hardware and software. May supervise Network Planning Analysts. Usually requires the equivalent of B.S. in Computer Science, Mathematics or Engineering and 6 –8 years' experience. Typically reports to Telecommunications Department Director/Manager (6410, 6420) or Planning and Engineering Manager (6510).

Skill Level 246: Project Engineer – Senior (Mercer ____ Job 9000)

Responsible for the completion of assigned complex or long-term engineering projects within budgetary and scheduling guidelines. High level individual contributor, leading a group of engineers, analysts, technicians and/or more project engineers assigned for the duration of a project. Does not have formal supervisory responsibilities, although may provide input for project team member appraisals. Would usually have a minimum of 2-3 years experience as a lead/project engineer (Job 9010) plus 6 – 8 years telecom engineering experience (assumes a minimum of a related Associate degree or equivalent technical training in addition to the years of experience), supplemental with continuing education network/telecom courses/technical seminars.

Skill Level 247: Principal Industry/Functional Area Expert (No Mercer correlation)

Recognized for strong expertise in industry issues and trends. Utilize functional area expertise gained through direct industry experience to assess the operational and functional baseline of an organization and its organizational components. Work with senior managers and executives to provide industry vision and strategic direction with regard to their enterprise. Guide the determination of information technology inadequacies and/or deficiencies that affect the functional area's ability to support/meet organizational goals. Generate functional area strategies for enhanced IT operations in a cross-functional area mode throughout the organization. Participate in account strategy sessions, strategic assessments and design reviews to validate enterprise approach and associated work products.

Provides guidance and direction to other professionals, acts in a consulting and/or advisory capacity; coordinates resolution of highly complex problems and tasks, possesses ability to meet and operate under deadlines.