

Effective Date: December 31, 2000

**STATE OF WISCONSIN**  
**CLASSIFICATION SPECIFICATION**  
**INFORMATION SYSTEMS**  
**SYSTEMS DEVELOPMENT SERVICES CLASSIFICATIONS**

**I. INTRODUCTION**

A. Purpose of This Classification Specification

This classification specification is the basic authority under Wis. Admin. Code ER 2.04 for making classification decisions relative to present and future positions, which perform professional Information Systems (IS) Systems Development Services duties for the majority of time. There are four classification levels within this one classification specification, and they are: IS Systems Development Services Professional, Senior, Specialist, and Consultant/Administrator.

Classification decisions must be based on the “best fit” of the duties within the existing classification structure. The “best fit” is determined by the majority (i.e., more than 50%) of the work assigned to and performed by the position when compared to the class concepts and definition of this specification or through other methods of position analysis. Position analysis defines the nature and character of the work through the use of any or all of the following: definition statements; listing of areas of specialization; representative examples of work performed; allocation patterns of representative positions; job evaluation guide charts, standards or factors; statements of inclusion and exclusion; licensure or certification requirements; and other such information necessary to facilitate the assignment of positions to the appropriate classification.

B. How to Use This Classification Specification

This classification specification includes professional IS Systems Development Services positions at the Professional, Senior, Specialist, and Consultant/Administrator classification levels, as defined in Section II of this specification. The IS Systems Development Services classifications include numerous allocation patterns or job types.

If a majority of a position’s time is identified in any one of the individual classification definitions, then the position must be classified in that particular classification. Positions which spend no more than 50% of their time on duties in any other single professional IS Data Services, IS Network Services, IS Systems Development Services, IS Technical Services, or IS Business Automation classification, and more than 50% of their time on a combination of duties from two or more of these IS classifications, should be classified in one of the IS Comprehensive Services classifications.

Section II.A. defines duties performed by positions appropriately included in this job family. Use this section to determine the correct job family classification. Then, use sections II.B. and II.C. to determine the appropriate classification level within that job family classification for the position: Professional, Senior, Specialist, or Consultant/Administrator.

For classification purposes, the majority of duties assigned to a position **must** meet level **and** classification definition.

C. Inclusions

This specification encompasses those professional IS Systems Development Services positions located within State of Wisconsin agencies, District or Regional Offices of agencies, Boards and Institutions and University of Wisconsin Campuses. Positions in this classification series are responsible for IS Systems Development Services as defined by the level, job group, and classification definition.

D. Exclusions

Excluded from this series are the following types of positions:

1. Supervisor positions as defined in Wis. Stats. 111.81(19), and as administered and interpreted by the Wisconsin Employment Relations Commission.
2. Positions which are not engaged for the majority of time in "professional employee" work as defined in Wis. Stats. 111.81(15)(a) or (b), and as administered and interpreted by the Wisconsin Employment Relations Commission.
3. Positions which do not spend the majority of their time (50% or more) performing duties identified in the IS Professional and Senior classification definitions.
4. Clerical, paraprofessional or professional positions which utilize computer systems in a business area, specialized program or reporting area and which are concerned with the manipulation of data contained in the system, and with responsibilities including program policy development and/or implementation, inputting of data into the system, correcting or modifying data, generating program reports and statistics, evaluating the effectiveness of the system, and providing information and technical assistance to users of the program system and liaison with IS professional staff. The primary purpose of these positions and the majority of the assigned duties are not the development or maintenance of the computer system.
5. IS (IS) Technician positions which spend the majority of time (more than 50%) engaged in any combination of the following activities: operating and monitoring a computer and/or teleprocessing network; routine computer programming and debugging; controlling data by coordinating and executing computerized system production runs; operating peripheral equipment; installing, maintaining, repairing and servicing computer hardware; installing software and upgrades and assisting with troubleshooting software and hardware problems; providing routine technical assistance; performing technical related work in the day-to-day maintenance of the LAN or WAN; completing data processing production for major, complex, integrated systems; or providing first level technical problem determination and resolution, and related job duties.
6. Positions engaged in DOA enterprise level IS work for the majority of the time.
7. All other positions which are more appropriately identified by other classification specifications.

E. Entrance Into and Progression Through This Series

Employees enter positions within this classification series by competition. Progression to the IS Systems Development Services Senior level will occur through reclassification. A progression series means a classification grouping whereby the class specifications specifically identify an entry and full

performance senior level. The full performance senior level within a progression series means the classification level that any employee could reasonably be expected to achieve with satisfactory performance of increasingly complex duties or the attainment of specified training, education, or experience.

An employee may have his/her senior level position considered for reclassification from the IS Systems Development Services Senior classification to the IS Systems Development Services Specialist classification. All other employees will enter positions within this classification series by competition.

A position assigned to the IS Systems Development Services Consultant/Administrator classification is the principal technical authority for an agency or campus in the assigned IS area. Employees will enter IS Systems Development Services Consultant/Administrator positions by competition. When circumstances permit on a case-by-case basis, an employee may enter a position in the IS Systems Development Services Consultant/Administrator classification by reclassification.

F. Definition of Information Systems Terms

To assist in the evaluation of positions for inclusion in this and other Information Systems classifications, definitions of IS related terms are provided in a document titled "Information Systems/Technology Definitions" which is incorporated herein by reference as though fully set forth. This document should be used with the classification specifications which have Information Systems or Information Technology as part of the class title.

## II. DEFINITIONS

A. Identifying the Correct Job Family Classification

This section defines duties performed by positions appropriately included in this job family.

No specific definitions are provided for the IS Comprehensive Services classifications because these positions spend no more than 50% of their time on duties in any other single professional IS Data Services, IS Network Services, IS Systems Development Services, IS Technical Services, or IS Business Automation classification, and more than 50% of their time on a combination of duties from two or more of these IS classifications.

### **IS Systems Development Services Job Family**

The Application and System Development positions are those responsible for the planning, development, implementation, upgrade, and support of software applications. Position types include application analysts, application designers, application developers, software programmers, software quality assurance staff, project managers/leaders, software tool specialists, software development methodology experts, software package technical experts, and GIS application specialists. Staff occupying positions in this family have the training and experience to serve the operational, information, knowledge, and analytical application needs of the agency business areas as well as extra-and inter-agency requirements.

**Positions which spend the majority of their time (50% or more) on one or more of the following duties are appropriately included in the IS Systems Development Services job family classifications.**

- 1) Work with customers to assess the scope and objectives, return on investment (ROI), risk, and budget for IS application efforts.
- 2) Determine application feasibility from technical perspectives.
- 3) Develop and evaluate application alternatives that solve the needs of the business area or agency.
- 4) Assist with the definition of requirements and the preparation of bid documents for the acquisition of applications or application development services (e.g. contract programmers). Assist with the evaluation of responses.
- 5) Discover, analyze, organize and document application functional and data requirements.
- 6) Incorporate information security policies, principles and practices in application requirements.
- 7) Design user interfaces for applications.
- 8) Model and document objects, data and processes related to application development.
- 9) Design software components and develop application prototypes.
- 10) Build and debug software components using a variety of programming languages, professional tools, and integrated development environments.
- 11) Follow software development life cycle methodologies and practices.
- 12) Develop scripts to execute software components in batch mode.
- 13) Document applications for various audiences, including other IS developers, operations staff, data and network administrators, application users, and application trainers.
- 14) Develop software testing plans and conduct software tests from components to entire systems.
- 15) Create and/or modify software and application designs to improve performance, security, and reliability of applications when in use.
- 16) Develop technical knowledge about the software and data structures delivered with purchased applications.
- 17) Customize purchased applications to provide functionally not originally provided by the package vendor.
- 18) Plan, monitor, and control the IS project budget and work activities on projects for the development of applications or the acquisition and installation of purchased applications.
- 19) Develop one-time and reusable applications to report and summarize application data.
- 20) Develop procedures and application code to integrate two or more applications.
- 21) Develop and implement procedures to manage software repositories with consistency and quality.
- 22) Design, develop, and implement application architectures, which define the interrelations between individual applications and the infrastructure that supports them.
- 23) Assist with training on agency applications for business area experts and program area liaisons, helping the business side understand applications and set training priorities.
- 24) Study, develop, recommend, and support application development tools, standards, policies and procedures, and methodologies.
- 25) Provide requirements for the selection of useful development tools.
- 26) Design and develop applications using GIS data.
- 27) Estimate the costs of application -related work on IS projects.
- 28) Troubleshoot, identify, and resolve production and development application problems. Patch applications when necessary.
- 29) Study the impact of proposed business changes on the business-area applications.
- 30) Lead teams of application professionals, determine resources and skill needs, and assign tasks.
- 31) Participate in statewide planning for application technology.
- 32) Assess and report status of application projects.

- 33) Analyze technical strengths and weaknesses of applications that are in use and those under consideration for purchase.
- 34) Facilitate application requirements gathering sessions.
- 35) Plan and test upgrades to purchased software.
- 36) Develop data extracts to populate other data access sources (like data warehouses and datamarts).
- 37) Develop data extracts and data conversion routines to transmit data to outside parties and other application systems.
- 38) Interface with managers and management teams presenting information about new or changed applications, potential new business opportunities in technical advances, and impacts on business rules.

**Positions appropriately classified in the IS Systems Development Services job family classifications may perform some of the following duties, but would not spend the majority of their time on these duties:**

- 1) Use applications to enter or retrieve information for the business area or agency.
- 2) Provide information and requirements for the application.
- 3) Establish valid data values and valid business rules for applications.
- 4) Test applications as a representative of the business area or agency to determine that business requirements are met.
- 5) Approve the application's readiness for production use.
- 6) Resolve business and policy issues related to the development and implementation of applications.
- 7) Use existing application data structures and reporting tools to answer business questions.
- 8) Act as an application owner by approving requests for access to the application and its data, defining application usage policies and roles, identifying applications quality issues, requesting application enhancements, prioritizing work requests for IS application projects.
- 9) Review and approve feasibility studies, risk assessments, impact assessments, technical specifications and designs as a representative of the business area or agency.
- 10) Use "off-the-shelf" applications and/or non-professional development tools to manage data used in one's own job or business area.
- 11) Audit applications and their use to uncover possible fraud and security breaches.
- 12) Perform data and database administration.
- 13) Install, support and administer networks and servers.
- 14) Administer security.
- 15) Perform data Center operation.
- 16) Provide general help on the use of computing services, tools, and applications.
- 17) Install and support hardware, operating systems, and infrastructure needed to develop or run applications.
- 18) Install software.

## B. Levels

### **IS PROFESSIONAL**

This classification is used as an entry progressing to a development level for professional IS positions. Work is performed under close progressing to limited supervision. Although this is the entry-developmental level for this series, knowledge of fundamental IS concepts, principles and practices must have been acquired before appointment into this classification; the focus is on learning the procedures, practices, techniques and technology for the assigned specialized area; and assignments are narrow in

scope. As the employee progresses, s/he continues to develop knowledge of the specialized area and the associated IS concepts, principles, practices, and techniques.

### **IS SENIOR**

Positions at this level work under general supervision. The technical work performed by a position at this level may be reviewed by the position's assigned supervisor for agreement with the agency's or campus' established technical direction, policies and standards. This is the full performance level, and it is the level that an employee in this series can reasonably expect to attain. An employee at this level has acquired a broad knowledge of general IS concepts, principles, practices and techniques **and** broad knowledge of the job family and classification to which the position is assigned. Positions at this level may lead positions at the Professional and Senior level in the completion of projects and work assignments. Positions at this level may support the activities of IS Specialists, Consultants, and/or Administrators and may work under the day-to-day direction of IS Specialists, Consultants, and/or Administrators.

### **IS SPECIALIST**

Positions at this advanced level work under general review with objectives and priorities established by overall work unit directives. There is little review of technical recommendations and solutions by a supervisor. Positions at this level will assist Information Systems Consultants/Administrators and management by implementing technical policies, standards and procedures which impact on agency/campus IS functions. The employee possesses and applies comprehensive knowledge of agencywide/campuswide IS architectures as well as IS concepts, principles and practices in the specialized functional area. The position independently resolves conflicts and problems through the skilled application of theoretical and practical knowledge of the specialized area as well as the application of general policies and agencywide/campuswide IS policies and standards. Work assignments are difficult and complex and focus on IS as defined under the Classification Definitions section of this specification. Positions at this level interact with agency or campus business managers and IS customers as well as other professional IS managers and staff in the completion of assigned duties.

### **IS CONSULTANT/ADMINISTRATOR**

A position at this level works under broad policy guidance and is regarded as an agency's or the campus' technical expert in this classification. A position covered by this specification is considered the definitive technical authority in the referenced IS area for the assigned agency or campus. Work performed by a position in one of these classifications must focus, for a majority of the time, on the IS area of expertise and will perform the most advanced level of work which requires the application of a combination of the highest levels of theoretical and practical knowledge in the specialized IS classification. Technical review is based on the effectiveness of the problem resolution and consultation provided. A position at this level provides direction, guidance and consultation on IS technical issues specific to the area of expertise to the agency's or campus' administrators, business managers, IS managers, IS specialist and professional positions. Actions by a position at this level result in establishing technical policies, parameters and standards on an agencywide or campuswide basis for the identified classification. Positions at this level will interact with IS staff in other agencies and/or campuses. Positions covered by this specification represent the agency/campus on enterprisewide committees/task forces and serve on interagency or intercampus study and/or advisory groups.

### C. Classification Definitions

#### **IS SYSTEMS DEVELOPMENT SERVICES PROFESSIONAL**

This classification is used as an entry progressing to a development level for professional IS Systems Development Services positions. Work is performed under close progressing to limited supervision. Positions in this classification perform professional IS work which supports the overall development, implementation, testing and maintenance of applications. Systems Development Services provided covers a variety of systems including Geographic Information Systems (GIS). For a majority of the time, positions in this classification perform work related to one or more of the phases in the Systems Development Life Cycle. Positions spend the majority of their time performing any combination of the following duties:

- Primarily responsible for coding computer programs in computer language/s for IS applications from detailed specifications.
- Design user interfaces (screens, windows, reports, etc.).
- Prepare documentation.
- Prepare test data and test programs.
- Participate in systems development analysis and design phases.
- Participate in proposing design and system alternatives in response to customer requests.
- Analyze business requirements for the development and/or enhancement of computer programs.
- Participate in proposing alternates in response to customer requests.
- Provide regular project status reports to customer.

#### **IS SYSTEMS DEVELOPMENT SERVICES SENIOR**

Positions in this classification perform professional IS work which supports the overall development, implementation, testing and maintenance of applications. Systems Development Services provided covers a variety of systems including Geographic Information Systems (GIS). For a majority of the time, positions in this classification perform work related to one or more of the phases in the Systems Development Life Cycle. Senior level positions spend the majority of their time performing any combination of the following duties:

- Analyze business requirements for the development and/or enhancement of automated systems.
- Develop and code complex programs.
- Positions may receive guidance from an IS Specialist, Project Leader Specialist, IS Consultant, Project Manager, or IS Supervisor.
- Prepare detailed program specifications for systems.
- Work with customers to define and develop applications to support business processes.
- Perform detailed feasibility studies.
- Propose design and system alternatives in response to customer requests.
- Prepare program specifications for systems.
- Develop system test plans.
- Coordinate system testing.
- Complete systems cost/benefit analysis for management.
- Coordinate systems installation.
- Conduct data analysis, including spatial data.
- Conduct integration tasks, including spatial data.

- Lead intra-agency development projects or portions of a development project.
- Prepare project plans.
- Oversee team assignments.
- Assist IS Systems Development Services Specialists and/or Consultants with their responsibilities.

This classification includes, but is not limited to, the following representative positions or job types. Positions do not need to exactly match one of these representative positions in order to be appropriately classified at this level.

### **Representative Positions**

IS Applications Programmer - Positions are primarily responsible for coding computer programs in computer language/s for IS applications. These positions develop new computer programs, modify existing programs, prepare documentation for, test and maintain programs and may participate in systems development analysis and design phases. Positions spend more than 50% of their time coding programs for automated systems from detailed specifications. At the senior level, positions in this job type will, for the majority of time, develop and code complex programs. Some positions assigned to ICASE projects will be involved in full life-cycle projects.

IS Geographic Applications Analyst - Positions work with customers to define and develop GIS applications to support business processes. Positions are primarily responsible for analyzing, designing, organizing, documenting and monitoring standards, structures and procedures for the development of new GIS automated systems and enhancement of existing automated systems; perform detailed feasibility studies, which may include preparing program specifications for systems, complete systems cost/benefit analysis, and coordinate systems installation; and conduct spatial data analysis, image processing, and spatial data integration tasks.

IS Programmer/Analyst - Positions perform a combination of analysis and coding duties. These positions develop specifications and participate in analyzing requests from customers for design and system alternatives; and develop, code, document, test, and maintain applications software. Positions in this job type spend less than 50% of their time coding programs for automated systems from detailed specifications.

IS Project Leader - Positions lead intra-agency development projects or portions of a development project. Positions prepare project plans, oversee team assignments and provide regular project status reports to customer. Teams led by positions in this job type are made up primarily of programmer/analysts and/or systems analysts/designers. Projects may be led one at a time or concurrently dependent upon project duration and timelines, and may include GIS. Positions may receive guidance from an IS Specialist, Project Leader Specialist, IS Consultant, Project Manager or IS supervisor.

IS Systems Analyst/Designer - Positions primarily are responsible for analyzing, designing, organizing, documenting and monitoring standards, structures and procedures for the development of new automated systems and enhancement of existing automated systems; and preparing detailed program specifications for systems, complete systems cost/benefit analysis for management and coordinate systems installation. Positions in this job type will spend less than 25% of their time coding programs for automated systems from detailed specifications.

**IS SYSTEMS DEVELOPMENT SERVICES SPECIALIST**

Positions in this classification perform advanced professional IS work which supports all phases of the Systems Development Life Cycle, which includes development, implementation, testing and maintenance of information systems. The majority of work performed by positions will be related to the analyses and design of applications and maintenance of existing applications. Positions in this classification will use information engineering, systems development tools and methodologies in the completion of assigned duties. Work performed supports more than one phase in the Systems Development Life Cycle. Positions in this classification spend the majority of their time performing any combination of the following duties:

- Conduct analyses, investigate the parameters and develop prototypes for employing complex or emerging technology into systems development projects, e.g. Geographic Information Systems (GIS), Imaging, Interactive Voice Response.
- Design models and provide direction to customers and other appropriate IS staff on appropriate use of the complex or emerging technology.
- Resolve complex problems with the use of a complex or emerging technology within a new or enhanced system.
- Perform detailed analysis and design.
- Conduct feasibility studies for specialized, business-related, complex automated systems.
- Develop and review complex specifications.
- Develop and coordinate complex integration test plans.
- Diagnose and resolve complex problems related to developed systems.
- Coordinate data modeling as part of the development process.
- Lead business process redefinition studies.
- Ensure systems tools and methodologies are consistent with agency technical policies and standards.
- Provide information, direction, and training in appropriate systems development techniques and methodologies to IS Professionals at the senior level or lower and other IS staff as needed.
- Coordinate systems development for IS customers on an agency/campuswide basis.
- Lead two or more intra-agency projects or several phases of a significant project with impact outside the agency through the direction of the project leads.
- Teams led by positions in this classification may include business area customers, other Information Systems Specialists, as well as Information Systems staff.
- May provide direction to and coordinate the work of Information Systems staff.
- Review detailed systems specifications to ensure the development of new systems and enhancements of existing systems is consistent with agency/campus development methodologies, standards, and policies.
- Provide direction to Information Systems staff on the adaptation and use of new development tools and methodologies for systems development projects.
- Lead the development of complex systems.
- Review detailed specifications and cost/benefit analyses for proposed systems.
- Recommend changes or improvements to management.
- Lead the design and development of complex systems.

This classification includes, but is not limited to, the following representative positions or job types. Positions do not need to exactly match one of these representative positions in order to be appropriately classified at this level.

### **Representative Positions**

IS Applications Technology Specialist - Positions conduct analyses, investigate the parameters and develop prototypes for employing complex, emerging technology into systems development projects, e.g., Geographic Information System (GIS), Imaging, Interactive Voice Response; design models and provide direction to customers and other professional IS staff on appropriate use of the complex, emerging technology; and resolve complex problems with the use of a complex, emerging technology within a new or enhanced system.

IS Development Specialist - Positions ensure systems tools and methodologies are consistent with agency technical policies and standards; provide information, direction, and training in appropriate systems development techniques and methodologies to IS Professionals at the senior level or lower and other IS staff as needed; and coordinate systems development for assigned IS customers on an agency/campuswide basis.

IS Project Leader Specialist - Positions lead two or more intra-agency projects or several phases of a significant project with impact outside the agency through the direction of the project leads. This leadership requires frequent contacts with managers, administrators, campus department heads and bureau directors as customers of the projects. Teams lead by positions in this classification will include business area customers, other Information Systems Specialists, as well as Information Systems Professionals. Positions at this level may provide direction to and coordinate the work of Information System Professional, Project Leader positions. Positions in this classification may lead GIS projects.

IS Systems Specialist - Positions review detailed systems specifications to ensure the development of new systems and enhancement of existing systems is consistent with agency/campus development methodologies, standards and policies; provide direction to Information Systems Professionals on the adaptation and use of new development tools and methodologies for systems development projects; lead the development of complex systems as described in the Project Leader Specialist classification; and review detailed specifications and cost/benefit analyses for proposed systems and recommend changes or improvements to management. Positions lead GIS design and development projects.

### **IS SYSTEMS DEVELOPMENT SERVICES CONSULTANT/ADMINISTRATOR**

Positions in this classification perform the highest level expert professional IS work which supports development, implementation and maintenance of applications for systems. For a majority of the time positions perform work related to the overall direction of the analyses and design of applications for an agency/campus. Work performed impacts all phases in the Systems Development Life Cycle. Positions spend the majority of their time performing any combination of the following duties:

- Are an agency/campus principal authority on the uses and feasibility for employing complex or emerging technology into systems development projects, e.g. Geographic Information System (GIS), Imaging, Interactive Voice Response, Computer Conferencing, Integrated Applications Technologies.
- Develop technical policies, procedures, and standards for the use of complex or emerging technology in an agency/campus.
- Direct the design of prototypes and tests of complex or emerging new projects.

- Provide consultation to other professional IS development staff on appropriate uses of the complex or emerging technology and its potential deployment in existing business applications.
- Establish and direct for an agency/campus the overall means through which business processes within an agency or campus are reviewed and redefined. Specific projects or phases of projects may be lead by IS Professionals or IS Specialists as appropriate.
- Define the scope of the agency/campus business process definition/redefinition projects in conjunction with agency business area managers.
- Review current business processes and make changes as mandated by new technology, techniques, and or agency/campus standards.
- Identify the most feasible solutions to customers for IS business processing purposes.
- Train customers and professional IS staff on business process redefinition.
- Direct IS Professionals and Specialists in conducting feasibility studies for business process redefinition of complex automated systems.
- Define, research, and select the tools, techniques, standards and methodologies to be used in enterprise application development activities.
- Are a primary authority for application tools and methodologies in the agency/campus.
- Provide direction and training to other professional IS staff in the use of development tools, techniques, metrics, standards, and methodologies.
- Specifies requirements and selects tools, techniques, metrics and methodologies on a project by project basis, if necessary.
- Coordinate teams working on two or more systems development projects **or** a single project with multiple aspects from inception to completion. A project team may be composed of IS Systems Development Services Specialists, IS Comprehensive Services Specialists, business area managers and project vendors.
- Ensure compliance across teams and projects with agency/campus development policies, procedures, and standards as well as enterprisewide standards which may impact on the project.
- May manage any or all phases of assigned systems development projects.
- Plan and budget for work flow and product deliveries.
- Manage human and fiscal resources.
- Negotiate timelines, products, and other project concerns with top management positions, e.g., Division Administrators, Department Heads, University Deans, Chancellors, Legislators, and/or similar level federal officials to attain project goals.
- Coordinate and monitor the completion of tasks and provide status/completion reports to management.
- Administer the vendor contracts for the managed projects.
- Assess the best way to use packaged software to meet the needs of the business area, including re-engineering business processes.
- Plan, schedule, and execute software upgrades, including expanding delivered upgrade scripts to cover in-house customizations and data irregularities.
- Produce, interpret and present the results of compare reports to assist customers in making informed decisions about migrating or revising existing customizations to work with the newly-delivered version of software.
- Assess, debug and apply vendor-delivered patches and fixes, including developing work-arounds.
- Assist customers in translating their security rules and considerations into operational constructs, based on the application-specific security packages.
- Act as an expert in the proprietary development/maintenance software delivered by the vendor for use with their product.

- Control and document changes to the vendor-delivered software, including reviewing proposals for changes, documenting actual changes made and monitoring the life-cycle of these changes through upgrades.
- Act as liaison between customers/end-users and technical staff, both vendor and in-house, including tracking of problems and resolutions.
- Document all faulty delivered objects.
- Perform or direct feasibility studies and needs analyses for specialized, business process redefinition of complex enterprise automated systems.
- Direct the detailed analysis of complex business process redefinition (reengineering) projects for enterprise-wide business.

This classification includes, but is not limited to, the following representative positions or job types. Positions do not need to exactly match one of these representative positions in order to be appropriately classified at this level.

### **Representative Positions**

IS Applications Technology Consultant - Positions are an agency/campus principal authority on the uses and feasibility for employing complex, emerging technology into systems development projects, e.g., Geographic Information System (GIS), Imaging, Interactive Voice Response, Computer Conferencing, Integrated Applications Technologies; develop technical policies, procedures and standards for the use of complex, emerging technology in an agency/campus; direct the design of prototypes and tests of complex, emerging new products; and provide consultation to other professional IS development staff on appropriate uses of the complex, emerging technology and its potential deployment in existing business applications.

IS Development Consultant - Positions define, research and select the tools, techniques, standards and methodologies to be used in enterprise application development activities, and are the primary authority for application tools and methodologies in the enterprise and provide direction and training to other professional IS staff in the use of development tools, techniques, metrics, standards and methodologies. The incumbent must be able to specify requirements and select tools, techniques, metrics and methodologies on a project by project basis, if necessary.

IS Project Manager - Positions must coordinate teams working on two or more systems development projects **or** a single project with multiple aspects from inception to completion. A project team will be composed of IS Systems Development Services Specialists, IS Comprehensive Services Specialists, business area managers and project vendors. Positions ensure compliance across all teams and projects with agency/campus development policies, procedures and standards as well as enterprisewide standards which may impact on the project. Positions manage all phases of assigned systems development projects; plan and budget for work flow and product deliveries, manage human and fiscal resources; effectively negotiate timelines, products and other project concerns with top management positions, e.g., Division Administrators, Department Heads, University Deans, Chancellors, Legislators and/or similar level federal officials to attain project goals, and oversee completion of tasks and provide status and completion reports to management; and will administer the vendor contracts for the managed projects. Projects may include GIS applications.

### **III. QUALIFICATIONS**

The qualifications required for these positions will be determined at the time of recruitment. Such determinations will be made based on an analysis of the goals and worker activities performed and by an identification of the education, training, work, or other life experience which would provide reasonable assurance that the knowledge and skills required upon appointment have been acquired.

### **IV. ADMINISTRATIVE INFORMATION**

These classifications were created as a result of the Information Systems Survey effective March 30, 1997 and the abolishing of the Management Information Specialist 1 through 7 series as announced in Bulletin CC/SC-64. The classifications created more accurately represent the actual duties of the positions in the survey.

The IS classifications were collapsed and semi-automatic pay progression IS classes were created effective December 31, 2000 and announced in Bulletin CLR/SC-124.

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