

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE

INFORMATION TECHNOLOGY SPECIALIST 4

DEFINITION

Performs work in systems management/programming process analysis and modification, software focused database management or specialized Web (Intranet/Internet) applications; develops/delivers mainframe and PC based information management courses, designs/revises personal computer network functions, oversees complete systems analysis assignments or serves as a project leader on large programming assignments; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Assists a supervisor by performing such duties as instructing employees about tasks, answering questions, distributing and balancing the workload and checking work; may make occasional suggestions on appointments, promotions, and reassignments.

Analyzes system management processes/systems (availability, change, configuration, problem, project, network and storage management, capacity planning, system performance, data modeling, charge back, information services, disaster recovery, systems security and skills planning).

Coordinates the availability/allocation of system resources; evaluates impact of workload on resource availability; prepares written/oral instructions for the operation of a major component of an information system; defines/maintains appropriate backup and recovery procedures for critical information and develops procedures for distribution of computing system output.

Coordinates system outages with customers and establishes/monitors system service level agreements and performance/availability goals.

Participates in the procurement process for information systems; evaluates automation alternatives; provides hardware/software product samples; consults with customers; prepares detailed product specifications/proposals and evaluates vendor proposals; makes recommendations and coordinates the procurement process.

Manages one or more system management processes including availability/allocation of system storage space, system resources (e.g., network, data, programs and objects) and system access.

Develops/delivers formal and informal training (e.g., products and software) to individuals or groups.

Recommends standards, policies and procedures for mainframe and PC based applications; develops short term performance requirements, establishes operational procedures, evaluates impact of new/changed software and monitor performance; analyzes output and makes required changes.

Installs/upgrades system components (e.g., hardware and software) and develops installation plans, configuring, tuning, placing, testing and training users.

Analyzes more complex agency operations/procedures and studies components to determine feasibility of adapting to automation; evaluates potential changes in operations/procedures and prepares cost estimates/time lines for completion.

Prepares data flow diagrams; designs documents, forms, record layouts, etc., to generate, transmit or gather data; adjusts time lines and cost estimates based on design.

Prepares program specifications, develops data bases or files for testing and tests system using sample data; prepares system documentation and develops program code.

Coordinates implementation of the systems; develops, coordinates and administers customer training; provides system enhancements and maintenance as required.

Participates in the development of complex programming code and evaluates alternative methods of program development.

Consults with less experienced Information Technology Specialists suggesting solutions to complicated technical programming problems and program logic; trains less experienced staff in programming techniques, file organization methods, job control language and programming.

COMPETENCIES REQUIRED

Knowledge of a broad range of current and emerging information technology including software, operating systems, telecommunications, database, and hardware available to be applied to agency needs.

Knowledge of basic system management processes/systems, as required in designated positions.

Knowledge of data modeling methods and techniques.

Knowledge of basic business concepts and principles.

Knowledge of programming languages, operating systems, or utility programs used by the employing agency, as required by the position.

Knowledge of business process analysis methods and techniques of systems analysis, design and development, as required in designated positions.

Knowledge of systems security methods and techniques.

Knowledge of accepted principles and standards of research and analysis relative to recommending, coordinating, and implementing information processing systems.

Knowledge of methods/tools used to troubleshoot information processing system problems and monitor system performance.

Knowledge of advanced computer programming methods, techniques, and tools for application development on multiple platforms.

Ability to operate current information systems and peripheral equipment to perform current work functions.

Ability to apply the knowledge of information technology to formulate and conduct assigned training courses for both information processing staff and customers.

Ability to apply methods/tools to solve complex information system problems.

Ability to work as a team member in solving problems and improving service delivery.

Ability to provide quality services to a variety of clients and customers.

Ability to analyze current and emerging technology to evaluate and recommend improved and potential uses.

Ability to prepare and present effective written or oral information for both technical and non-technical agency staff at all levels.

Ability to read and interpret technical written information/instructions.

Ability to integrate input from a broad range of sources and apply it to agency information processing systems.

Ability to develop programs of a high level of complexity.

Ability to coordinate and direct activities of others on the work project.

Ability to interact effectively with individuals at all levels of responsibility.

Ability to plan work, think conceptually, observe and evaluate trends, analyze data, draw logical conclusions and make decisions and recommendations.

Ability to develop and conduct training using skills in adult learning techniques, course development, and presentation.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing quality professional service.

Displays a high level of initiative, effort and attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.

Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization.

Exchanges information with individuals or groups effectively by listening and responding appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited four-year college or university and experience equal to two years of full-time work: operating a multi-job computer; installing, operating and coordinating computer based networks; installing/maintaining database management systems; developing business application processes; developing/operating system programs; installing/maintaining personal computers, Local Area Networks and/or servers; managing operating systems; developing/ delivering information management training; providing Information Technology (IT) customer service; or designing/administering Internet sites;

OR

an equivalent combination of education and experience substituting the completion of an approved curriculum/specialized training program developed and implemented by or in cooperation with state government; or eighteen semester hours of accredited post high school course work in one of the specialty areas listed above; or certification by an authorized educational institution/major computer or software producer in an area directly related to one of the specialty areas listed above, for the required education;

OR

an equivalent combination of education and experience substituting one year of the required experience for thirty semester hours of the required education;

OR

employees with current continuous experience in the state executive branch that includes experience equal to six months of full-time work as an Information Technology Specialist 3.

Effective Date: 10/14 KF