

Iowa Department of Administrative Services – Human Resources Enterprise
Job Classification Description

Information Technology Specialist 3

Definition

Under general supervision, performs intermediate-level professional responsibilities supporting business applications processes, application development and database management, system and network administration, technical training and reporting, project management, product management, system testing and quality assurance, mainframe/platform administration, and/or enterprise information technology security; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Conducts requirements analysis for moderate to complex systems under general supervision; works with stakeholders to document business processes and develop user stories or use cases; assists in creating test plans and validating system functionality against requirements.

Supports data analysis and reporting needs for assigned projects; participates in project meetings and provides input on design decisions.

Maintains and enhances existing applications and databases, ensuring stability and compliance; participates in the design and development of new applications under project team guidance; performs basic database administration tasks, monitors performance, and assists with troubleshooting; contributes to data governance activities, including metadata documentation and quality checks.

Handles customer complaints and resolves customer service level problems.

Performs administration and maintenance of servers, network devices, and related systems under general supervision. Configures LAN/WAN components, applies security controls, and monitors system performance; assists with troubleshooting complex issues and contribute to disaster recovery planning; participates in infrastructure projects and provides input on design and implementation.

Assists in IT procurement activities for hardware, software, and IT services; prepares purchase requests, reviews vendor quotes, and ensures compliance with established standards.

Assists with the planning and coordination of small IT projects; prepares basic project documentation, maintains schedules, and tracks tasks; communicates updates to team members and stakeholders; support project meetings by recording notes and action items.

Assists in defining product features and maintaining backlog; participates in sprint planning and testing activities; gather user feedback and recommend enhancements.

Executes functional, integration, and regression testing for moderate to complex systems; develops test cases based on requirements and document results; identifies defects, assists in root cause analysis, and verifies fixes; supports quality metrics reporting and contributes to continuous improvement initiatives.

Installs, upgrades, tests and documents information system components (e.g., workstations, terminals, peripheral devices, user applications, utility programs and other software).

Performs system administration tasks for mainframe and platform environments under general supervision; installs and configures operating system components and utilities; monitors system performance and assists with troubleshooting; supports backup and recovery processes and contributes to system upgrade planning.

Assists in creating basic training materials and user documentation for applications and systems; conducts small group or one-on-one training sessions under supervision; compiles simple reports on service requests, system usage, or help desk activity; maintains logs and updates documentation as directed.

Determines the symptoms/causes of process problems involved in information processing systems and resolves using appropriate tools.

Tests programs and reviews results of test data; create labels, lists, and files in various media types, or to execute and test programs.

Configures and maintains endpoint protection tools and assists with firewall rule updates; conducts routine security audits and prepares compliance reports; performs vulnerability scans and applies security patches across multiple systems.

Performs limited systems management duties in availability management, capacity planning, system performance, change management, charge back, configuration management, information services disaster recovery, problem management, project management, network management, information systems security, storage management and skills planning.

Attends information technology classes and reviews technical literature/vendor product descriptions.

Competencies Required

Knowledge:

- Customer Service – Principles and processes for providing customer services, including customer needs assessment, meeting quality standards for services, and evaluating customer satisfaction.
- Computers and Electronics – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Engineering and Technology – The practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Telecommunications – Transmission, broadcasting, switching, control, and operation of telecommunications systems.

Abilities:

- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Written Expression – Communicate information and ideas in writing so others will understand.
- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning – Combine pieces of information to form general rules or conclusions.

- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Information Ordering – Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Fluency of Ideas – Come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
- Originality – Come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Category Flexibility – Generate or use different sets of rules for combining or grouping things in different ways.
- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Skills:

- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Active Learning – Understanding the implications of new information for both current and future problem-solving and decision-making.
- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Systems Analysis – Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Service Orientation – Actively looking for ways to help people.
- Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Minimum Qualification Requirements

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

- 1) Graduation from an accredited four-year college or university with a degree in any field, and experience equal to one year of full-time work in application development and database management, business analysis, systems and network administration, technical training and reporting, IT vendor and purchasing management, IT project management, IT product management, system testing and quality assurance, mainframe and platform administration, and/or information technology security.

- 2) Graduation from an accredited four-year college or university with a degree in computer science, computer applications, software engineering, computer engineering, management information systems, business analytics, or cyber security.
- 3) All of the following (a and b):
 - a. One year of full-time work experience in application development and database management, business analysis, systems and network administration, technical training and reporting, IT vendor and purchasing management, IT project management, IT product management, system testing and quality assurance, mainframe and platform administration, and/or information technology security; and
 - b. A total of four years of education and/or full-time experience (as described in part a), where thirty semester hours of accredited college or university coursework in any field equals one year of full-time experience.
- 4) All of the following (a and b):
 - a. Three years of full-time work experience in application development and database management, business analysis, systems and network administration, technical training and reporting, IT vendor and purchasing management, IT project management, IT product management, system testing and quality assurance, mainframe and platform administration, and/or information technology security; and
 - b. Either of the following:
 - i. Certification from an authorized educational institution/major computer or software producer in one or more of the specialty areas listed in part a; or
 - ii. Eighteen semester hours from an accredited college or university in one or more of the specialty areas listed in part a.
- 5) Current, continuous experience in the state executive branch that includes six months of full-time work as an Information Technology Specialist 2.

Effective date: 02/26 SA