

IT SPECIALIST 1-4

CLASS DESCRIPTION

General Responsibilities:

This classification series is designed to describe positions in the Information Technology Department that are responsible for performing specialized work relative to the City's management information systems. Positions are assigned to perform either: 1) Applications Development or 2) Technical Support activities. Within the "development" area, employees work with customers in defining system requirements and translating those requirements into diverse automated applications. In addition, staff may participate in city business process review or reengineering functions necessary to improve or streamline functions in a single or in multiple city agencies. "Technical Support" activities focus on assisting customers (directly or indirectly) through the development and implementation of telecommunication systems; performing network engineering and/or administration for both Local Area and Wide Area Networks; performing system configuration and/or administration; supporting the utilization of personal computers in office applications; selecting, installing, and troubleshooting enterprise hardware/software products and providing necessary training, etc. This classification may be used in departments outside of the Information Technology Department performing similar functions and may have overlapping focus areas.

This series is structured to provide for career progression from IT Specialist 1 to 2 as a function of employee expertise (as gained through experience). Progression to the IT Specialist 3 or 4 levels is normally contingent upon the availability of budgeted position vacancies and is normally accomplished by competition or position study. It should be noted that higher level positions within the series are characterized by increasing independence, expertise, judgment, discretion, responsibility, initiative, coordination, planning, conflict resolution and leadership.

IT Specialist 1

This is entry-level professional work in the development or support of automated management information systems. This work is characterized by more routine and/or focused assignments where there is limited direct responsibility for the development of automated systems or the independent provision of customer support. This work is normally performed under the close to limited supervision of a Principal IT Specialist or other supervisor/manager and/or in a trainee capacity.

IT Specialist 2

This is objective level professional work in the development or support of automated management information systems. This work is characterized by the independent application of professional skills in providing standardized developmental or support activities, and/or serving as a contributing member on more diverse team efforts. Work is performed under the general supervision of a Principal IT Specialist or other supervisor/manager.

IT Specialist 3

This is advanced-level professional work in the development or support of automated

management information systems. This level is characterized by responsibility for the development and implementation of automated systems and major system components or the development and implementation of support systems and programs, as assigned. Work may involve some leadership responsibility on specific projects, as assigned and is performed under the general supervision of a Principal IT Specialist or other supervisor/manager.

IT Specialist 4

This is professional leadership work in the development or support of complex automated management information systems. This work requires considerable judgment, discretion and expertise in the development or support of highly complex and diverse management information systems. Work is characterized by significant technical or project leadership responsibility for the development and implementation of specified technology areas. Employees may be expected to supervise lower-level employees on a project basis, and provide general leadership to lower-level staff. Employees work under the general supervision of a Principal IT Specialist or other supervisor/manager and operate with considerable independence in meeting established objectives.

Examples of Duties and Responsibilities:

IT Specialist 1 - Development

Participate in the development of user applications and/or the enhancement of existing applications, as a member of a development team. Assist in the analysis of customer requirements. Write portions of applications using current development language(s) following established IT Department standards. Prepare, or assist in preparing, system documentation. Assist in testing user applications, hardware and systems software.

Participate in diverse development and support efforts in a training capacity in order to gain both technical competency and familiarity with organizational dynamics.

Perform related work as assigned.

IT Specialist 1 - Technical Services

Troubleshoot routine application, hardware and systems software problems and identify potential causes. Recommend corrective actions and follow through with senior IT Specialists and/or customers. Setup new PC's, laptops, tablets, smart phones and printers in order to replace end-of-life devices. Use call tracking system to enter and maintain customer requests and hardware/software issues.

Participate in diverse development and support efforts in a training capacity in order to gain both technical competency and familiarity with organizational dynamics.

Perform related work as assigned.

IT Specialist 2 - Development

Perform all work of a IT Specialist 1 with a higher degree of independence, discretion, expertise, complexity and implicit responsibility.

Work with customers to define requirements for basic applications (e.g., stand-alone systems with limited users, limited/routine transactions, few data elements, few screens, no/limited interface with other applications, etc). Analyze requirements and translate application design specifications to current development language including inputs, processing and outputs. Establish proper controls for security and test applications. Prepare documentation.

Actively participate on internal teams to improve departmental programs and services.

Ensure application designs, systems software and networks are compatible and in alignment with the practices and goals of the department.

Participate in diverse departmental efforts in a training capacity, (e.g., involvement in application development involving networking considerations, database management, etc. in order to facilitate back-up capability). Act as a project leader on small projects and/or components of larger projects.

Present/participate in related customer training.

Perform related work as assigned.

IT Specialist 2 - Technical Services

Perform all work of a IT Specialist 1 with a higher degree of independence, discretion, expertise, complexity and implicit responsibility.

Implement and troubleshoot computer applications, hardware and systems software. Correct and prevent future problems. Install software packages. Troubleshoot malware issues and remove viruses using anti-virus tools.

Evaluate and recommend hardware, network and systems software requirements. Perform routine vendor interface. Perform related testing and troubleshooting. Act as project leader on small projects and/or components of larger projects.

Actively participate on internal teams to improve departmental programs and services.

Present/participate in related customer training.

Perform related work as assigned.

IT Specialist 3 - Development

Perform all work of a IT Specialist 2, with emphasis on the more technically complex and responsible activities.

Work with customers on the more complex automated applications (e.g., involving some system networking; some diversity of users and user interests; a large number of data elements and procedural considerations; and generally, a large number of variables in design, hardware/software, and potentially conflicting priorities, etc.).

Act as Project Leader on smaller projects and/or components of larger projects. Provide activity schedule; provide technical consultation and training to lower level staff as required.

Contact vendors; evaluate products; actively participate in the request for proposal (RFP) processes; participate in vendor contract negotiations.

Exercise judgment in the resolution of conflicts relative to scheduling priorities between customers, varying solution options to applications, etc.

Perform related work as assigned.

IT Specialist 3 - Technical Services

Perform all work of a IT Specialist 2, with emphasis on the more technically complex and responsible activities.

Implement hardware, networks, and systems software.

Work on more complex aspects of customer support and network design/implementation; taking on some responsibilities for analyzing, decision-making, implementing and troubleshooting within the various customer support program(s) (e.g., telecommunications, network support, unified communications, personal/enterprise computer hardware/software network security, desktop management, storage/backup and virtualization.). Assume independent responsibility for a program component and/or assume more pervasive responsibilities under general supervision. Act as a project leader on small projects and/or components of larger projects.

Analyze and implement procedures in order to ensure the security and integrity of the network.

Contact vendors; evaluate products; actively participate in the request for proposal (RFP) processes; participate in vendor contract negotiations.

Exercise judgment in the resolution of conflicts relative to scheduling priorities between customers, varying solution options to applications, etc.

Perform related work as assigned.

IT Specialist 4 - Development

Perform all work of a IT Specialist 3, with increased emphasis on project leadership or technical leadership for the most complex information technology duties, functions and responsibilities.

Take full responsibility for specified technology areas (e.g. database design and administration, City website, GIS, enterprise applications, content management systems).

Work with customers on the most complex automated applications (e.g., involving system networking; highly diverse user interests and objectives; multi-dimensional utilization; and with significant pressures/responsibility for results).

Plan, assign, lead and monitor other IT Specialists. Provide technical training and consultation. Participate in hiring processes, and other staff utilization issues. Act as Project Leader on major development projects.

Provide recommendations on departmental policies and procedures, budgeting and planning issues.

Represent the department on sensitive interaction with customers and vendor negotiations.

Act on behalf of the Principal IT Specialist or Applications Development Division Manager, as assigned.

Perform related work as assigned.

IT Specialist 4 - Technical Services

Perform all work of a IT Specialist 3, with increased emphasis on project leadership or technical leadership for the most complex information technology duties, functions and responsibilities.

Take full responsibility for specified technology areas (e.g., telecommunications, network support, unified communications, personal/enterprise computer hardware/software network security, desktop management, storage/backup and virtualization.).

Provide recommendations on departmental policies and procedures, budgeting and planning issues.

Plan, assign, lead and monitor other IT Specialists. Provide technical training and consultation. Participate in hiring processes, and other staff utilization issues.

Represent the department on sensitive interactions with customers and vendor negotiations.

Act on behalf of the Principal IT Specialist or Technical Services Division Manager, as assigned.

Perform related work as assigned.

QUALIFICATIONS

Knowledge, Skills and Abilities:*

IT Specialist 1 - Development - Knowledge of a variety of software development tools and techniques including databases, scripting languages, reporting tools, browsers, and technologies specific to their area of responsibility. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to problem solve, apply logic, and perform process identification and systems thinking. Ability to exercise judgment and discretion in completing assigned tasks. Ability to learn new technologies that emerge and impact our systems, and resolve any problems involved in integrating

them within our systems. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to maintain adequate attendance.

IT Specialist 1 - Technical Services - Knowledge of personal computer system technology (hardware and software) and its effective application. Knowledge of a wide range of software and hardware applications. Knowledge of any or all of the following: network security concepts; storage and network backup systems; virtualization of servers and desktops; IP telephony; Microsoft Office suite of products; Active Directory; Exchange; E-mail content filtering and archival systems; Windows Server Operating System; fiber optic and category 5/5e/6 wiring concepts; server and workstation anti-malware software; wireless networking concepts; network switch/router/firewall concepts; Polycom teleconferencing systems; desktop management concepts; call tracking systems; fiber optic network concepts; digital surveillance camera systems; and building security system concepts. Ability to troubleshoot and resolve routine hardware and software computer malfunctions. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to provide advice, consultation, and training to diverse user groups. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to maintain adequate attendance.

IT Specialist 2 - Development – Working knowledge of a variety of software development tools and techniques including databases, scripting languages, reporting tools, browsers, and technologies specific to their area of responsibility. Working knowledge of computer system design. Knowledge of management information system networking considerations. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to problem solve, apply logic, and perform process identification and systems thinking. Ability to learn new technologies that emerge and impact our systems, and resolve any problems involved in integrating them within our systems. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in team efforts to improve/develop departmental programs and services. Ability to evaluate software and recommend purchase. Ability to exercise judgment and discretion in completing assigned tasks. Ability to determine customer needs and define the scope of projects. Ability to maintain adequate attendance.

IT Specialist 2 -Technical Services - Working knowledge of personal computer system technology (hardware and software) and its effective application. Working knowledge of a wide range of software and hardware applications. Working knowledge of any or all of the following: network security concepts; storage and network backup systems; virtualization of servers and desktops; IP telephony; Microsoft Office suite of products; Active Directory; Exchange; E-mail content filtering and archival systems; Windows Server Operating System; fiber optic and category 5/5e/6 wiring concepts; server and workstation anti-malware

software; wireless networking concepts; network switch/router/firewall concepts; Polycom teleconferencing systems; desktop management concepts; call tracking systems; fiber optic network concepts; digital surveillance camera systems; and building security system concepts. Ability to troubleshoot and resolve routine hardware and software computer malfunctions. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to provide advice, consultation, and training to diverse user groups. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in team efforts to improve departmental programs and services. Ability to evaluate hardware and software, and recommend purchase. Ability to exercise judgment and discretion in completing assigned tasks. Ability to maintain adequate attendance.

IT Specialist 3 - Development - Thorough knowledge of a variety of software development tools and techniques including databases, scripting languages, reporting tools, browsers, and technologies specific to their area of responsibility. Thorough knowledge of desktop, server, and browser-based computer system technology (hardware and software) and its effective application. Thorough knowledge of computer system design and business process analysis. Working knowledge of management information system networking considerations. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to problem solve, apply logic, and perform process identification and systems thinking. Ability to learn new technologies that emerge and impact our systems, and resolve any problems involved in integrating them within our systems. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in team efforts to improve/develop departmental programs and services. Ability to evaluate software and recommend purchase. Ability to determine customer needs and define the scope of projects. Ability to exercise considerable judgment and discretion in completing assigned tasks. Ability to provide consultation, training and leadership to lower level staff. Ability to maintain adequate attendance.

IT Specialist 3 - Technical Services - Thorough knowledge of personal computer system technology (hardware and software) and its effective application. Thorough knowledge of any or all of the following: network security concepts; storage and network backup systems; virtualization of servers and desktops; IP telephony; Microsoft Office suite of products; Active Directory; Exchange; E-mail content filtering and archival systems; Windows Server Operating System; fiber optic and category 5/5e/6 wiring concepts; server and workstation anti-malware software; wireless networking concepts; network switch/router/firewall concepts; Polycom teleconferencing systems; desktop management concepts; call tracking systems; fiber optic network concepts; digital surveillance camera systems; and building security system concepts. Ability to troubleshoot and resolve routine hardware and software computer malfunctions. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to provide advice, consultation, and training to diverse user groups. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in

team efforts to improve departmental programs and services. Ability to evaluate hardware and software and recommend purchase. Ability to exercise considerable judgment and discretion in completing assigned tasks. Ability to provide consultation, training and leadership to lower level staff. Ability to maintain adequate attendance.

IT Specialist 4 - Development - Thorough knowledge of management information system networking considerations. Thorough knowledge of a variety of software development tools and techniques including databases, scripting languages, reporting tools, browsers, and technologies specific to their area of responsibility. Thorough knowledge of desktop, server, and browser-based computer system technology (hardware and software) and its effective application. Thorough knowledge of computer system design and business process analysis. Thorough knowledge of management information system networking considerations. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to problem solve, apply logic, and perform process identification and systems thinking. Ability to learn new technologies that emerge and impact our systems, and resolve any problems involved in integrating them within our systems. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in team efforts to improve/develop departmental programs and services. Ability to evaluate software and recommend purchase. Ability to determine customer needs and define the scope of projects. Ability to exercise considerable judgment and discretion in completing assigned tasks. Ability to provide consultation, training and leadership to lower level staff. Ability to provide project leadership. Ability to lay out, plan, and review work. Ability to represent department interests in sensitive interaction with customers and in vendor negotiations. Ability to simultaneously manage multiple projects of the most complex nature and resolve conflicts. Ability to maintain adequate attendance.

IT Specialist 4 - Technical Services - Thorough knowledge of personal computer system technology (hardware and software) and its effective application. Thorough knowledge of any or all of the following: network security concepts; storage and network backup systems; virtualization of servers and desktops; IP telephony; Microsoft Office suite of products; Active Directory; Exchange; E-mail content filtering and archival systems; Windows Server Operating System; fiber optic and category 5/5e/6 wiring concepts; server and workstation anti-malware software; wireless networking concepts; network switch/router/firewall concepts; Polycom teleconferencing systems; desktop management concepts; call tracking systems; fiber optic network concepts; digital surveillance camera systems; and building security system concepts. Ability to troubleshoot and resolve routine hardware and software computer malfunctions. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective working relationships with internal staff and staff of other agencies. Ability to provide advice, consultation, and training to diverse user groups. Ability to resolve problems in a timely and effective manner, and to maintain an awareness of project deadlines and communicate project status, risks, and other issues. Ability to multi-task and prioritize responsibilities. Ability to effectively participate in team efforts to improve departmental programs and services. Ability to evaluate hardware and software and recommend purchase. Ability to exercise considerable judgment and discretion in completing assigned tasks. Ability to provide consultation, training and leadership to lower level staff. Ability to provide project leadership. Ability to lay out, plan, and review work. Ability to represent department interests in sensitive interaction with

customers and in vendor negotiations. Ability to maintain adequate attendance.

*Specific knowledge, skills, and abilities may be added for particular expertise as required on a position basis.

Training and Experience:

Generally, positions in this classification will require:

IT Specialist 1 - Possession of a four year degree from an accredited college or university in computer science or a related field, or possession of an Associate's Degree in computer science or a related field and 2 years of directly related experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

IT Specialist 2 - Two years of professional experience comparable to that gained as a IT Specialist 1 with the City of Madison in the appropriate specialty area. Such experience would normally be gained following completion of a four year degree from an accredited college or university in computer science or a related field, or completion of an Associate's Degree in computer science or a related field and 2 additional years of directly related experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

IT Specialist 3 - Two years of objective-level professional experience comparable to that gained as a IT Specialist 2 with the City of Madison in the appropriate specialty area. Such experience would normally be gained following completion of a four year degree from an accredited college or university in computer science or a related field, or completion of an Associate's Degree in computer science or a related field and 2 additional years of directly related experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

IT Specialist 4 – Two years of advanced-level professional experience comparable to that gained as a IT Specialist 3 with the City of Madison in the appropriate specialty area, including at least one year in a technical or project leadership capacity. Such experience would normally be gained following completion of a four year degree from an accredited college or university in computer science or a related field, or completion of an Associate's Degree in computer science or a related field and 2 additional years of directly related experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

Specific training and experience requirements will be established at the time of recruitment.

Necessary Special Qualifications:

Ability to meet the transportation requirements of the position.

