

**MICHIGAN CIVIL SERVICE COMMISSION  
JOB SPECIFICATION**

**INFORMATION TECHNOLOGY INFRASTRUCTURE ANALYST**

**JOB DESCRIPTION**

Employees in this job function as information technology (IT) professionals serving as technical experts and participate in or oversee a variety of analytical and technical assignments that provide for problem diagnosis and solutions documentation, implementation, administration, support, and maintenance of a variety of hardware, software, and network products in an information technology infrastructure environment.

There are two classifications in this job. Employees serve in the Department of Technology, Management & Budget (DTMB).

**Position Code Title - Info Tech Infra Analyst-E**

**Information Technology Infrastructure Analyst P11**

The employee performs a range of professional assignments. Independent judgment is required to carry out assignments that have significant impact on services or programs. Guidelines may be available, but require adaptation or interpretation to determine appropriate courses of action.

**Position Code Title - Info Tech Infra Analyst-A**

**Information Technology Infrastructure Analyst 12**

This is the advanced level. The employee may function as a lead or senior worker. At this level, employees are responsible for overseeing the work assignments of other information technology professionals or have regular assignments which have been recognized by Civil Service as having significantly greater complexity than those assigned at the experienced level.

**JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Provides on site or remote access diagnoses and resolution of computer hardware and software problems using a highly integrated set of diagnostic tools and techniques utilizing a specialized set of diagnostic tools and elevated privileges.

Researches, analyzes, develops, and documents new processes and procedures to implement new solutions for use by IT Technicians to meet future problem resolution needs.

Serves as technical expert providing support to IT Technicians.

Develops guidelines and upgrade techniques for new operational procedures for the support of databases, hardware systems, operating systems software, network systems software, security and client server systems.

Leads in the development of processes and procedures to be used by IT Technicians in the division and elsewhere in DTMB.

Administers, implements, and provides technical support of applications and associated hardware used in a client server environment utilizing a specialized set of diagnostic tools with elevated privileges.

Administers and implements automated data processing systems and computer application programs.

Develops specifications to detail what new systems or enhancements to existing systems can accomplish.

Develops operational, installation, and upgrade procedures, to be used by other staff, for communication systems, hardware, network, security, storage and software.

Serves as a liaison between other technical staff, management, users, and vendors regarding service requests, usage, standards, security, and other technical matters.

Develops structured diagrams for the specifications of databases, communication systems, servers, storage area networks, security or any other computer related hardware or software.

Develops and documents configurations of the following: databases, servers, computers, security and network monitor systems, packaged programs, macros, utilities, and communication systems.

Develops and implements databases, communication systems, storage area networks, security and applications with user departments, vendors, and data centers.

Develops and implements the directory configurations, messaging configurations, and state-wide operating systems which include communication systems (servers, routers, switches and hubs).

Administers, implements, and provides technical support for the telecommunications equipment, filters and interfaces related to state-wide messaging and communication systems utilizing a specialized set of diagnostic tools with elevated privileges.

Provides planning, design, and implementation of computer hardware, software, and network components.

Tests programs and systems and integrates system modules.

Converts and implements new systems or upgrades existing systems.

Analyzes the need for, and develops, documents, implements, and monitors, information technology quality assurance standards.

Develops cost estimates and makes recommendations for systems development and upgrades to existing systems.

Evaluates network services equipment and software for purchase; recommends new configurations, provides training or arranges for vendor training for system users.

Evaluates, implements, and provides customer support for third-party software systems in a client server environment.

Participate in or lead the problem and root cause analysis in support of Problem Management.

Reconcile issues across support teams to improve Incident Management Process.

Ensure customer support service issues and concerns are handled appropriately through effective incident support processes.

Ensure operational support documentation is complete and accurate.

Support continuous improvement programs in response to support service metrics, customer feedback and process efficiencies.

Validate Service Level Agreements (SLAs) for supportability and ensures performance against SLAs.

Plan for future improvement/expansion implementation of various aspects of Help Desk Center operations, which involve significant liaison with IT technical support teams.

Assumes responsibility for segments of Help Desk operations management.

Maintains records and prepares reports and correspondence related to the work.

Receive and respond to advanced troubleshooting telephone calls and service requests from customers needing assistance. Interprets and analyzes problems by using automated diagnostic programs.

Performs related work as assigned.

### **Additional Job Duties**

#### **Information Technology Infrastructure Analyst 12 (Lead Worker)**

Oversees the work of professional Information Technology staff by making and reviewing work assignments, establishing priorities, coordinating activities, and resolving related work problems.

#### **Information Technology Infrastructure Analyst 12 (Senior Worker)**

Performs, on a regular basis, professional Information Technology assignments, which have been recognized by Civil Service as more complex than those assigned at the experienced level.

## **JOB QUALIFICATIONS**

### **Knowledge, Skills, and Abilities**

**NOTE:** Thorough knowledge in the area listed is required at the advanced level.

Knowledge of DTMB infrastructure and software environments, programs, methodologies, procedures and policies.

Knowledge and understanding of technology available to determine and develop solutions.

Knowledge of systems management software, remote control, patch management, software distribution, and computer operating systems.

Knowledge of Information Technology diagnostic tools.

Knowledge of network environments and concepts such as TCP/IP, DHCP, DNS, wireless and mobile computing.

Knowledge of computer servers, server operating systems, server tools and utilities, and server data backup and restore.

Knowledge of technical analysis, implementation, configuration, and upgrading of computer hardware, software, and peripherals.

Knowledge of personal computers and personal computer software.

Knowledge of file maintenance and report generation methods.

Knowledge of interactive processing and remote printing.

Knowledge of the fundamental concepts and operating principles of data communications and data processing hardware and software.

Knowledge of capabilities of computer equipment and technology.

Considerable technical problem solving and analytical skills.

Ability to provide analytical, technical, and administrative support in planning, designing, and implementation of information technology hardware, software, and network components.

Ability to support a variety of technologies, business departments and systems, and independently resolve problems and pro-actively communicate solutions.

Ability to prepare detailed written instructions and documentation.

Ability to analyze instructions and data.

Ability to gather and analyze facts, define problems, and devise solutions.

Ability to plan and develop basic and detailed mechanical and clerical procedures for use in data processing systems.

Ability to effectively make oral and written reports and presentations and prepare clear and concise graphs and charts.

Ability to conduct interviews and establish and maintain effective relationships with systems users.

Ability to maintain records, prepare reports, and conduct correspondence related to the work.

Ability to communicate technical terminology at a level appropriate to the audience.

### **Additional Knowledge, Skills, and Abilities**

#### **Information Technology Infrastructure Analyst 12 (Lead Worker)**

Ability to organize and coordinate the work of others.

Ability to set priorities and assign work to other professionals.

### **Working Conditions**

*None*

### **Physical Requirements**

*None*

### **Education**

Possession of a bachelor's degree with 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

### **Experience**

#### **Information Technology Infrastructure Analyst P11**

No specific type or amount is required.

#### **Information Technology Infrastructure Analyst 12**

Two years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11.

### **Alternate Education and Experience**

#### **Information Technology Infrastructure Analyst P11 - 12**

Possession of an associate's degree with 16 semester (24 term) credits in computer science, data processing, computer information, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics and two years of experience as an application programmer, computer operator, or information technology technician; or two years (4160 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

OR

Educational level typically acquired through completion of high school and four years of experience as an application programmer, computer operator, information technology technician or four years (8,320 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

## **Special Requirements, Licenses, and Certifications**

Certain positions may require certification in specific information technology programs.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

## **JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

### **Job Code**

INFTCHIA

### **Job Code Description**

INFORMATION TECHNOLOGY INFRASTRUCTURE ANALYST

### **Position Title**

Info Tech Infra Analyst-E

Info Tech Infra Analyst-A

### **Position Code**

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### **Pay Schedule**

NERE-263

NERE-264

HK

01/15/2017