

# STATE OF ALABAMA



## CAREERS IN INFORMATION TECHNOLOGY

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[www.personnel.alabama.gov](http://www.personnel.alabama.gov)

## INFORMATION TECHNOLOGY CAREERS WITH THE STATE OF ALABAMA

The State of Alabama offers many different careers in Information Technology. Some examples of these include careers in setting up personal computers, programming various applications, and managing the IT operations of a state agency. The State of Alabama uses many different types of technology including working with mainframe, midrange, personal computer, and telecommunications equipment. These jobs are available with many different state agencies and are located statewide, but most (over 90%) are located in Montgomery, Alabama.

The primary groupings of jobs are illustrated below. Those shown with an asterisk (\*) are promotional only from other jobs within the groupings. **Not all jobs are currently open for applications. Please check our web site for the most current information.**

### IT JOB CLASS MATRIX

Management	Technical Support	Applications Development and Delivery	Systems Operations
IT Manager III	IT Systems Specialist, Senior	Programmer Analyst, Senior	IT Operations Manager*
IT Manager II	IT Systems Specialist	Programmer Analyst	IT Operations Supervisor*
IT Manager I	IT Systems Specialist, Associate	Programmer Analyst, Associate	IT Operations Specialist
	IT Systems Technician, Senior	Programmer	IT Operations Technician
	IT Systems Technician		

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- ✓ 13 PAID VACATION LEAVE DAYS PER YEAR (increases to a maximum of 29 days 2 hours through years of employment)
- ✓ 13 PAID SICK LEAVE DAYS PER YEAR
- ✓ 13 PAID HOLIDAYS PER YEAR
- ✓ AFFORDABLE HEALTH AND DENTAL INSURANCE WITH DEPENDENT COVERAGE AVAILABLE
- ✓ FLEXIBLE BENEFITS PROGRAM (PRE-TAX DOLLARS FOR HEALTH CARE AND DEPENDENT CARE, PRESCRIPTIONS, CO-PAYS, CONTACTS, EYE GLASSES, ETC.)
- ✓ PAYMENT FOR DEPENDENT COVERAGE WITH TAX-FREE DOLLARS
- ✓ DEFERRED COMPENSATION PLAN
- ✓ EXCELLENT RETIREMENT PROGRAM
- ✓ LONGEVITY BONUS EACH YEAR - AFTER FIVE YEARS
- ✓ MILITARY LEAVE
- ✓ JURY LEAVE
- ✓ EDUCATIONAL LEAVE
- ✓ PROFESSIONAL DEVELOPMENT
- ✓ PAYROLL DEDUCTION FOR BANKS, CREDIT UNIONS, APPROVED INSURANCE COMPANIES AND OTHER EMPLOYEE BENEFIT PROGRAMS
- ✓ ANNUAL MERIT RAISES

This booklet contains a listing and a brief description of jobs with the State of Alabama in the field of Information Technology. The purpose of this booklet is to help you apply for jobs in which you are interested and for which you are qualified. The information in this booklet is current as of the printing date on the front of the booklet.

### **HOW TO APPLY**

To be considered for a job you must be on the employment register. You must first submit an official application form. Each job class requires a separate application. You can get an application from the State Personnel Department, any Alabama Career Center Office, or the State Personnel web site at [www.personnel.alabama.gov](http://www.personnel.alabama.gov) . Photocopies of completed applications will be accepted.

Some job classes are open on a **continuous** basis. You can apply for these at any time. These announcements can be found on our web site or at your local Alabama Career Center Office.

Other job classes are open on a **current** basis. You must apply by the closing date on the job announcement. These announcements can also be found on our web site or at your local Alabama Career Center Office.

Job announcements which specify that a degree or coursework is required as part of the minimum qualifications will necessitate the submission of an official college transcript from each regionally accredited college attended. Photocopies of transcripts, faxed transcripts, and/or information obtained from the internet will NOT be accepted. Official transcripts which have been submitted for any state job after January 2, 2012, will remain on file in our system and will not need to be resubmitted.

### **HOW YOU ARE RATED**

The minimum requirements for the job are on the announcement (and in this booklet). You must meet the requirements to be accepted. If you do not meet the requirements you should not apply. For some jobs you will take a written test. For other jobs you will complete a questionnaire detailing your training and experience, or you may receive a score based on your education and experience as listed on your application. Some scores are number scores like 80 or 90. Other scores group similar applicants together. These groups are called Bands and have names like Band 1 or Band 2.

For current exams, written tests are given soon after the closing date. For continuous exams, written tests are given every two to three months. You will be notified a week before the test and told the date, time and place of the test. You must show picture identification at the test. Results will be sent to you about four to six weeks after the test. You must pass the test or evaluation to be put on the employment register.

You must submit proof to get veteran's credit. Veteran's credit consists of five points added to your score. If you are a disabled veteran, ten points will be added to your score. More information about this credit is on the application form.

### **HOW APPOINTMENTS ARE MADE**

Hiring is done by various State agencies from names sent by the State Personnel Department. These names are the top ten applicants on the register. If the scores are banded or tied, then the top bands or tied scores are selected until there are 10 applicants on the list. The list may contain more than 10 applicants if more than one applicant ties with the lowest score or band on the list. The names of people not selected stay on the register to be considered for future jobs. Applicants are usually hired at the minimum of the pay range.

### **PAY PLAN**

Each job is assigned to one of over 70 pay ranges in the state pay plan. For example, Programmer Analyst, Associate has been assigned pay range #7678 which is \$43,339.20 - \$72,686.40. Under each job description in this booklet, the assigned pay range at the time of printing has been listed. This pay schedule should be used only as a guide because pay ranges for some job classifications are occasionally updated to be competitive with the job market.



# TECHNICAL SUPPORT JOBS

## IT SYSTEMS TECHNICIAN – 10525

**Salary Range:** \$29,954.40-\$45,501.60

### **10525 - Personal Computer Option (448)**

This is applied technical work involving the physical aspects of data network operations. Employees in this class are responsible for the installation, repair, support, and relocation of personal computer equipment and software. Work involves installing, testing, and maintaining personal computers and peripheral equipment. Employees may also provide beginning training to end-users. Instruction and/or supervision is received from higher level technical personnel.

**Qualifications:** You **must** have **all** of the following:

- High School/GED.
- One (1) year of experience in troubleshooting and installing Business and/or Government applications software and/or hardware.

### **NOTES:**

- College/technical school credit in Information Systems may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience). *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10525 - Telecommunications Option (008)**

This is applied technical work involving the physical aspects of **voice** and data network operations. Employees in this class are responsible for the installation, repair, support, and relocation of **voice** and data communications equipment and systems. Work involves maintaining telephone sets, jacks, switches, modems, inside cabling, and coaxial cabling. Employees may also provide beginning training to end-users. Instruction and/or supervision is received from higher level technical personnel.

**Qualifications:** You **must** have **all** of the following:

- High School/GED.
- One (1) year of experience in troubleshooting and installing telecommunications systems, such as performing adds, changes, and deletes.

### **NOTES:**

- College/technical school credit in Information Systems may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience). *Please refer to the job announcement on our website for more detail regarding substitution.*

## **IT SYSTEMS TECHNICIAN, SENIOR – 10526**

**Salary Range:** \$39,290.40-\$59,517.60

### **10526 - Personal Computer Option (448)**

This is advanced applied technical level and/or supervisory work in data and voice systems and installation. Employees are responsible for the planning, coordination, installation, and maintenance of varied and complex personal computer systems. Work involves performing technical systems activities including participating in the planning and administration of local/wide area networks and coordinating systems repairs. Work also involves meeting with vendors and users to assess available resources for providing equipment and services that will fulfill agency and user needs.

**Qualifications:** You **must** have **all** of the following:

- One year of credit at a college or technical school in the field of Information Systems.
- Two (2) years of experience in troubleshooting and installing Business and/or Government applications software and/or hardware.

#### **NOTES:**

- Responsible experience in software and/or hardware troubleshooting and installation beyond the required minimum of two years may be substituted for the required education on a year-for-year basis (e.g., one year of additional experience equals one year of college/technical school).
- College/technical school credit in Information Systems beyond the required minimum of one year may be substituted for the required experience on a year-for-year basis (e.g., one year of additional education equals one year of experience).
- *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10526 - Telecommunications Option (008)**

This is advanced applied technical level and/or supervisory work in data and **voice** systems and installation. Employees are responsible for the planning, coordination, installation, and maintenance of varied and complex telecommunications systems and equipment. Work involves recommending appropriate telecommunication technologies and solutions to meet user requirements and/or supervising the installation of telecommunications systems and equipment. Work also involves meeting with vendors and users to assess available resources for providing equipment and services that will fulfill agency and user needs.

**Qualifications:** You **must** have **all** of the following:

- One year of credit at a college or technical school in the field of Information Systems.
- Two (2) years of experience in troubleshooting and installing telecommunications systems, such as performing adds, changes, and deletes.

#### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

## **IT SYSTEMS SPECIALIST, ASSOCIATE - 10527**

**Salary Range:** \$43,339.20-\$76,348.80

This classification has five options. Each is described separately, below.

### **10527 - Telecommunications Option (008)**

This is beginning through mid-level applied and developmental technical work in **voice** and data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain telecommunications systems. Work involves specialization in telecommunications. Employees work under general supervision and work is reviewed by a superior for achievement of desired results.

**Qualifications:** You **must** have **all** of the following:

- An Associate's Degree in Information Technology.
- Two (2) years of experience in telecommunications system design, maintenance, or support.

#### **NOTES:**

- College/technical school credit in Information Systems above the minimum may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience).
- Additional experience above the minimum may be substituted for the required education on a year-for-year basis (e.g., one year of experience equals one year of education).
- *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10527 - Mainframe/Midrange Option (399)**

This is beginning through mid-level applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain mainframe/midrange operating systems. Work involves specialization in mainframe/midrange operating systems. Employees work under general supervision and work is reviewed by a superior for achievement of desired results.

**Qualifications:** You **must** have **all** of the following:

- An Associate's Degree in Information Technology.
- Two (2) years of experience in mainframe/midrange system design, maintenance, or support.

#### **NOTES:**

- College/technical school credit in Information Systems above the minimum may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience).
- Additional experience above the minimum may be substituted for the required education on a year-for-year basis (e.g., one year of experience equals one year of education).
- *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10527 - Networking Option (400)**

This is beginning through mid-level applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain local/wide area networks. Work involves specialization in local/wide area networks. Employees work under general supervision and work is reviewed by a superior for achievement of desired results.

**Qualifications:** You **must** have **all** of the following:

- An Associate's Degree in Information Technology.
- Two (2) years of experience in local/wide area network design, maintenance, or support.

**NOTES:**

- College/technical school credit in Information Systems above the minimum may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience).
- Additional experience above the minimum may be substituted for the required education on a year-for-year basis (e.g., one year of experience equals one year of education).
- *Please refer to the job announcement on our website for more detail regarding substitution.*

**10527 - Database Option (401)**

This is beginning through mid-level applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain database systems. Work involves specialization in database management. Employees work under general supervision and work is reviewed by a superior for achievement of desired results.

**Qualifications:** You **must** have **all** of the following:

- An Associate's Degree in Information Technology.
- Two (2) years of experience in database system design, maintenance, or support.

**NOTES:**

- College/technical school credit in Information Systems above the minimum may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience).
- Additional experience above the minimum may be substituted for the required education on a year-for-year basis (e.g., one year of experience equals one year of education).
- *Please refer to the job announcement on our website for more detail regarding substitution.*

**10527 - Generalist (402)**

This is beginning through mid-level applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain local/wide area networks (LAN/WAN), operating systems, and/or database systems. Work involves assignment as a generalist performing in multiple areas typically supporting less complex systems.

**Qualifications:** You **must** have **all** of the following:

- An Associate's Degree in Information Technology.
- Two (2) years of experience in **two** or more of the following areas:
  - Local/wide area network design, maintenance or support
  - Mainframe/Midrange design, maintenance or support
  - Database system design, maintenance, or support

**NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*



## **IT SYSTEMS SPECIALIST – 10528**

**Salary Range:** \$59,517.60-\$90,724.80

This classification has five options. Each is described separately, below.

### **10528 - Telecommunications Option (008)**

This is full performance level work performing advanced applied and developmental technical work in **voice** and data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain telecommunications systems. Work involves specialization in telecommunications. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have the following:

- Current permanent status as an IT Systems Specialist, Associate (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in information technology plus four (**4**) years of experience in telecommunications system design, maintenance, or support.

#### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis.
- *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10528 - Mainframe/Midrange Option (399)**

This is full performance level work performing advanced applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain mainframe/midrange computer systems. Work involves specialization in mainframe/midrange computer systems. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have the following:

- Current permanent status as an IT Systems Specialist, Associate (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in information technology plus four (**4**) years of experience in Mainframe/Midrange design, maintenance, or support.

#### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10528 - Networking Option (400)**

This is full performance level work performing advanced applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain networking systems. Work involves specialization in computer networks. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have the following:

- Current permanent status as an IT Systems Specialist, Associate (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in information technology plus four (**4**) years of experience in computer network design, maintenance, or support.

**NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

**10528 - Database Option (401)**

This is full performance level work performing advanced applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain database systems. Work involves specialization in database systems. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have the following:

- Current permanent status as an IT Systems Specialist, Associate (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in information technology plus four (**4**) years of experience in Database design, maintenance, or support.

**NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

**10528 - Generalist Option (402)**

This is full performance level work performing advanced applied and developmental technical work in data systems design and maintenance. Employees in this class analyze, develop, design, modify, implement, and/or maintain local/wide area networks (LAN/WAN), operating systems, mainframe/midrange, and/or database systems. Work involves assignment as a generalist performing in multiple areas typically supporting complex IT systems. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have the following:

- Current permanent status as an IT Systems Specialist, Associate (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in information technology plus four (**4**) years of experience in two or more of the following areas:
  - Local/wide area network design, maintenance or support
  - Mainframe/Midrange design, maintenance or support
  - Database system design, maintenance, or support

**NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

## **IT SYSTEMS SPECIALIST, SENIOR – 10529**

**Salary Range:** \$69,098.40-\$105,403.20

This is supervisory, highly applied, and developmental technical level work for complex voice and data systems design that fulfills current and future client needs. Employees in this class are responsible for supervising a group of subordinate technical employees engaged in voice and data systems design and modification. Some employees may serve as a resource for technical expertise in a specialized area. Employees work with considerable independence, and work is reviewed for effectiveness of results and adherence to policy.

**Qualifications:** You **must** have **all** of the following:

- A four-year college degree with a minimum of five (5) courses in information technology.
- Eight (8) years of experience in design, maintenance, or support of database management, networking, mainframe, midrange, and/or telecommunications systems.

### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*



# SYSTEMS OPERATIONS JOBS

## IT OPERATIONS TECHNICIAN – 10421

**Salary Range:** \$25,821.60-\$43,339.20

This is entry through full performance operations support for data and voice communications equipment, mainframe and client server operations, and network operations. Employees in this class are responsible for monitoring and maintaining telecommunications equipment, mainframe and client server equipment, and computer network equipment. Work is assigned by more senior technicians or specialists, and assignments increase in complexity as employees gain experience. As employees progress, the need for direct supervision lessens, and they may be responsible for training less experienced technicians in voice and data operations.

### 10421 – Computer Option (449)

**Qualifications:** You **must** have **all** of the following:

- High school Diploma/GED Certificate.
- 6 months of experience working with computers in a business, organization, or government setting.

### NOTES:

- College/technical school credit in Information Technology above the minimum may be substituted for the required experience on a year-to-year basis (i.e., one year of education equals one year of experience). *Please refer to the job announcement on our website for more detail regarding substitution.*

## IT OPERATIONS SPECIALIST – 10422

**Salary Range:** \$31,488.00-\$50,119.20

This is highly specialized and lead supervisory operations support for data and voice communications equipment, mainframe and client server operations, and network operations. Employees in this class serve as lead operator responsible for monitoring, maintaining, and diagnosing problems with telecommunications, mainframe and client server equipment, and computer network equipment. Employees work under limited supervision serving as leader of a workgroup or shift and are responsible for assigning work, training less experienced technicians, maximizing production, and maintaining work schedules. Work is reviewed to check progress and conformance to established policies and requirements.

### 10422 – Computer Option (449)

**Qualifications:** You **must** have **all** of the following:

- High School diploma/GED.
- **Two years** of experience in computer operations including running, canceling, and monitoring jobs on a mainframe application system, modifying JCL, operating peripheral equipment, using a PC system to access mainframe applications and databases, and/or performing system IPLs.

### NOTES

- College/technical school credit in Information Technology above the minimum may be substituted for the required experience on a year-for-year basis (e.g., one year of education equals one year of experience).
- *Please refer to the job announcement on our website for more detail regarding substitution.*



# APPLICATIONS DEVELOPMENT AND DELIVERY

## **PROGRAMMER – 10515**

**Salary Range:** \$39,290.40-\$59,517.60

This is entry level through full performance computer programming work. Employees in this class are responsible for preparing, from predetermined program information and specifications, basic to complex computer programming applications, along with coding, testing, debugging, and documenting these applications.

**Qualifications:** You **must** have **all** of the following:

- High School/GED
- 1 year of college/technical school courses in an information technology program (at least **2 courses** must be in programming languages) plus 6 months of experience in computer programming utilizing high level languages to manipulate databases or files and produce outputs and reports.

### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis.
- *Please refer to the job announcement on our website for more detail regarding substitution.*

## **PROGRAMMER ANALYST, ASSOCIATE – 10516**

**Salary Range:** \$43,339.20-\$72,686.40

This classification has three options. Each is described separately, below.

### **10516 - General Option (003)**

This is beginning through mid-level professional programming and analysis work. Employees in this class are responsible for analyzing and evaluating existing applications and designing and developing new or enhanced applications to support end-user needs.

**Qualifications:** You **must** have **all** of the following:

- Two-year degree (AS/AA) from an accredited college or university in Computer Science, Math, Information Technology or a related field, including **2 courses** in programming
- Two (2) years of experience in computer programming utilizing high level languages to manipulate databases or files and produce outputs and reports

### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10516 – Quality Management Option (465)**

This is beginning through mid-level professional quality management verification and validation work. Employees in this class are responsible for designing test scripts and scenarios, analyzing and evaluating lifecycle work products against quality standards, and testing application software utilizing quality management testing tools in order to ensure requirements are satisfied, mimic production, age data, and perform other testing scenarios.

**Qualifications:** You **must** have **all** of the following:

- Two-year degree (AS/AA) from an accredited college or university in Computer Science, Math, Information Technology or a related field, including **2 courses** in programming
- Two (2) years of experience in Quality Management activities such as Quality Assurance, Quality Control, or Configuration Management utilizing Quality Management tools and techniques to analyze, verify, and validate software, and ensure programmatic changes will integrate with production

#### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10516 – Geographic Information Systems Option (484)**

This is beginning through mid-level professional geographic and geospatial programming and systems analysis work. Employees in this class are responsible for analyzing and evaluating existing GIS applications and designing and developing new or enhanced GIS applications to support end-user needs.

**Qualifications:** You **must** have **all** of the following:

- Two-year degree (AS/AA) from an accredited college or university in Geomatics, Geographic Information Systems, Geography, Computer Science, Math, Information Technology or a closely related field, including **2 courses** in programming
- Two (2) years of computer programming experience in **Geographic Information Systems (GIS)** utilizing high level languages to manipulate databases or files and produce outputs and reports.\*\*

#### **NOTES:**

- Additional education and/or experience above that which is minimally required, may be substituted on a year-for-year basis. *Please refer to the job announcement on our website for more detail regarding substitution.*
- \*\*Computer Aided Design (CAD) experience is not acceptable.

## **PROGRAMMER ANALYST – 10517**

**Salary Range:** \$55,327.20-\$84,276.00

This classification has three options. Each is described separately, below.

### **10517 - General Option (003)**

This is the full performance professional level for performing moderately to highly complex programming and systems analysis work. Employees in this class are responsible for independently analyzing and evaluating existing applications systems and designing and developing new or enhanced systems to support end-user needs. This differs from the lower level in that incumbents work on projects with integrated systems that impact multiple applications. Employees work directly with users to define systems requirements and needs and provide training and assistance on applications to both end-users and lower level Programmers, Programmer Analyst Associates, and other technical personnel. Supervision may be exercised over lower level IT personnel. Work at this level requires full proficiency in more than one programming language. Employees work under limited supervision and are held accountable for achieving objectives and performing work in an efficient manner.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst, Associate (for the promotional register only).
- Bachelor's degree from an accredited four-year college or university in Computer Science, Math, Information Technology or a related field, including **2 courses** in programming plus four (**4**) years of experience in computer programming utilizing high level languages to manipulate databases or files and produce outputs and reports, including two (**2**) years of experience in system analysis, defining system requirements, writing system specifications, and designing computer systems.

#### **NOTES:**

- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis (e.g., one year of experience equals one year of education). *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10517 – Quality Management Option (465)**

This is full performance professional level work performing moderately to highly complex quality management verification and validation work. Employees in this class are responsible for independently analyzing and evaluating changes to existing applications systems against quality standards in order to allow for integration into the production environment. This differs from the lower level in that incumbents work on projects with integrated systems that impact multiple applications. Supervision may be exercised over lower level IT personnel. Work at this level requires full proficiency in more than one testing tool.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst, Associate (for the promotional register only).
- Bachelor's degree from an accredited four-year college or university in Computer Science, Math, Information Technology or a related field, including **2 courses** in programming plus four (**4**) years of experience in Quality Management activities such as Quality Assurance, Quality Control, or Configuration Management utilizing Quality Management tools and techniques to analyze, verify, and validate software and ensure programmatic changes will integrate with production including two (**2**) years of experience in designing and executing complex test plans, cases, and scripts, designing and executing performance and load tests, analyzing applications for integration, and verifying lifecycle work products.

**NOTES:**

- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis (e.g., one year of experience equals one year of education). *Please refer to the job announcement on our website for more detail regarding substitution.*

**10517 – Geographic Information Systems Option (484)**

This is full performance professional level work performing moderately to highly complex geographic and geospatial programming and systems analysis work. This differs from the lower level in that incumbents work on projects with integrated systems that impact multiple applications. Supervision may be exercised over lower level IT/GIS personnel. Work at this level requires full proficiency in GIS software tools.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst, Associate (for the promotional register only).
- Bachelor's degree from an accredited four-year college or university in Geomatics, Geographic Information Systems, Geography, Computer Science, Math, Information Technology or a closely related field, including **2 courses** in programming, plus four (**4**) years of computer programming experience in **Geographic Information Systems (GIS)** utilizing high level languages to manipulate databases or files and produce outputs and reports including two (**2**) years of experience in **GIS** system analysis, defining system requirements, writing system specifications, and designing **GIS** computer systems.\*\*

**NOTES:**

- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis (e.g., one year of experience equals one year of education). *Please refer to the job announcement on our website for more detail regarding substitution.*
- \*\*Computer Aided Design (CAD) experience is not acceptable.

**PROGRAMMER ANALYST, SENIOR – 10518**

**Salary Range:** \$64,077.60-\$97,766.40

This classification has three options. Each is described separately, below.

**10518 - General Option (003)**

This is supervisory and highly technical professional level work performing complex programming and systems analysis. Employees in this class are responsible for supervising a group of subordinate Programmers, Programmer Analyst Associates, and Programmer Analysts engaged in systems application design and modification and managing the design, development, and implementation of applications systems integration solutions that span multiple environments. Some employees may serve as a technical expert in providing optimal technical recommendations and solutions in a particular application or area, originating new techniques, establishing criteria, or developing new information. Major policy and overall assignments are received from management; however, the employee exercises independent judgment in carrying out the work and is held responsible for achieving objectives.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst including the required experience below (for the promotional register only).



- A four-year degree from an accredited\* college or university with a minimum of **5 courses** in Information Technology (IT), two (**2**) of which must be programming courses plus six (**6**) years of experience in computer programming utilizing high level languages to manipulate databases or files and produce outputs and reports, including three (**3**) years of experience in system analysis, defining system requirements, writing system specifications, and designing computer systems.

#### NOTES

- College credit above the minimum may be substituted for the required general computer programming experience on a year-for-year basis (e.g., one year of education equals one year of experience) but **NOT** for the specialized analysis and design experience.
- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis.
- *Please refer to the job announcement on our website for more detail regarding substitution.*

#### **10518 – Quality Management Option (465)**

This is supervisory and highly technical professional level work performing complex quality management verification and validation work. Employees in this class are responsible for supervising a group of subordinate Programmers and Programmer Analysts engaged in defining quality standards, auditing processes, procedures, and products, systems application testing, and managing the design, development, and implementation of applications systems testing of modules that span multiple environments. Some employees may serve as a technical expert in providing optimal technical recommendations and solutions in a particular application or area, originating new techniques, establishing criteria, or developing new information.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst including the required experience below (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in Information Technology (IT), two (**2**) of which must be programming courses plus six (**6**) years of experience in Quality Management activities such as Quality Assurance, Quality Control, or Configuration Management utilizing Quality Management tools and techniques to analyze, verify, and validate software and ensure programmatic changes will integrate with production including three (**3**) years of experience in designing and executing complex test plans, cases, and scripts, designing and executing performance and load tests, analyzing applications for integration, verifying lifecycle work products, and auditing processes, procedures, and products.

#### NOTES

- College credit above the minimum may be substituted for the required general quality management analysis experience on a year-for-year basis (e.g., one year of education equals one year of experience) but **NOT** for the complex testing analysis experience.
- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis.
- *Please refer to the job announcement on our website for more detail regarding substitution.*

### **10518 – Geographic Information Systems Option (484)**

This is supervisory and highly technical professional level work performing highly complex geographic and geospatial programming and systems analysis work. Employees in this class are responsible for supervising a group of subordinate IT/GIS personnel engaged in systems application design and modification and managing the design, development, and implementation of applications systems integration solutions that span multiple environments. Work at this level requires full proficiency in GIS software tools and supervisory skills.

**Qualifications:** You **must** have **all** of the following:

- Current permanent Merit system status as a Programmer Analyst including the required experience below (for the promotional register only).
- A four-year degree from an accredited college or university with a minimum of **5 courses** in Geographic Information Systems (GIS) or Information Technology (IT), two (**2**) of which must be programming courses plus six (**6**) years of computer programming experience in **Geographic Information Systems (GIS)** utilizing high level languages to manipulate databases or files and produce outputs and reports including three (**3**) years of experience in **GIS** system analysis, defining system requirements, writing system specifications, and designing **GIS** computer systems.\*\*

### **NOTES**

- College credit above the minimum may be substituted for the required general computer programming experience on a year-for-year basis (e.g., one year of education equals one year of experience) but **NOT** for the specialized analysis and design experience.
- Additional experience above the minimum may be substituted for the required degree on a year-for-year basis.
- *Please refer to the job announcement on our website for more detail regarding substitution.*
- \*\*Computer Aided Design (CAD) experience is not acceptable.



# IT MANAGEMENT

## IT MANAGER I – 10586

**Salary Range:** \$69,098.40-\$105,403.20

This is highly responsible administrative and managerial work in either directing IT operations for an agency with a standard IT operations environment or participating in the direction of a larger, highly complex IT operation by managing a functional area. Employees in this class direct a full range of IT services for departments with standard IT operations. In agencies with the most complex IT operations, employees may manage a functional area. Work at this level is found in agencies with sufficient management responsibilities in the IT function to support a full time management position and is differentiated from the senior technical roles in that focus is on broad management issues including supervising staff, planning, organizing, and integrating functions in a centralized agency. Emphasis is on providing optimal IT systems and services within budgetary constraints to support the business needs of the agency. Employees in this class serve as a key member of management reporting directly to a higher IT Manager, agency director or higher level administrative superior.

**Qualifications:** You **must** have **all** of the following:

- Current permanent status as a Programmer Analyst, Senior; IT Systems Specialist; or IT Project Manager (for the promotional register only)
- A four-year college degree from an accredited college or university
- Eight (8) years of experience at a senior level in information technology, at least two (2) years of which must be supervisory experience to include conducting performance appraisals

### **NOTE**

- A Master's degree in Information Technology may be substituted for one year of the required general experience in information technology, but **NOT** for the supervisory experience.

## **IT MANAGER II – 10587**

**Salary Range:** \$74,479.20 - \$113,479.20

This is highly responsible administrative and management work in directing IT operations for an agency having a moderately complex IT operation environment. Employees in this class direct a full range of IT services for departments with moderately complex operations. Work at this level is impacted by a wide variety of factors such as complex applications; multiple platforms; interaction and joint projects between different functional areas and vendors; number of users; remote locations; and supervision of a large staff of technical support, operations, and/or applications and delivery personnel. Emphasis is on providing optimal IT systems and services within budgetary constraints to support the business needs of the agency. Employees in this class serve as key members of management reporting to an IT Manager III, agency head or higher level administrative superior.

**Qualifications:** You **must** have **all** of the following:

- Current permanent status as an IT Systems Specialist, Senior or IT Manager I (for the promotional register only)
- Bachelors degree from an accredited college or university in any field and 10 years of senior level IT experience to include **four** of the following: project management, developing policies and procedures, managing an IT group or function, preparing budgets, strategic IT planning and/or contract or vendor negotiations. Experience must include at least 5 years of **full-time** supervision to include hiring/terminating personnel, conducting performance appraisals, assigning work/projects, and employee counseling.

**OR**

- Bachelors degree from an accredited college or university in IT or a related field and 9 years of senior level IT experience to include **four** of the following: project management, developing policies and procedures, managing an IT group or function, preparing budgets, strategic IT planning and/or contract or vendor negotiations. Experience must include at least 5 years of **full-time** supervision to include hiring/terminating personnel, conducting performance appraisals, assigning work/projects, and employee counseling.