

**DEPARTMENT:** ALL APPLICABLE  
**CLASSIFICATION:** COMPETITIVE  
**APPROVED:** OCTOBER 16, 2017

### COMPUTER PROGRAMMER

**DISTINGUISHING FEATURES OF THE CLASS:** The work involves responsibility for creating and/or modifying computer programs. The incumbent analyzes business processes and projects proposed for computerization, and designs, modifies, tests, implements, maintains and documents appropriate software applications. The incumbent researches reported problems, plans and proposes a solution, coordinates the problem solving process, selects the best solution, tests the proposed solution, and ensures that the agency's standards and requirements are met. The incumbent may work with more than one modern operating system and with more than one modern programming language including object-oriented/event-driven programming languages. A Computer Programmer operates a micro-computer and related peripheral equipment for production work on a regular basis, and may develop, implement, and conduct ongoing data processing training. The work is performed under the direct supervision of a higher-level administrator with considerable leeway allowed for the use of independent judgment in carrying out the details of the work. Does related work as required.

#### **TYPICAL WORK ACTIVITIES:**

1. Meets with employees and department heads and analyzes business processes and projects proposed for computerization, defines end user requirements, develops process logic and flowcharts, and determines the appropriate programming solution;
2. Develops the logic of a computer program based on program specifications, flowcharts and other documentation;
3. Writes program instructions (code) in a specific programming language;
4. Prepares sample test data and debugging the program code;
5. Tests the program within the overall system with sample and actual data and makes modifications and revisions to software programs to ensure accuracy and compliance with end-user needs;
6. Develops program and user documentation and operator instructions;
7. Developing software that operates on multiple platforms (midrange processors, server processors, PCs, web, laptops, Personal Data Assistants (PDAs), etc.) as needed;
8. Develops reports, prepares data for export, establishes procedures for importing of data;
9. Analyzes communications requirements with other software;
10. Prepares data for display on the other media (Internet, Intranet, PDAs, laptops, etc.);
11. Troubleshoots with application software vendors for user/system problem resolution;
12. Operates a micro-computer and peripheral equipment for production work;
13. May perform data processing needs assessments and develops and performs staff training on data processing software applications;
14. Trains others on the use of new and/or revised programs, customizations, and software;
15. Prepares, revises, modifies and updates existing software systems according to agency needs ;
16. Creates and assists end-users with the creation of functional procedure manuals and writes process documentation for system customizations as applicable;
17. Diagnoses and resolves software applications problems;
18. Creates and maintains a variety of records and reports related to activities;
19. Attends training and other conferences related to information technology needs.

#### **FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of modern programming languages including object-oriented/event-driven languages; thorough knowledge of the principles and practices of analyzing business processes and designing and developing computer programs; good knowledge of computer software related to storing, manipulating and reporting on accounting and statistical data; good knowledge of personal computer hardware, software and peripheral equipment; ability to create and modify computer programs; ability to perform business process analysis and design and develop object-oriented computer programs; ability to train others in the use of computer software; ability to understand and interpret complex oral instructions and written directions; ability to establish and maintain effective working relationships with others; ability to perform close, detail work involving considerable visual effort and concentration; ability to communicate effectively both orally and in writing; sound judgment; integrity; tact; courtesy; physical condition commensurate with the demands of the position.

#### **MINIMUM QUALIFICATIONS:**

#### **PROMOTIONAL FOR NIAGARA COUNTY:**

Two (2) years of permanent competitive status as a Micro Computer Coordinator or a Micro Computer Specialist immediately preceding the date of the written test and must meet the open competitive qualifications.

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## **COMPUTER PROGRAMMER CONTINUED**

**OPEN-COMPETITIVE:** Graduation from a high school or possession of an equivalency diploma **AND**

1. Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's degree in computer programming, computer science, computer information services, or closely related field **and** two (2) years of full-time paid experience which involved demonstrated responsibility for the design and development of computer programs in a 4GL programming language (ex. PL/SQL, SQR, Visual Basic or other object-oriented/event-driven language), business process analysis, technical documentation creation, and operation of micro-computers and peripherals; **OR**
2. Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an Associate's degree in computer programming, computer science, computer information services, or closely related field **and** four (4) years of full-time paid experience which involved demonstrated responsibility for the design and development of computer programs in a 4GL programming language (ex. PL/SQL, SQR, Visual Basic or other object-oriented/event-driven language), business process analysis, technical documentation creation, and operation of micro-computers and peripherals.

**SPECIAL REQUIREMENT:** Successful completion of a background check is required for employment at the Niagara County Sheriff's Office.