Programmer

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
PROGRAMMER I	0241	B20	$48,158 - $77,477
PROGRAMMER II	0242	B22	$54,614 - $88,703
PROGRAMMER III	0243	B24	$62,004 -$101,556
PROGRAMMER IV	0244	B26	$72,886 - $123,267
PROGRAMMER V	0245	B28	$88,191 - $149,155
PROGRAMMER VI	0246	B29	$97,010 - $164,069

GENERAL DESCRIPTION

Performs computer programming work involving analyzing system specifications to develop software for computer applications; developing solution software; documenting the methods and procedures used in software development; and testing, correcting, and revising software.

EXAMPLES OF WORK PERFORMED

Analyzes users' needs; designs, tests, and develops software to meet those needs.

Develops routine code and debugs software.

Analyzes proposed applications for equipment requirements and capabilities.

Analyzes, reviews, and revises software to increase operating efficiency or to adapt to new procedures.

Compiles and documents procedures used throughout software development and revision.

Prepares detailed workflow charts and diagrams that describe input, output, and logical operation and converts them into a series of instructions coded in a programming language.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level VI may also perform work listed within the previous levels.

Note: *Factors that may distinguish between journey levels include the degree of independence in performing the work and the complexity of the work and may include the years of related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.*

PROGRAMMER I: Performs routine to moderately complex (journey-level) computer programming work. Works under general supervision, with limited latitude for the use of initiative

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and independent judgment. Employees at this level may rely on direction from others to solve problems that are not standard. Employees may also assist other staff in performing work of greater complexity.

PROGRAMMER II: Performs complex (journey-level) computer programming work. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous levels and may routinely assist other staff in performing work of greater complexity. Employees may:
- Write routine to complex software code, and debug software.
- Prepare detailed analyses, plans, diagrams, and verification procedures for existing and proposed applications.
- Prepare and execute software test plans.
- Perform research and analysis required for project proposals, software and systems modifications, and new projects.

Note: A senior-level employee (levels III-VI) may serve in a lead or supervisory role; however, supervisory responsibilities within this job classification series will normally be found at the V and VI levels.

A senior-level employee may perform the full range of work identified in the preceding levels and may coordinate, evaluate, or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the size and complexity of programming projects, and the employee's related experience, education, and certifications.

PROGRAMMER III: Performs highly complex (senior-level) computer programming work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:
- Write complex software code and debug software.
- Coordinate and/or perform work on programming projects, including those that are highly complex in nature and/or large in scale.
- Coordinate and/or write test plans and test data.
- Develop instructions or manuals for end users.

PROGRAMMER IV: Performs advanced (senior-level) computer programming work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may fully perform highly complex programming work and may coordinate and/or perform highly complex coding, testing, and debugging of applications, as outlined by system requirements.

PROGRAMMER V: Performs highly advanced (senior-level) computer programming work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may independently perform the most complex programming work and may review and evaluate programming efforts in relation to system requirements.

PROGRAMMER VI: Performs highly advanced and/or supervisory (senior-level) computer programming work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may be considered technical experts in the field and may:

- Develop standards and procedures for programming staff and ensure that work is completed in a timely and efficient manner and is consistent with defined policies and procedures.
- Manage multiple projects occasionally, and/or some of the most complex programming projects involving highly complex design, development, and implementation of software programs and applications.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience and/or education in a field relevant to the work being performed. Agencies have the discretion to identify the general or specialized experience, education, or certifications required for positions and may tailor qualification requirements to be specific and meet the agency's business needs. Agencies also may substitute experience and education for one another, if appropriate and allowed by statute.

KNOWLEDGE, SKILLS, AND ABILITIES

For all levels

- Knowledge of the principles, practices, and techniques of programming and systems analysis; computer operations procedures and systems; and computer programming languages.

- Skill in problem solving, in critical thinking, in computer programming, in the use of hardware and software, and in modifying or developing software for applications.

- Ability to process information logically; to design programs and systems logic; to prepare program specifications; to code, test, and debug software; to interpret technical information related to programming and other areas of data processing; and to communicate effectively.

Additional for Programmer III - VI levels

- Ability to oversee and/or supervise the work of others.