

APPLICATIONS PROGRAMMER SERIES

<u>Code No.</u>	<u>Class Title</u>	<u>Occ. Area</u>	<u>Work Area</u>	<u>Prob. Period</u>	<u>Effective Date</u>
0116(3118)	Applications Programmer I	02	735	6 mo.	10/12/01
0117(3118)	Applications Programmer II	02	735	6 mo.	10/12/01
0103(3118)	Applications Programmer III	02	735	6 mo.	10/12/01
0104(0099)	Applications Analyst	02	735	12 mos.	10/12/01
0105(0113)	Senior Applications Analyst	02	735	12 mos.	10/12/01

Promotional Line: 197

Series Narrative

Employees in this series perform computer programming, systems analysis and design, and determine the methods used in the application of computers to meet user needs.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Applications Programmer I **0116(3118)**

Employees at this level perform computer programming and other related data processing applications. They work under direct supervision from a designated supervisor.

An Applications Programmer I typically –

1. learns systems analysis, design, and implementation
2. assists in preparing systems flow charts and/or block diagrams
3. revises forms
4. codes programs from predefined instructions
5. learns and/or writes programs in applicable programming languages
6. tests and performs problem resolution on computer programs in accordance with established procedures and specifications
7. assists in the preparation of documentation
8. performs other related duties as assigned

Level II: Applications Programmer II **0117(3118)**

Employees at this level perform systems analysis and assist in devising systems and computer applications. They work under general supervision from a designated supervisor.

An Applications Programmer II typically –

1. performs systems analysis design and implementation
2. prepares flow charts to describe existing and proposed operations
3. writes, tests, and performs problem resolution on comprehensive computer programs in accordance with established procedures and specifications
4. may consult directly with operating departments regarding data processing applications and problems
5. assists in the preparation of documentation
6. assists in the system and technical training of staff
7. revises and designs forms
8. performs other related duties as assigned

Level III: Applications Programmer III

0103(3118)

Employees at this level are responsible for determining methods of use of computers and related auxiliary equipment in data processing applications. They work under general supervision from higher-level personnel.

An Applications Programmer III typically –

1. consults with and advises users concerning specific data processing procedures available and feasibility of using information processing equipment
2. consults with higher level data processing analysis personnel to determine specific detailed programming procedures and instructions for converting specific problems to a logical sequence of machine operations
3. analyzes, modifies, and revises established procedures to incorporate changes in user needs and to maintain efficiency in data processing procedures
4. writes, tests, and performs problem resolution on comprehensive computer programs and systems in accordance with established procedures and specifications
5. develops and applies cross-checks and other types of testing methods to assure accuracy in data processing operations
6. performs comprehensive studies and analysis of data processing functions, methods, and procedures and makes recommendations concerning the feasibility of revising existing operations or adapting new applications for data processing solutions
7. provides problem definitions and assignments and coordinates the activities of personnel engaged in the design, preparation, and revision of computer programs and data processing operations

8. assists in the instruction, training, and advising of personnel in computer usage techniques, machines operation, and related data processing applications
9. performs other related duties as assigned

Level IV: Applications Analyst**0104(0099)**

Employees at this level are responsible for analyzing complex problems for information processing machine solutions and assist in coordinating information processing system activities in related applications of computers and auxiliary equipment. They work under administrative supervision from higher-level personnel.

An Applications Analyst typically –

1. consults with and advises users concerning major, complex problem areas of data processing applications and systems in integrated data processing applications
2. performs comprehensive studies and analysis of related user needs and objectives in data processing applications
3. prepares, defines, modifies, and designs information processing system definitions and operational flow charts and procedures
4. coordinates the analysis, procedures programming, and operational functions in adapting, converting, or developing computer and auxiliary equipment operations for specific operational areas of related data processing applications
5. consults with analysts and user representatives to develop solutions to existing or prospective complex data processing applications
6. conceives, writes, modifies, and maintains applications programs to carry out monitoring, assembly, and compiling functions on a computer systems
7. develops and applies cross-checks and audit procedures to assure accuracy and reliable practices in information processing system operations
8. instructs, trains, and advises personnel in computer usage techniques and subject-matter principles and/or practices
9. may lead/supervise processing problem solving team
10. evaluates uses and/or limitations of new information processing equipment
11. performs other related duties as assigned

Level V: Senior Applications Analyst**0105(0113)**

Employees at this level direct, plan, coordinate and are responsible for information processing systems analysis and applications of computers and auxiliary equipment in a computer complex. They work under administrative supervision from higher level personnel.

A Senior Applications Analyst typically –

1. consults with and advises users and prospective users concerning information processing systems availability and applicability to proposed problems and coordinates the activities of staff on user problems
2. makes recommendations and provides justification for new information processing software and/or equipment
3. determines ways and means by which automation can be economically effected or existing information processing systems may be improved
4. conducts and assists in directing and coordinating comprehensive studies of inter- and intradepartmental, functions, schedules, and operations
5. determines real-time needs and feasibility of user's data processing schedules in order to coordinate information processing systems
6. makes recommendations and proposes solutions for annual goals and objectives of data processing systems in order to effect overall efficiency
7. conceives, develops, and makes recommendations for new or revised methods, procedures, and techniques to meet the overall goals and solve problems of information processing systems
8. supervises, directs, and analyzes the activities, procedures, and operational functions of staff engaged in data processing activities in a computer complex in order to assure accuracy and efficiency in information processing operations
9. assists in problem definitions and assigns specific phases of new information processing systems to the appropriate operational sections and/or systems personnel
10. plans, conducts, and supervises technical training programs and subject-matter seminars on appropriate areas of data processing
11. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:**Level I: Applications Programmer I****0116(3118)**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) High school graduation or equivalent **AND** 2 years of experience in computer science, information systems, data processing practices or operations, management science or a related field

or
- (B) Associate's degree in a field related to computer science, information systems, data processing systems or management sciences

or
- (C) Any combination of education and experience in computer science, information systems, data processing practices or operations or a related field totaling two years

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. Aptitude for programming

Level II: Applications Programmer II

0117(3118)

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. High school graduation or equivalent
2. (A) 90 semester hours, 15 of which are in a field related to computer science, information systems, data processing practices or operations, management sciences or a related field

or
- (B) Any combination of education and experience totaling three years and consisting of no less than one year of experience in data processing programming and systems analyst work

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. Knowledge of data processing practices, methods, principles, and techniques
2. Ability to work on all phases of systems analysis with only general direction
3. Ability to understand, develop, communicate, and express ideas
4. Aptitude for programming

Level III: Applications Programmer III

0103(3118)

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. High school graduation or equivalent
2. (A) Bachelor's degree with a major in computer science, information systems, or data processing or a major in a closely related field that included 30 semester hours of credit in computer-related courses

or
- (B) Four years of experience in computer programming, analysis, or applications software systems development/design that included one year of applications software systems development/design

or
- (C) Any combination of education and experience that totals four years and included one year of experience and/or training in applications software systems development/design¹

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. Knowledge of data processing practices, methods, principles and techniques relative to the application and operation of a computer complex
2. Ability to plan, schedule, and coordinate chronological operations and to reason logically regarding operational aspects of data processing applications and functions of a computer complex
3. Ability to understand, develop, communicate, and express ideas
4. Ability to express or translate technical machine functions of data processing systems operations into non-technical terms and vice versa

Level IV: Applications Analyst

0104(0099)

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. High school graduation or equivalent
2. (A) Master's degree in computer science, information systems, data processing practices or operations or a related field

or

¹ Credit for course work in applications software systems development/design or closely related subjects shall be evaluated on the basis of one semester hour of credit being equal to one month of experience.

(B) Two years of work experience comparable to that gained as an Applications Programmer III

or

(C) Any combination of education and experience that totals two years

3. Two years of work experience comparable to that gained as an Applications Programmer III, **in addition** to the preparation required in #2 above

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. Knowledge of data processing practices, methods, principles, and techniques relative to the application and operation of a computer complex
2. Skill in planning, scheduling, and coordinating chronological operations and in reasoning logically regarding operational aspects of data processing applications and functions of a computer complex
3. Skill in understanding, developing, communicating, and expressing ideas
4. Skill in expressing or translating technical machine functions of data processing systems operations into non-technical terms and vice versa
5. Skill in supervising and training others

Level V: Senior Applications Analyst

0105(0113)

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Possession of credential requirements listed for the Applications Analyst
2. Two years of work experience comparable to that gained as an Applications Analyst

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. Thorough knowledge of data practices, methods, principles, and techniques used in the applications and operation of a computer complex
2. Skill in two or more major areas of data processing applications in order to conceive, modify, plan, and develop data processing systems for a computer complex for both applications and new areas of application
3. Skill in understanding, developing, communicating, and expressing ideas
4. Skill in conversing fluently in non-technical terms and in presenting data processing equipment applications to users

5. Skill in supervising and training others

Applications Programmer IChange-in-Title from Management Analyst-Programmer II; Revised
Applications Programmer II Change-in-Title from Management Analyst-Programmer III; Revised
Applications Programmer III.....Change-in-Title from Data Processing Analyst I; Revised
Applications Analyst.....Change-in-Title from Data Processing Analyst II; Revised
Senior Applications Analyst..... Change-in-Title from Data Processing Analyst III; Revised