

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 1867

TITLE: PROGRAMMER ANALYST III

GRADE: S-28

DEFINITION:

Under general supervision, performs complex development, configuration, and maintenance programming work such as defining, designing, developing, testing, maintaining and modifying applications or COTS solutions on a platform that is instrumental to business operations in order to support and meet information and automation needs of users; performs a variety of complex analytical and programming tasks to deliver, enhance, and maintain software of material complexity on underlying technologies which include mainframe, client-server, services-oriented, database, or web-based environments; researches the use of new methods and technologies; works on multiple project requests; evaluates user requests to determine feasibility and to estimate resource requirements; plans and organizes complex projects, ensures connectivity for complex systems that typically have multiple, layered interfaces; performs *advanced* systems analysis tasks and proposes solution designs; assists less experienced programmer/analysts in complex or large-scale assignments; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

This is advanced programming and journey level systems analysis work. The Programmer Analyst III class is distinguished from the PA II class in that the Programmer Analyst III performs complex programming and analysis work such as determining system requirements, proposing solutions, and designing new systems or complex modifications whereas the Programmer Analyst II performs full-performance level work such as writing and reviewing program coding and testing.

The Programmer Analyst III class is distinguished from the Programmer Analyst IV in that the Programmer Analyst III performs complex programming and analysis work whereas the Programmer Analyst IV serves as the advanced technical expert for multiple systems and/or agencies or performs supervisory duties over two or more IT subordinates.

ILLUSTRATIVE DUTIES:

Serves as lead programmer for complex technology solutions;
Defines, designs, and delivers technically advanced code and objects for applications;
Writes, reviews, and deploys scripts, services, system interfaces, and integration logic;
Plans, packages, and implements complex programs, routines, jobs, and utilities;
Implements software in conformance with defined change / release control procedures;
Follows system lifecycle standards and development procedures;
Maintains and documents moderate to complex computer programs and/or application software;
Develops advanced test scripts and data; tests, evaluates, and debugs software systems;
Configures and/or provides administration of COTS applications and related databases;
Defines and designs inputs, outputs, work flows, error handling, and complex functional logic;
Monitors and evaluates efficiency/effectiveness of applications and underlying data structures;
Suggests design and solution options when user enhancements are not feasible as requested;
Seeks and identifies opportunities for new technology or system enhancements;
Interacts with customer agency in scoping requirements, evaluating feasibility and priority;
Confers with users to define requirements and validate conformance to acceptance criteria;

Interfaces with users to provide technical assistance, diagnose and resolve software problems;
Translates user requirements and interprets specifications of advanced complexity;
Defines tasks, estimates resource needs, and organizes work for assigned projects;
Prepares requests for programming, and recommends staff assignments;
Produces or contributes to advanced designs, specifications, and deliverables;
Prepares or delivers training, user manuals, and documentation for assigned projects;
Oversees tasks assigned to subordinate clerical, technical, contractor, or project team staff;
Supports a 24 x 7 environment, responding to emergencies and critical system failures;
Assists in detecting, analyzing, and resolving non-routine application-related problems;
Presents ideas and concepts to an audience and participates effectively in workgroup activities;
Proactively engages and works with relevant functional areas in DIT in accomplishing work;
Evaluates new tools and methodologies for software development effectiveness and applicability;
Assists in the development of requests for proposals and in the evaluation of responses;
Monitors contract performance and writes technical reports;
Assists in definition and adoption of new standards as needed;
Provides mentoring, assistance, training, and guidance to less experienced programmers;
Lends assistance and support to other staff as needed; and
May require support beyond normal work days to instrumental business operations or systems that require 24x7 support;
Performs other duties as assigned.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Considerable knowledge of position-relevant computer languages and technologies;
Considerable knowledge of programming principles, operating systems, and hardware;
Considerable knowledge of system development life cycle concepts and activities;
Considerable knowledge of modern information processing techniques and systems analysis;
Considerable knowledge of the capabilities and operating requirements of various platforms;
Considerable knowledge of centralized, distributed, client server, and Web architectures;
Considerable knowledge of computer / database programming process and related practices;
Considerable knowledge of conceptual and logical data, work flow, and process modeling;
Considerable knowledge of report design and procedural report writing;
Skill in defining and supervising the work of others in a project lead capacity;
Skill in finding and presenting a range of options to resolve complex problems;
Skill in writing advanced programs and debriefing changes made;
Skill in designing and developing complex applications and components;
Skill in performing unit testing and the related debugging of computer errors;
Ability to establish and maintain effective business relationships;
Ability to work independently, serves as a team lead, or add value as a team contributor;
Ability to elicit requirements from stakeholders to support development of specifications;
Ability to perform research and find relevant materials to assist in project tasks and assignments;
Ability to seek root cause(s) and appropriate solution(s) for resolving complex issues;
Ability to plan, to organize, and to conduct systems analysis and feasibility assessments;
Ability to evaluate processes/procedures, to suggest improvements, and to design specifications;
Ability to document necessary system modifications and enhancements to defined standard(s);
Ability to assist users in troubleshooting and solving systems and programming problems;

Ability to translate technical terminology into simple, non-technical language;
Ability to provide guidance and assistance to technical employees and review their work;
Ability to train less skilled technical workers and to plan, assign, and review their work;
Ability to prepare clear, detailed programs of instruction for efficient system utilization;
Ability to ask relevant questions to assure understanding of assignments and requirements;
Ability to write easy to follow systems documentation tailored to the end user audience.

EMPLOYMENT STANDARDS:

Any combination of education, experience and training equivalent to the following:
Graduation from an accredited four-year college or university with a degree in Information Systems, Computer Technology, Business, Economics, or related field, PLUS
Three years programming/analysis experience in a complex information systems environment.

CERTIFICATES AND LICENSES REQUIRED:

None.

NECESSARY SPECIAL REQUIRMENTS:

Must successfully complete a criminal background investigation prior to appointment and be re-certifiable throughout employment tenure;
Some positions identified by departments must execute IT Employee Agreement acknowledging obligations under information security and privacy requirements in light of broad access to systems and data in the performance of job duties.

UPDATED:	July 30, 2007
REGRADED:	July 8, 2006
ESTABLISHED:	May 24, 1999