

## SYSTEMS AND PROGRAMMING MANAGER

### DEFINITION

Plans, schedules, coordinates, directs, and reviews the work of staff engaged in systems analysis, design, programming development, integration, documentation, testing and training, business data warehousing, and portal design and development.

### TYPICAL DUTIES

- Directs, through unit supervisors, project teams engaged in analyzing, designing, implementing, modifying, and maintaining information systems, portals, and a District-wide data warehouse.
- Defines the scope of projects, coordinates project schedules, and monitors performance.
- Prepares oral and written status reports on assigned projects.
- Reviews the analysis and testing of systems and programs to insure completeness of controls, adherence to project plans and requirements, completion of documentation, quality of output, and efficiency of systems and programs.
- Evaluates and makes recommendations on proposals submitted by consultants, service organizations, component suppliers, and equipment manufacturers; confers with representatives of such organizations regarding research and development on new information systems.
- Reviews feasibility studies conducted by the staff and evaluates recommendations regarding operating advantages and cost savings of installing proposed new systems or of converting or modifying existing systems.
- Coordinates and participates in training programs for information systems employees and users.
- Plans organization and staffing of assigned units and assigns projects.
- Develops and revises procedures and standards for systems documentation.
- Assists the Chief Information Officer in providing liaison in information technology matters with State and Federal agencies; advises District and college administrators regarding operational problems, limitations, and potential applications of information systems.
- Meets with non-technical staff to assess their computer support requirements and recommends the appropriate technology solution(s).
- Adapts packaged software to District requirements.
- Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS

A **Systems and Programming Manager** is responsible for managing the work of staff engaged in systems analysis, design, programming development, integration, documentation, testing and training, business data warehousing, and portal design and development.

## DISTINGUISHING CHARACTERISTICS (Cont.)

A **Chief Information Officer** is responsible for administering a program of information systems to support the instructional, student information, human resources, and financial management operations of the District.

A **Supervising Systems and Programming Analyst** is responsible for supervising the work of a small group of programming staff, provides liaison with operating units affected by studies, and personally performs the most difficult systems analysis, design, and programming work of the unit.

A **Software Systems Engineering Manager** is responsible for managing the work of technical staff engaged in analyzing, installing, customizing, optimizing, troubleshooting, and monitoring large scale, complex application and system software for the District.

## SUPERVISION

General supervision is received from the Chief Information Officer. General supervision is exercised over supervisory and technical staff on a project by project basis.

## CLASS QUALIFICATIONS

### Knowledge of:

- Information technology concepts and capabilities
- Techniques of systems analysis, design, and programming
- Programming languages such as ABAP, C, C++, Visual Basic, Java, COBOL, ACMS, Visual Basic for Application (VBA), etc.
- Script languages such as Vbscript, Javascript, Jscript and PERL, etc.
- Reporting tools such as MS Access, Crystal Reports, webFOCUS, etc.
- Database systems such as Rdb, Oracle, Access, SQL Server, etc.
- Enterprise Resource Planning (ERP) systems such as SAP, Peoplesoft, Oracle, etc.
- Capabilities of mainframes, application, database, and web servers, and other equipment
- Web page design and development using tools such as SAP Portals, .ASP, Dreamweaver, etc.
- Concepts and techniques of project management including project control, planning, estimating, resource management, and quality assurance
- Principles, procedures, and methods used in data acquisition, storage, structuring, and retrieval
- New developments in computer concepts, methodology, and technology
- Business procedures and methods
- Procedures and standards for systems documentation
- Principles of organization, management, and work simplification
- Principles of supervision and training

Ability to:

- Plan, coordinate, and review the work of assigned technical units
- Direct and coordinate multiple projects of a complex and technical nature
- Train staff in the application of new information technology concepts
- Apply new developments in computer methodology and technology and solve difficult technical problems in the development of major programs and information systems
- Estimate time and manpower requirements for a variety of information systems projects
- Analyze and interpret complex technical concepts and communicate them clearly both orally and in writing
- Prepare effective written and oral communications, reports, and presentations
- Create clear guidelines and procedures
- Anticipate conditions, plan ahead, establish priorities, and meet project schedules
- Review and evaluate detailed project management plans and project progress
- Review and evaluate project deliverables
- Motivate, direct, and develop others
- Stimulate teamwork and promote cohesiveness to achieve team and project goals
- Establish and maintain effective and cooperative working relationships with administrators, staff, project consultants, and vendors

ENTRANCE QUALIFICATIONS

Education and Experience:

Graduation from a recognized four-year college or university, preferably with a degree in management information systems, computer science, computer engineering, business administration, public administration, or related field.

**AND**

Four years of recent full-time paid experience in business applications analysis, design, and programming for medium or large scale multi-programmed computers, including experience with large-scale networks. Two years of the required experience must have been in a supervisory capacity. Experience with an Enterprise Resource Planning (ERP) system is desirable.

Special:

A valid California Class "C" driver's license must be obtained within 60 days of appointment. Access to an automobile.