

# MONTEREY COUNTY OFFICE OF EDUCATION

## INFORMATION SYSTEMS SPECIALIST II

**Classification:** Classified

**Salary Level:** 46.5

### **DEFINITION:**

The Information Systems Specialist II is responsible for providing intermediate to advanced technical support in the development, design, documentation, maintenance, evaluation, and support of software systems. This position will perform systems analysis to determine system requirements; design and implement appropriate database and software solutions; maintain documentation of all software development efforts; provide technical support to MCOE and district staff for computer software applications; act as a liaison with software and other vendors to resolve general operation problems; assist and instruct staff in utilizing computer application resources; maintain records in the assigned helpdesk system; provide technical leadership to junior programmers and perform related duties as required.

### **SUPERVISOR:**

Manager of Software Systems

### **POSITION(S) SUPERVISED:**

None

### **QUALIFICATION REQUIREMENTS:**

To perform a job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed in the job description are representative (not an exhaustive list) of the knowledge, skills and/or abilities required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties of the position.

### **DISTINGUISHING CHARACTERISTICS:**

Positions in this classification are distinguished from Information Systems Specialist I by the level of expertise required in software development. This position has application design and project management responsibilities not required of the junior position. Positions in this classification are also distinguished from Systems Analyst by the level of software development expertise required. This position requires a lesser degree of user need analysis, systems architecture work, technical team oversight, and only minimal skills regarding database maintenance and optimization.

### **ESSENTIAL DUTIES:**

The following is a list of duties that is representative of the position that includes but is not limited to:

- Performs intermediate to advanced SQL and other relational database development and management
- Designs, develops, and modifies complex object oriented web applications using Visual Studio and other development tools
- Creates xml data files from various data sources according to vendor specifications
- Builds custom bridges between multiple systems and integrates complex data
- Performs advanced website configuration and administration on IIS and other web servers

- Develop solutions to user-related problems and applications systems
- Provides project management services and reporting for projects within their purview
- Creates complex data reports, and automates file transfers and data conversions for various systems, data sources, and state reporting
- Organizes and prepares application software documentation, procedural documentation, and operation instructions
- Provide leadership and guidance to Information Systems Specialist I and other staff as needed
- Designs the data and presentation of applications based on user needs
- Performs analysis, evaluation and implementation of student information, business, and similar systems
- Reviews and evaluates software and make recommendations in support of MCOE initiatives
- Reviews and evaluates procedures, schedules and systems controls; designs and implements security for applications
- Assists with the performance of normalization, performance tuning, and maintenance for SQL Server
- Interfaces with software and hardware vender personnel to resolve technical issues
- Assists with the design and implementation of training programs of MCOE and district staff, students and parents in the proper use of software systems
- Attends various web-based and other training sessions as required
- Represents office at technical conferences
- Performs other related duties as required

## **PHYSICAL AND MENTAL CHARACTERISTICS**

Physical, mental and emotional stamina to perform the duties and responsibilities of the position; manual dexterity sufficient to write, use the telephone and business machines; vision sufficient to read printed materials; hearing sufficient to conduct in-person and telephone conversations; speaking ability in an understandable voice with sufficient volume to be heard at normal conversational distance or on the telephone; physical mobility sufficient to move about the work environment (office and location) and drive an automobile; physical strength to lift a minimum of 40 pounds; physical stamina sufficient to sit for prolonged periods of time; mental acuity to collect and interpret data, evaluate, reason and define problems, establish facts, draw valid conclusions, make valid judgments and decisions.

## **REQUIRED QUALIFICATIONS:**

### **Education and Experience:**

Associate degree in computer science or related field, and six years of computer software application development experience, or any equivalent combination of education and experience.

### **KNOWLEDGE OF:**

- SQL development practices including joins, temporary tables, triggers, and cursors
- Visual Studio programming including loops, data binding, object oriented development, Active Directory integration and ASP website design
- XML data import and data file creation from various data sources according to vendor specifications
- SQL server administration, normalization, and performance tuning
- The setup, configuration, maintenance, troubleshooting of websites on IIS and other web servers.
- Web services and web-based application development
- Client/Server and N-Tier application development and deployment
- Process flow analysis and mapping
- Project management principles
- School business applications including payroll, accounts payable, finance and student information

- Policies, procedures, functions and general principles of software development
- Principles, techniques, methods and procedures pertaining to the various aspects of a networked computer systems
- Various programming languages, methods and techniques for training

**SKILLS AND ABILITIES TO:**

- Perform intermediate to advanced SQL database development functions
- Effectively and efficiently formulate, implement and maintain computer software systems
- Use higher-level programming languages
- Analyze data and situations, reason logically and creatively identify problems, draw valid conclusions and develop effective solutions
- Design, create, modify, and present complex reports
- Create and generate custom reports and extracts for Escape Online 5
- Adapt to changing technologies and learn functionality of new equipment and systems
- Apply creative thinking in design and development of methods of processing data with computers
- Coordinate work with activities of other technical personnel
- Establish and maintain cooperative working relationships
- Learn new skills to keep current with technology changes
- Instruct others in the use and care of computer software systems
- Adapt to changing technologies and learn functionality of new equipment and systems
- Manage time effectively between multiple tasks and location, and record time utilization
- Comply with the department’s customer service standards, as outlined in associated policies and procedures
- Effectively implement problem solving techniques
- Understand, prepare and deliver clear and concise oral instructions
- Prepare written materials in an efficient and comprehensive manner
- Maintain record of work in trouble ticketing database

**DESIRABLE QUALIFICATIONS:**

- Bachelor degree preferred but not required
- Experience with educational sector software systems

**LICENSES AND CERTIFICATIONS:**

Possess and appropriate California Driver’s License with evidence of insurability.