### IMPERIAL COMMUNITY COLLEGE DISTRICT

**CLASS TITLE: Systems Architect** 

### **BASIC FUNCTION:**

Under general direction of an assigned supervisor, research, design, develop, implement and maintain information systems and applications; assist in developing and maintaining standards and procedures to obtain reliable performance of installed systems; program and support complex systems as necessary including system interfaces.

#### **REPRESENTATIVE DUTIES:**

Conduct the process analysis, needs analysis and related functional requirements assessment for the development or integration of technology solutions to support educational technology processes. *E* 

Develop, implement, troubleshoot and solve complex data exchanges between the College District Enterprise Resource Planning system and other data systems. *E* 

Coordinate software administration and support for all third-party applications/systems. *E* 

Perform research to discover best-practice solutions to streamline processes. *E* 

Research, recommend, and test appropriate technology solutions to support transition to new information technology processes. *E* 

Perform research and analysis for supported systems and projects. **E** 

Analyze integration limitations and implement solutions. *E* 

Provide technical support to other programmers, analysts, operators, end users, and coordinate stake holder acceptance testing.  $\boldsymbol{E}$ 

Develop strategic system architecture plans. *E* 

Work directly with consultants or vendors to implement and maintain systems according to requirements listed in approved contracts; assist in the development of contractual requirements for systems. *E* 

Write and debug complex computer and database programs. *E* 

Evaluate the performance and utilization of computer systems, databases and make recommendations concerning effectiveness, efficiency and quality assurance. *E* 

Conduct technology, trends, standards and products research. *E* 

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Responsible for integration of subsystems and system components. *E* 

Perform related duties and responsibilities as required.

### **KNOWLEDGE AND ABILITIES:**

### KNOWLEDGE OF:

- Advanced computer science applications and project management.
- Structured systems analysis methodology techniques to build systems.
- Advanced knowledge of programming and scripting languages.
- Best practices for software design, development and implementation.
- Concepts of Project Management as applied to information technology.
- Knowledge of process diagramming (data flow diagrams (DFDs), flowcharts).
- Advanced knowledge of PL/SQL and T-SQL programming.
- Knowledge of data transport protocols and tools including data security techniques,
   APIs and differing forms of FTP.

### **ABILITY TO:**

- Understand and assist in enforcing established security policies and guidelines.
- Meet deadlines and work independently with limited supervision
- Learn new skills and adapt to changes in technology.
- Investigate and analyze complex problems using interpersonal skills and technical knowledge.
- Investigate, plan, design and install systems and applications.
- Evaluate complex problems and effectively communicate solutions.
- Apply advanced programming skills to solve complex technical problems.
- Perform work and interact with others within a diverse environment through cultural competence and equity approach.
- · Communicate effectively, both orally and in writing.

### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: Bachelor's degree in a Technical, or Computer Science or related field and six years of relevant experience at programmer/programmer analyst level.

### **WORKING CONDITIONS:**

## **ENVIRONMENT:**

Office environment.

Driving a vehicle to conduct work

# PHYSICAL DEMANDS:

Incorporated within one or more of the previously mentioned essential functions of this job description are essential physical requirements. The chart below indicates the percentage of time spent on each of the following essential physical requirements.

- 1. Seldom = Less than 25 percent
  2. Occasional = 25-50 percent
- 3. Often = 51-75 percent

2. Occasional = 25-50 percent

- 4. Very Frequent = 76 percent and above
- 4 a. Ability to work at a desk, conference table or in meetings of various configurations.
- 2 b. Ability to stand for extended periods of time.
- 4 c. Ability to sit for extended periods of time.
- 4 d. Ability to see for purposes of reading printed matter.
- 2 e. Ability to hear and understand speech at normal levels.
- 4 f. Ability to communicate so others will be able to clearly understand a normal conversation.
- 2 g. Ability to bend and twist.
- 2 h. Ability to lift 25 lbs.
- 2 i. Ability to carry 25 lbs.
- 4 j. Ability to operate office equipment, computer or related peripherals.
- 3 k. Ability to reach in all directions.

This job description is intended to describe the general nature and level of work being performed. It is not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals so classified.