



SYSTEM SOLUTION ARCHITECT BASIC FUNCTION

Under the general direction of an assigned supervisor, research, design, develop, implement, and maintain information systems, databases, and applications. Assist in developing and maintaining standards and procedures to obtain reliable performance of installed systems. Program and support complex systems. Develop system and data interfaces between disparate systems.

DISTINGUISHING CHARACTERISTICS

This classification is unique in that it is responsible for designing complex systems to meet user needs based on analysis of business needs and processes. This includes designing complex databases, data exchanges between the enterprise systems and third-party applications/systems. Providing guidance to programmers, analysts, and other information technology staff is also a requirement of this classification.

ESSENTIAL DUTIES & RESPONSIBILITIES

The following duties and responsibilities describe the general nature and level of work being performed. It is not intended to be restricted or construed as an exhaustive list of all duties and responsibilities required of individuals so classified, and not all duties listed are necessarily performed by each employee in this classification.

1. Conducts process analysis, needs analysis, and related functional requirements assessment for the development or integration of technology solutions to support educational technology processes.
2. Develops, implements, troubleshoots, and solves complex databases and data exchanges between the enterprise resource planning system and other data systems.
3. Coordinates software administration and support for all third-party applications/systems.
4. Performs research to discover best-practice solutions to streamline processes.

5. Manages complex projects.
6. Researches, recommends, and tests appropriate technology solutions to support a transition to new information technology processes.
7. Performs research and analysis for supported systems and projects.
8. Analyzes integration limitations and implements solutions.
9. Provides guidance and technical support to programmers, analysts, end users, and coordinates stake holder acceptance testing.
10. Develops strategic system architecture plans.
11. Works directly with consultants or vendors to implement and maintain systems according to requirements listed in approved contracts; assists in the development of contractual requirements for systems.
12. Writes and debugs complex computer and database programs.
13. Evaluates the performance and utilization of computer systems, databases and makes recommendations concerning effectiveness, efficiency, and quality assurance.
14. Conducts technology, trends, standards, and products research.
15. Responsibility for integration of subsystems and system components.
16. Performs other job-related duties as required.

QUALIFICATIONS

Knowledge Of:

- Advanced computer science applications and project management.
- Structured systems analysis methodology tools and techniques to build used in designing systems.
- Cloud system environments and architectures.
- Database systems, tools, and techniques.
- Advanced knowledge of programming, querying, and scripting languages.
- Best practices for software design, development, and implementation.
- Concepts of project management as applied to information technology.

- Process diagramming (data flow diagrams, flowcharts, etc.).
- Data transport protocols and tools including data security techniques, application program interfaces, and differing forms of file transfer protocols.

Skills and Abilities 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.
- Work independently or as part of a team to resolve system issues.
- Think critically.
- Develop creative solutions to complex problems.
- Investigate, plan, design, and install systems, databases, and applications.
- Evaluate complex problems and effectively communicate solutions.
- Apply advanced programming, querying, and scripting skills to solve complex technical problems.
- Work effectively with others.
- Make effective presentations and speak in public.
- Communicate effectively, both orally and in writing.

Education and Experience:

A bachelor's degree in computer science, a technical discipline or related field plus six (6) years' experience in programming and analysis.

Certificates, Licenses, Special Requirements:

Certain assignments may require a valid California driver's license and the ability to maintain insurability under the district's vehicle insurance program.

Other Requirements:

Imperial Community College is committed to creating an academic and work environment that fosters diversity, equity, and inclusion and equal opportunity for all, and ensures that students, faculty, management, and staff of all backgrounds feel welcome, included, supported, and safe. Our culture of belonging, openness, and inclusion makes our district a unique and special place for individuals of all backgrounds. It is important that our employees' values align with our District's mission and goals for Equal Opportunity, Diversity, Equity, Inclusion, and Access.

WORKING CONDITIONS

Work Environment:

Office environment.

Physical Demands:

Sitting for extended periods of time at a desk, conference table or in meetings of various configurations; operate office equipment, computers, and related peripherals; technical documentation and printed material reading capability both in print and using technology systems; lift and carry 25 pounds; ability to occasionally stand, bend and twist, and reach in all directions.

Vision: See in the normal visual range with or without correction. Hearing: Hear in the normal audio range with or without correction.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this classification.

Mental Demands:

Ability to work well with others; ability to communicate so others will be able to clearly understand; ability to understand/interpret spoken and written communications; ability to use judgement in working with others.