

# San Diego Community College District

## CLASSIFICATION DESCRIPTION

**Title:** Systems Programmer

**Unit:** Supervisory & Professional

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**Job Code:** D1827  
**Original Date:** 07/2009  
**Last Revision:** 07/2024  
**Staff Type:** Classified  
**FLSA status:** Exempt  
**Salary Range:** 06

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### DEFINITION

Under the direction of the Manager, Technical Services, or assigned manager, install, maintain, and analyze mainframe or client/server computer operating subsystems and third party software; monitor performance and tuning of system parameters; resolve hardware and software problems; design and write new programs; maintain security system; design and test connections among different computer systems; work with vendors on patches and upgrades; provide technical advice and training; and recommend new software and hardware.

### DISTINGUISHING CHARACTERISTICS

Systems Programmer is a journey-level classification supporting mainframe class hardware and software. The incumbent exercises independent judgment and is assigned significant responsibilities requiring specialized knowledge, skills, abilities, and experience. Positions in this classification work with Systems Administrators and Database Administrators as necessary to complete assigned duties.

### EXAMPLES OF DUTIES

1. Install, maintain, and analyze system software and hardware; propose modifications and evaluate new software releases for its impact on systems, security, and applications.
2. Monitor and tunes system software and third party software products; test software systems to insure proper functioning; coordinate with development staff or Database Administrator to solve operating problems.
3. Maintain and document operating systems and related software; monitor the effects of programs and queries on system performance; adjust factors to improve performance; provide statistical reporting on systems, database, and application transactions.
4. Diagnose and fix system malfunctions; react to emergency situations in a professional manner.
5. Maintain security system; control the issue of passwords; create, manage, and delete user and group profiles.
6. Design, install, and test connections among computer systems with different operating systems and applications software.
7. Configure systems to intercommunicate; run programs to test connections; establish connections with computers in other departments, agencies, and the internet.
8. Consult with vendors on the latest trends in the computer industry; perform cost/benefit analyses for various configurations of software; recommend purchase of software and hardware; assist in the selection, evaluation, and testing of new computer hardware and software.
9. Provide technical advice and training to coworkers and application users; prepare reports and coordinate upgrades and system downtime according to department procedures.
10. Perform related duties as assigned.

**DESIRABLE QUALIFICATIONS****Knowledge:**

- Computer programming languages, such as COBOL, C, SQL, and specific control languages.
- Developments and techniques in software systems design.
- District organization, operations, policies, and objectives.
- English syntax and language mechanics.
- Oral and written communication skills.
- Performance management and capacity planning.
- Principles and practices of data processing using mainframe, server, and cloud computing facilities.
- Principles and practices of work direction, supervision, and training.
- Record-keeping techniques.
- Technical aspects of field of specialty.

**Skills and Abilities:**

- Analyze problems and take corrective action in a professional manner.
- Communicate effectively both orally and in writing.
- Coordinate functions and activities between departments and Technology Services.
- Develop standards for the operation of system hardware and software.
- Establish and maintain effective work relationships with others.
- Maintain records and prepare reports.
- Meet schedules and time lines.
- Plan and organize work.
- Work independently and set priorities.

**Training and Experience:**

Any combination of training and experience equivalent to: a Bachelor's degree in computer science, engineering, or related field and four years of data processing experience, including three years in IBM systems programming.

**WORKING CONDITIONS****Physical Requirements:**

Category III. Physical skill is required for keyboarding, mouse operation, and use of peripheral equipment.

**Environment:**

Work environment includes typical computer related noise levels and paper printing equipment. Exposure to computer monitors occurs on a regular basis.