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| **INFORMATION SECURITY ENGINEER**  |
| **Reports to:**  | Manager, Infrastructure Systems and Application Development |
| **Dept:** | Academic Information Services |  | **Range:** | 40 |
| **FLSA:** | Exempt |  | **EEO:** | Professional |

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed by individual positions.*

### BASIC FUNCTION:

Under general direction, coordinate the development, implementation and evaluation of informa­tion technology (IT) security standards, best practices, architecture and systems for the district to ensure the integrity and security of the district’s IT infrastructure and the protection, integrity and confidentiality of information assets spanning the entire enterprise; and perform related duties as assigned.

### DISTINGUISHING CHARACTERISTICS*:*

### Information Security Engineer is distinguished from Infrastructure Systems Engineer by the former’s responsibility for implementation, maintenance and monitoring the district’s overall Information Services security program while the latter position focuses on design, implementation and maintenance of the district’s technology infrastructure

### ESSENTIAL DUTIES & RESPONSIBILITIES:

*The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.*

1. Develop and implement security applications, policies, standards and procedures intended to prevent the unauthorized use, disclosure, modification, loss or destruction of data; works with the Infrastructure Systems Engineer and other staff to ensure the integrity and security of the depart­ment’s IT infrastructure; reviews the development, testing and implementation of IT security products and control techniques in all locations and departments throughout the district.
2. Monitor security systems and identify, troubleshoot, diagnose, resolve and report IT security problems and incidents; help coordinate and conduct investigations of suspected breaches in IT Security; respond to emergency IT security situations.
3. Consult with application developers and other Academic Information Services staff to ensure produc­tion applications meet established IT security policies and standards.
4. Promote and coordinate the development of training and education on IT security and privacy awareness topics for district administrators, faculty and staff; develop appropriate security-incident notification procedures for district management.
5. Conduct vulnerability assessments to identify existing or potential electronic data and infor­mation system compromises and their sources; coordinate IT investigative matters with appropriate law enforcement agencies.
6. Perform audits and periodic inspections of district information systems to ensure security measures are functioning and effectively utilized and recommend appropriate remedial measures to eliminate or mitigate future system compromises.
7. Review, evaluate and recommend software products related to IT systems security, such as virus scanning and repair, encryption, firewalls, internet filtering and monitoring, intrusion detection, etc.
8. Maintain up-to-date technical knowledge by attending educational workshops, reviewing professional publications, establishing personal networks and participating in professional associations.

### OTHER DUTIES:

1. May participate in the review of IT facility acquisition, construction and remodeling projects to ensure conformity to established security policies and guidelines.
2. May serve as a witness or subject-matter expert for the department in legal matters concern­ing IT systems security.
3. Attends various meetings and participate on committees as required.
4. Perform related duties as assigned.

### KNOWLEDGE AND ABILITIES:

### KNOWLEDGE OF:

1. Current trends and advancements in enterprise-wide technology security management, including IT security risk identification and mitigation.
2. Information systems security architecture and compliance.
3. Disaster recovery planning and testing, auditing, risk analysis and business continuity planning.
4. Advanced IT security and IT audit concepts and techniques.
5. Enterprise operating systems.
6. Information systems and architecture used in a college setting.
7. OSI model layer networking technologies and concepts.
8. Server virtualization technologies.
9. Safety policies and safe work practices applicable to the work.

### ABILITY TO:

1. Assess IT security in both central and college departments.
2. Assist in developing local architectures and security solutions.
3. Conduct timely investigations and responses to computer security-related incidents and threats including viruses, worms and other system compromises.
4. Ensure compliance with all federal, state and local legislation related to information security.
5. Provide comprehensive information security awareness and training.
6. Assist with investigations initiated by internal and external authorities.
7. Monitor and identify any anomalous traffic and compromised systems on campus networks.
8. Work with other Academic Information Services staff to deploy anti-virus and other security-related desktop system software for campus-wide use.
9. Communicate effectively, both orally and in writing.
10. Demonstrate sensitivity to and understanding of diverse academic, socioeconomic, cultural, ethnic and disability issues.
11. Establish and maintain effective working relationships with those encountered in the course of work.

### EDUCATION AND EXPERIENCE:

Graduation from an accredited four-year college or university with a bachelor’s degree in computer science, information technology, systems engineering or a related field, and at least five years of progressively responsible experience involving applications and/or IT infrastructure systems, including two years of IT security-related experience involving risk identification and mitigation, security architecture development and compliance; or an equivalent combination of training and experience. Experience in a public agency is preferred.

### LICENSES AND OTHER REQUIREMENTS:

A valid California driver’s license and the ability to maintain insurability under the district’s vehicle insurance program. Security certifications such as CISSP, CISM, GIAC are not required but preferred.

**WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES:**

Project lead responsibilities.

**CONTACTS:**

Administrators, managers, faculty, staff, other public agencies, law enforcement representatives, vendors, contractors, students and the general public.

**PHYSICAL EFFORT:**

*The physical efforts described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Primarily sedentary with intermittent standing, walking, bending and stooping; occasional light lifting and carrying of objects weighing 25 pounds or less; ability to travel to a variety of locations on and off campus as needed to conduct district business.

**EMOTIONAL EFFORT:**

Ability to develop and maintain effective working relationships involving interactions and communications personally, by phone and in writing with a variety of individuals and/or groups from diverse backgrounds on a regular, ongoing basis; ability to work effectively under pressure on a variety of tasks concurrently while meeting established deadlines and changing priorities.

**WORKING CONDITIONS:**

Primarily business office environment; subject to frequent public contact and inter­ruption; inter­mittent exposure to individuals acting in a disagreeable fashion; may work at any district location or authorized facility with occasional evenings and/or weekends on an as-needed basis. Occa­sional local travel may be requested.