

**FLORIDA STATE COLLEGE AT JACKSONVILLE  
JOB DESCRIPTION, 2009**

**ENGINEER IV - SOFTWARE**

**FLSA STATUS: NON-EXEMPT - PAY GRADE: 24 - P**

**GENERAL STATEMENT OF JOB**

The Engineer IV – Software reviews and analyzes systems software supplied by the manufacturer and determines optimum configuration required for the College's computer environment. Employees in this class install, maintain and customize system software required to support collegewide utilization of Information Resources. May serve as College database administrator for production systems using college-standard products/environment. This highly technical senior level position is responsible for designing, implementing, maintaining, managing, and supporting the College's enterprise databases.

**CHARACTERISTIC DUTIES AND RESPONSIBILITIES**

Design, modify, develop, write and implement software applications.

Support and/or install software applications/operating systems.

Participate in the testing process through test review and analysis, test witnessing and certification of software.

Software engineers may also serve as business analysts. As such, the engineer reviews, analyzes and evaluates business systems and user needs; formulates systems to parallel overall business strategies; writes detailed descriptions of user needs, program functions, and steps required to develop or modify applications and/or processes.

Has knowledge of commonly used concepts, practices and procedures within a particular field and must be familiar with databases, general hardware characteristics, and client-server concepts.

Design, plan and coordinate work teams

Provide technical support to project team members

Generally manage a group of software developers/engineers.

Relies on experience and judgment to plan and accomplish goals.

Typically reports to a senior manager.

May be assigned to serve as UNIX Administrator, Systems Programmers, or Database Administrators. As a UNIX Administrator, or Systems Programmer, the engineer installs, configures, and maintains operating systems, analyzes and resolves problems associated with server hardware, operating systems software and related products, as well as applications software.

Detect, diagnose and report operating system related problems on servers.

As a database administrator, the engineer administers, maintains, develops and implements policies and procedures for ensuring the security and integrity of databases.

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Implement data models and database designs, data access and table maintenance codes, resolves database performance issues, database capacity issues, replication and other related data issues.

Performs other related duties as assigned.

### **SUPERVISION RECEIVED**

Supervision is typically received from a senior manager or director.

### **SUPERVISION EXERCISED**

Employee acts in a lead capacity.

### **MINIMUM QUALIFICATIONS**

An associate's degree in a related field from an accredited college or university and two (2) years of related experience.

### **PREFERRED QUALIFICATIONS**

A bachelor's degree with five (5) years of direct experience and thorough knowledge of the area of specialty.

## **MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

**Physical Requirements:** Must be physically able to operate a variety of machines and equipment including computer, office equipment, telephone, etc. Physical demands are essentially those of sedentary work. Tasks may require extended periods of time at a keyboard or workstation.

**Data Conception:** Requires the ability to compare and/or judge the readily observable, functional, structural or compositional characteristics (whether similar to or divergent from obvious standards) of documentation, files, accounts, and equipment.

**Interpersonal Communication:** Requires the ability to speak and/or signal people to convey or exchange information. Includes issuing and receiving assignments, instructions, and/or directions.

**Language Ability:** Requires ability to read standard English, as well as basic technical data, policy and procedure manuals, codes, etc.. Requires the ability to prepare forms and reports using prescribed formats. Requires the ability to communicate with a broad array of individuals from various professional backgrounds.

**Intelligence:** Requires the ability to apply principles of logical thinking to define problems, collect data, establish facts and draw valid conclusions; to interpret a variety of instructions or inquiries furnished in written and/or oral form; to acquire knowledge of topics related to occupation.

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**Verbal Aptitude:** Requires the ability to record and deliver information, to explain procedures, and to follow oral/written instructions. Must be able to communicate effectively with co-workers, the public, and students.

**Numerical Aptitude:** Must be able to add, subtract, multiply and divide; calculate decimals and percentages.

**Form/Spatial Aptitude:** Requires the ability to inspect items for proper length, width and shape, and visually read various information.

**Motor Coordination:** Requires the ability to coordinate hands and eyes accurately in operating modern office equipment and machinery.

**Manual Dexterity:** Must have minimal levels of eye/hand/foot coordination.

**Color Discrimination:** May not require the ability to differentiate between colors and shades of color.

**Interpersonal Temperament:** Requires the ability to deal with people beyond receiving instructions. Must be adaptable to performing under moderate levels of stress, imposed by frequent deadlines, peak workloads, or public/student contact.

**Physical Communication:** Requires the ability to talk and hear: (talking: expressing or exchanging ideas by means of spoken words; hearing: perceiving nature of sounds by ear).

**Environmental Requirements:** Tasks are regularly performed without exposure to adverse environmental conditions (e.g., dirt, cold, rain, fumes).

Effective: 10/09