

**SYSTEMS PROGRAMMER - COMPUTER SCIENCE****NATURE OF WORK**

This is highly skilled technical work in programming and maintaining computer equipment for the Department of Computer Science.

Work involves the development, installation and maintenance of computer software. Employees of this class are expected to gain a thorough understanding of the operating system and programming languages used by the Department. Assignments are normally received in the form of verbal instructions indicating a general outline of work to be accomplished. Work is performed with considerable independence and is reviewed by observation of results obtained.

**ILLUSTRATIVE EXAMPLES OF WORK**

Configures and maintains the operating systems; installs and maintains the language processors required by the Computer Science Department.

Writes, maintains and documents programs as required; install, updates and modifies packages/programs as required.

Develops, implements and maintains an adequate backup system and a comprehensive computer security system.

Evaluates the hardware/software requirements of the departmental computer facilities and makes recommendations for the correction of any suspected weaknesses.

Work closely with service representatives and Technical Services staff to maintain a high level of hardware availability.

Designs the layout of equipment and arranges for the installation of equipment for the Computer Room, the departmental laboratories and the student terminal areas.

Conducts seminars on the operating system and the major languages available.

Provides support and consultation, primarily for the departmental Lab Assistants and Instructional Assistants and to faculty and staff as required.

Attends conferences and seminars as required by the Department Head.

Performs related work as required.

## **REQUIREMENTS OF WORK**

Considerable experience in systems programming; graduation from a four-year college or university with major course work in Computer Science; or any equivalent combination of experience and training which provides the following knowledge, abilities and skills:

Considerable knowledge of the departmental operating system and related system hardware.

Considerable knowledge of Pascal, Assembler and C programming languages.

Considerable knowledge of microprocessor and graphics hardware and related maintenance requirements.

Knowledge of Fortran, Basic, Lisp and APL programming languages.

Knowledge of the operating systems used by the Department of Computing Services.

Knowledge of current trends and products available in the computer industry.

Ability to devise highly technical solutions to complex problems.

Ability to establish and maintain an effective working relationship with faculty, staff and students.

**0350**

**1992.12.03**

**Confirmed: 2004.01.05**