GLENDALE COMMUNITY COLLEGE DISTRICT **CLASS DESCRIPTION**

ENGINEERING LABORATORY SPECIALIST

DEFINITION

Performs activities to insure the functional efficient operation of the District's engineering laboratory, as well as operation of all the District engineering, architectural, mechanical engineering computers as they relate to time compression equipment projects.

SUPERVISION RECEIVED AND EXERCISED

Supervision received by the Dean of Workforce & Economic Development or his/her designee.

Provides work direction to lower-level staff. Supervision is exercised over student workers.

EXAMPLES OF DUTIES

Demonstrate and recommend Rapid Prototyping (Time Compression) systems and related 3D CAD software programs. Upgrade procedures and maintenance activities to achieve possible reliability and accessibility.

Interface with CACT technicians, to demonstrate the advantage of Rapid Prototyping to engineering and manufacturing organizations.

Provides support, assistance and training to engineering and manufacturing company as well as the District's engineering and manufacturing staff.

Responsible for utilizing, maintaining, updating and organizing CAD/ CAM hardware and software in the Engineering and Manufacturing Department.

Provides assistance to industry professionals and students on rapid prototyping and manufacturing industry in conjunction with 3D CAD solid modeling as it pertains to stereo lithography and other time compression technologies.

Interfaces between departments within the Technology Division to insure proper usage and capabilities of the rapid prototyping programs in the various laboratories.

Provides assistance to students involved in the engineering, manufacturing and rapid prototyping programs in the various laboratories.

Works with manufacturing community to develop opportunities for training and education.

Stays current and recommend necessary technological changes that the lab(s) will require.

Selects, trains, evaluates and maintains schedules of student workers.

Perform related duties as required.

QUALIFICATIONS

Knowledge of:

CAD/CAM operating system software architectures and operations.

QUALIFICATIONS (continued)

Rapid prototyping using 3D CAD solid modeling, stereo-lithography and other time compression technologies.

Characteristic and capabilities of modern CAD/CAM based computer and time compression technologies.

Stay current on technology and methodology of the latest computer and operating systems software.

Knowledge of the relationship between engineering design and manufacturing.

Develop an understanding of Master Cam and it's design capabilities for manufacturing and rapid prototyping.

Develop awareness of CMM technologies.

Ability to:

Work independently without direct supervision.

Assist District staff in troubleshooting and resolving software and hardware problems.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain cooperative and effective working relationship with members of the college community and outside contacts.

Interpret detailed systems and procedures.

Keep pace with all new elements, both software and hardware.

Balance the effectiveness and efficiency of computer resources use.

Interview, train, and provide work direction to student workers.

EMPLOYMENT STANDARDS

Minimum Qualifications:

Bachelor's degree in Electro/Mechanic Engineering, or related field from an accredited college or university; or the equivalent of ten years of working CAD experience, which includes the following; experience in AUTOCAD 14 & 2000, CATIA or CADAM, and computer vision and/or PRO-E.

Work experience should be in a drafting design-engineering environment, utilizing electro-mechanical design skills involving Aerospace and Industrial Manufacturing.