For Students Enrolled in:
DDTC: Computer-Aided Drafting, Certificate of Competency
2003 to Present

Program Description: In this program, students will learn to manage computer systems for drawing production, information storage, retrieval and communication in the engineering and design workplace. As they develop computer aided drafting skills, they will explore manufacturing, mechanical, and architectural engineering and construction applications.

This program is intended, primarily, to serve as computer training for individuals who have previous experience as manual "board" drafters and who already possess a working knowledge of technical drawings. However, though there is no requirement of prior technical experience, individuals desiring an elementary introduction to the fields of engineering drafting, and design will be well served by this curriculum.

Students may, through the use of specified course alternatives, choose to pursue a basic 2D option with added emphasis in elementary blueprint reading and construction applications, or a 3D parametric modeling option with emphasis on advanced software features and mechanical / manufacturing applications.

All credits earned in this certificate are applicable to the Associate of Applied Science Degree in Computer Aided Drafting and Design.

Program Outcomes:
Upon successful completion of this program, students should be able to:

- Create two- and three-dimensional technical design models and drawings to document solutions for defined customer problems.
- Use CAD tools in applying the principles of descriptive geometry and the techniques of graphic construction to the process of documenting design intent.
- Execute computer generated plane and 3D geometric forms, as well as object viewing techniques, to describe and present a design concept.
- Apply CAD tools and techniques in the execution of working, mult view, assembly and 3D model drawings.

Semester 1:
TCC 112
TCC 121
TCC 122
Notes:
2D Architectural Option: TCS 100 Construction Blueprint Reading - 3 credits  ARC 121 Architectural Graphics I - 3 credits

3D Engineering Modeling Option: TDD 216 Three-D CADD - 3 credits

Total Credits: 15