

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: ENGR 203 Department: Engineering & Science Trans.

Course Title: Computer Aps in Engineering Semester: Spring Year: 1997

Objectives/Competencies

Course Objective	Competencies
<ol style="list-style-type: none">1. The student learns to use the computer diskette as an information exchange medium.2. The student becomes proficient at using the following software as engineering problem-solving tools:<ol style="list-style-type: none">a. Quattro Spreadsheetb. CADKEY Design3. The student performs a “Reverse-Engineering” Design Project (Design for Assembly)	<ol style="list-style-type: none">1. Submit all homework and projects on floppy disk.1. Solve problems using spreadsheet features: Math functions, graphing, iteration, matrix calculations.2. Draw wireframe models in 3-D, using all features available in CADKEY.1. Draw exploded assembly drawings and standard orthographic projections.2. Evaluate a mass-produce item for cost of assembly.3. Redesign above item for improved cost of assembly.4. Prepare and deliver written and oral business report on design project.