CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
In this class students will learn the basics of 3D solid model creation utilizing state-of-the-art computer graphics systems and software leading to a broad understanding of the tools and techniques necessary to accurately design parts in a modern manufacturing environment.

PREREQUISITE: CNC 230
COREQUISITE: CNC 235

EXPECTED COMPETENCIES:
Upon successful completion of this course, the student will be able to:
- Demonstrate understanding of solids extrude and solids chamfer
- Merge template and create dimensions
- Create draft surface, curve one edge, flat boundary and fillet surfaces
- Create revolved, net surfaces and project
- Create lofted surface
- Create swept surface and trim surface to curve
- Create ruled and blend surfaces, and create curve at intersection
- Create draft, swept surfaces and rectangle with surface
- Create offset surface and silhouette boundary

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E