

Master Course Syllabus

Department: Engineering Technology

Course Prefix/Number: IT 235

Official Course Title: Solid Modeling

Master Syllabus Approved by Department on: 12 / 03 / 07
month date year

I. Catalog Description: A study of complex three-dimensional solid models used in the fields of mechanical engineering, sheet metal, welding, and other areas of manufacturing and engineering. Orthographic views projected from solid models and annotation techniques are used to produce engineering drawings. Prerequisite: IT 105 or 3 semester hours of drafting or approval of the instructor. Lab fee \$10.

II. Prerequisites: IT 1053 or approval of the instructor.

III. Expanded Course Description: This course is intended for freshman and sophomore level students as the second design and graphical communication course. Students explore methods of controlling designs through the assignment of parameters, variables, and constraints that allow the designer to control the design as changes are made. Part drawings are produced and annotated as required for manufacturing purposes.

IV. Intended Student Learning Outcomes: Upon completion of the course, students will be able to:

1. Understand and create parametric sketches and assemblies of objects.
2. Define and use parametric constraints to control the geometry of solid models.
3. Explain the purpose of and utilize design variables and work features for the construction of solid models.
4. Explain, construct, and edit feature based solid models.
5. Generate orthographic and pictorial views complete with bills of material from parametric solid models.

V. Unless otherwise stipulated in this master syllabus by the department, the following items are subject to faculty discretion as described in each faculty member's individual course outline/syllabus:

- a) Course Requirements? (grading/evaluation procedures; class attendance policy; term papers, projects, field assignments; examinations; class participation, etc.)
- b) Required Text(s)?
- b) Bibliography?

- VI. Academic Honesty: Cheating, plagiarism (submitting another person's materials or ideas as one's own), or doing work for another person who will receive academic credit are all-impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were the student's own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.
- VII. Students With Disabilities Policy: It is the policy of Tarleton State University to comply with the Americans with Disabilities Act (ADA) and other federal, state, and local laws relative to the provision of disability services. Students with disabilities attending Tarleton State University may contact the Office of Disability Services at (254) 968-9478 to request appropriate accommodation. Furthermore, formal accommodation requests cannot be made until the student has been officially admitted to Tarleton State University.

Department Head Signature/Date:

Signature

_____/_____/_____
Date