

# COLLEGEWIDE COURSE OUTLINE OF RECORD

## ENGR 116, GEOMETRIC MODELING FOR VISUALIZATION

COURSE TITLE: Geometric Modeling for Visualization

COURSE NUMBER: ENGR 116

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of “C” or better in MATH 100 Intermediate Algebra.

SCHOOL: Applied Science and Engineering Technology

PROGRAM: Pre-Engineering

CREDIT HOURS: 2

CONTACT HOURS: Lecture: 1 Lab: 2

DATE OF LAST REVISION: Fall, 2015

EFFECTIVE DATE OF THIS REVISION: Fall, 2016

CATALOG DESCRIPTION: This is a fundamental course which introduces students to geometric modeling for visualization and communication. Modeling construction techniques to produce computer models for graphic visualization and communication will be explained and used.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Graphically represent technical design using CAD.
2. Solve technical design problems, using CAD.
3. Communicate graphically, using sketches and CAD.
4. Use 2D and 3D geometric forms to create and communicate design solution.
5. Demonstrate 3D spatial environment understanding and mental visualization ability.

COURSE CONTENT: Topical areas of study include –

Geometric modeling	Assembly modeling
Design process	Working drawings
2D construction techniques	Presentation
Graphic representation	3D parametric modeling

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

#### ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

#### COPYRIGHT STATEMENT:

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

#### ADA STATEMENT:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.