

**Central Washington University / Department of Industrial and Engineering Technology
IET 265, Three-Dimensional Modeling / Spring Quarter 2013**

Catalog Description: IET 265. Three-Dimensional Modeling (4) Prerequisites, IET 160 or IET 161 or by permission of instructor. Design of parts, assemblies and working drawings using 3-D solid modeling software, basic theory of threaded fasteners and gears, welding representation and geometric dimensioning and tolerancing. Two hours lecture and four hours laboratory per week.

Textbooks: Engineering Design with SolidWorks 2012, David C. & Marie P. Planchard, SDC Publications.
Students Guide to Learning SolidWorks Software, SolidWorks Corp. (as a pdf file via class website)
The Ultimate GD&T Pocket Guide, 2nd Edition, Alex Krulikowski

Supplies: 4GB or more flash drive or similar backup medium, have a backup copy of your work at all times!

Instructor: Chris Scarlett, Electrical Design Engineer, Adjunct Professor, freelance designer, draftsman and small business owner. Email: chris@e-d-and-i.com, design@edi3di.com, (scarlech@cwu.edu less frequently used)

Office: Mondays through Thursdays after class, by appointment, by email or by phone: 509-899-2732

Class Website: <http://edi3di.com/Classes/2013-2-IET-265/>

Learner Outcomes: (Course Objectives)

Outcome	Assessment Strategy
1. Demonstrate the ability to produce solid models using SolidWorks software	Design assignments due and graded weekly.
2. Demonstrate the ability to understand basic concepts and terminology as explained in the textbook, videos and in lecture.	Periodic assessments involving the written portions of examinations using short answers, multiple choice, matching and true/false questions.
3. Demonstrate the ability to produce basic design documents under a time constraint.	Periodic assessments involving the creation and modification of design documents during In Class Evaluations (ICEs) and examinations.

Assessments:

Item	Percentage of total grade
Examinations (2) for 50% and the Final Project for 50%, (3 items total)	50%
Design Assignments, ICEs, every week	50%

You will receive a letter grade as a final assessment in this class based on the following scale:

A = 92 or higher, A- = 89 – 91, B+ = 86 – 88, B = 83 – 85, B- = 80 – 82, C+ = 77 – 79, etc...

Design assignments: Student progress is evaluated weekly by the submission of files or printed drawings from In Class Evaluations (ICEs) typically on the first class day of the week with a time constraint. Assignments will be evaluated for completeness and timeliness and awarded a maximum point value in multiples of 10 points. Design assignments will be returned for corrections the next class meeting and can be re-submitted for re-grading by the upcoming Friday by 5pm. Re-graded design assignments will receive a maximum of 80%. Missed assignments may be submitted by the upcoming Friday for a maximum of 70%. Missed assignments more than a week late will not be graded. Missed ICEs will receive a grade of 0.

Examinations: there will be 2 exams and the Final Project. Exams will be in 2 portions with a written portion consisting of short answers, multiple choice, matching and true/false questions and a design portion consisting of a small project. Both elements of the exam will be completed in class under a time constraint. Points will be split evenly between the 2 portions. The Final Project, of the students' choosing, will include drawings and a presentation.

General statement about missed class: In all fairness to the class as a whole; if you miss class for whatever reason it is your responsibility to make up the work. Class material covered once will not be repeated. If you miss an ICE or an examination without prior arrangements you will not get credit for the missed work. Exceptions will only be made under extraordinary circumstances (medical or family emergencies etc...) and only with proper documentation.

Cheating: Your work has to be unique and original to this class. If caught cheating you will fail the class!

ADA Statement: Students who have special needs or disabilities that may affect their ability to access information and or material presented in this course are encouraged to contact the ADA Compliance Officer, Director, ADA Affairs and Students Assistance on campus at 963-2171 for additional disability related educational accommodations.