

AutoCAD 3D Drawings

CAD 112 – February 2012



Class Description:

This is an intermediate level CAD class. Students will learn 3D drawing with AutoCAD software by conducting various projects. Course topics include: images, wireframes modeling, surface modeling, and solid modeling, rendering, image draping, and 3D texture mapping.

Location:

WEI Headquarters:
Haskell Business Center
1301 Fraser Street, Suite A3
Bellingham, WA 98229



Dates and Times:

The class is scheduled to run on **Tuesday and Thursday evenings at 6:00-9:00 PM from January 31st to February 23rd**. This provides a total of (8) evening classes to cover the course material. Please see the Class Calendar on the last page.

Tuition and Registration:

Tuition must be paid before the class begins. Program enrolled students have seniority for this class and should register online three-weeks before the class begins. Continuing education students may begin registering online two-weeks before the class begins. Students may also send class registrations by mail to the following address:

Washington Engineering Institute
1301 Fraser Street, Suite A3
Bellingham, WA 98229

School Provided Materials:

- **Lecture Notes:** The school provides lecture handouts as needed.
- **Temporary School Laptop:** Enrolled students should obtain their own laptop and install AutoCAD 2011/2012 as soon as possible. However, you may temporarily borrow a school laptop during lecture times, but you will not have it to study at home. Therefore, you should obtain a laptop as soon as possible. Please contact dbren@weiedu.org if you need to borrow a school laptop temporarily during lectures.

Student Provided Materials:

- **Personal Laptop:** Program enrolled students are required to have a laptop in order to conduct their program. Enrolled students should obtain their own laptop and install AutoCAD 2011/2012 as soon as possible.
- **AutoCAD 2011/2012 Student Download:** Students should download and license AutoCAD 2011/2012 to their laptop as part of the coursework for the class, through the Autodesk Education Community. Your instructor will provide a special link for you to download and license AutoCAD on the first night of class.3 Ring Binder, calculator, engineer calculations pad (green sheets), and small straight edge for linework.

Instructor

Dave C. Bren, PE, MSCE Civil Engineering Technology Instructor

Experience: 15 years of experience in the public and private civil engineering industry. Most recent experience was as the Assistant Public Works Director for the City of Blaine. Mr. Bren established and taught the Civil Engineering Technology program at Bellingham Technical College from 1997-2006 while continuing to consult in the industry.

Registration: Professional Engineer
State of Washington License

Education: Master of Science in Civil Engineering
University of Washington

Bachelor of Science in Civil Engineering
University of Washington

Format:

Class Structure: Evenings will typically run in one-hour blocks as follows:

6:00 PM – Class setup and first hour
6:50 PM – Break
7:00 PM – Class
7:50 PM – Break
8:00 PM – Class last hour

Final Exam and Grades:

Grades will be determined by attendance character (30%) and class projects (70%). The Instructor holds sole authority to issue grades and shall issue grades based on a 4.0 schedule as follows.

Grading legend

4.0	A
3.7	A-
3.3	B+
3.0	B
2.7	B-

2.4	C+
2.0	C
1.7	C-
1.3	D+
1.0	D
0.7	D-

AU	Class audited with no grade earned
EXP	Experiential credit granted per policy
EDU	Prior education credit granted per policy
I	Incomplete – Instructor Allows Extra Time to Complete
W	Withdrawn from class

February 2012 – AutoCAD 3D Drawings – CAD 112

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
30	31 3D Wires 6:00-9:00 PM Coordinates & Display 3D Lines and Polylines Wireframes P1: 3D House/Structure	1	2 3D Surfaces 6:00-9:00 PM Surface Modeling Digital Terrain Modeling TIN and Contours P2: 3D Terrain Model	3	4	5
6	7 3D Solids 6:00-9:00 PM Solid Modeling Solids Union, Subtraction, and Fillets P3: 3D Pelton Wheel Bucket	8	9 Rendering and Images 6:00-9:00 PM 3D Views and Orbit Background Colors and Lighting Rendering and Images P4: 3D House Lighting	10	11	12
13	14 Materials and Textures 6:00-9:00 PM Applying Materials Applying Textures P5: 3D House Siding & Roofing	15	16 Solid Modeling I 6:00-9:00 PM Solid Modeling Applications P6: Machine Part I	17	18	19
20	21 Solid Modeling II 6:00-9:00 PM Solid Modeling Applications P6: Machine Part II	22	23 CNC Machine Operations 6:00-9:00 PM CNC Machine Operations	24	25	26



PO Box 483
 Custer WA 98240
admin@weiedu.org
 (360) 739-1428

Class Registration Form 2010 v2.0

Returning students with a Student ID do not need to fill out the gray portions of this form.

Name	
Address	
Phone	
Email	

Class Requested	CAD 112 – AutoCAD 3D Drawings
Class Month / Date	February 2012

WAC 490-105-160 – State Licensed School Reporting Requirements:

Student ID #		
SSN #		
Date of Birth		
Gender		
Disability	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Race	<input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black/African American <input type="checkbox"/> Hawaiian Native or Pacific Islander <input type="checkbox"/> Hispanic <input type="checkbox"/> White/Caucasian <input type="checkbox"/> Multi-racial <input type="checkbox"/> Other	
Prior Education	<input type="checkbox"/> Less than high school graduation <input type="checkbox"/> GED <input type="checkbox"/> High School Graduate <input type="checkbox"/> Post H.S., no degree or certificate <input type="checkbox"/> Associate Degree <input type="checkbox"/> Bachelor Degree <input type="checkbox"/> Master or Doctorate Degree	GED Year _____ Graduation Year _____ Graduation Year _____ Graduation Year _____ Graduation Year _____
Name of Last School Attended		

Student Signature

Date