

AutoCAD 2D Drawings

CAD 111 – 5 Credits – Oct/Nov 2011



Class Description:

This is an entry-level CAD class that is focused on learning the AutoCAD software by conducting civil, mechanical, and surveying technology applications. Thus students are learning fundamentals of the profession at the same time as learning CAD. Civil and surveying technology applications include; field surveying, mapping, utilities, and road cross-sections. Mechanical technology applications include; orthographic projections, isometric projections, basic dimensioning, and title block preparation.

Location:

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



Dates and Times:

The class is scheduled to run on **Wednesday evenings** at **6:00-9:00 PM** from **October 5th to November 23rd**. This provides (8) evening classes to cover the course material. In addition, the Instructor has the option to utilize Saturday mornings for course work and lab work. Please see the Class Calendar on the third page for details.

Tuition and Registration:

Tuition for this class is \$400. 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
Registration Office
PO Box 483
Custer WA 98240

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 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 as soon as possible.
- **AutoCAD 2011 Student Download:** Students should download and license AutoCAD 2011 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.

Instructors

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

Education: Master of Science in Civil Engineering
University of Washington

Bachelor of Science in Civil Engineering
University of Washington

Erin Russell CAD Teaching Assistant

Experience: Currently working at Cascade Engineering Group as a Civil Designer.

Education: Associates in Civil Engineering Technology
Bellingham Technical College

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:

Students will be graded by attendance (20%) and by class projects (80%). The Instructor holds the 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

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Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					1	2
3	4	5 Chapter 1	6	7	8	9
		6:00-9:00 PM AutoCAD Interface Drawing Setup Lines, Points, and Text <u>EX-1:</u> Property Boundary				
10	11	12 Chapter 2	13	14	15 CAD Lab	16
		6:00-9:00 PM Drawing Orientation Layers and Properties Modelspace Plotting <u>EX-2:</u> 11x17 Titleblock <u>EX-3:</u> Modelspace Plotting			9:00AM-NOON Orthographic Projections Basic Dimensioning <u>DWG-1:</u> 11x17 Titleblock	
17	18	19 Chapter 3	20	21	22	23
		6:00-9:00 PM Line and Text Editing Block Insertion & Exploding Polylines and Area Fills <u>EX-4:</u> Bearing and Distance <u>EX-5:</u> Legal Description Text				
24	25	26 Chapter 4	27	28	29 Civil/Survey Lab	30
		6:00-9:00 PM Temporary & Running Osnaps Offset, Divide, & Measure Filters & Transparent Commands <u>EX-6:</u> Radial Survey			8:00 AM-Noon Field Survey Prepare Radial Survey Drawing <u>DWG-2:</u> Radial Survey	

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Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
31		1		2	Chapter 5	3		4		5		6	
				6:00-9:00 PM Text Style and Importing Paperspace DVIEW and UCS <u>EX-7:</u> Paperspace Plotting									
7		8		9	Chapter 6	10		11		12	Optional CAD Lab	13	
				6:00-9:00 PM Editing Commands <u>EX-8:</u> Plan View Fundamentals						9:00AM-NOON Prepare Plan View drawing <u>DWG-3:</u> Plan View Drawing			
14		15		16	Chapter 7	17		18		19		20	
				6:00-9:00 PM Polylines and Area Fills <u>EX-9:</u> Profile View Fundamentals									
21		22		23	Chapter 8	24		25		26	Optional CAD Lab	27	
				6:00-9:00 PM Drawing Data <u>EX-10:</u> Utilities Fundamentals						9:00AM-NOON Prepare Utilities drawing <u>DWG-4:</u> Utilities Drawing			



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 111 – AutoCAD 2D Drawing
Class Month / Date	Oct/Nov 2011

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