

Civil / Survey CAD Level 1

ENGR 111 – 5 Credits/\$400 – July 2010

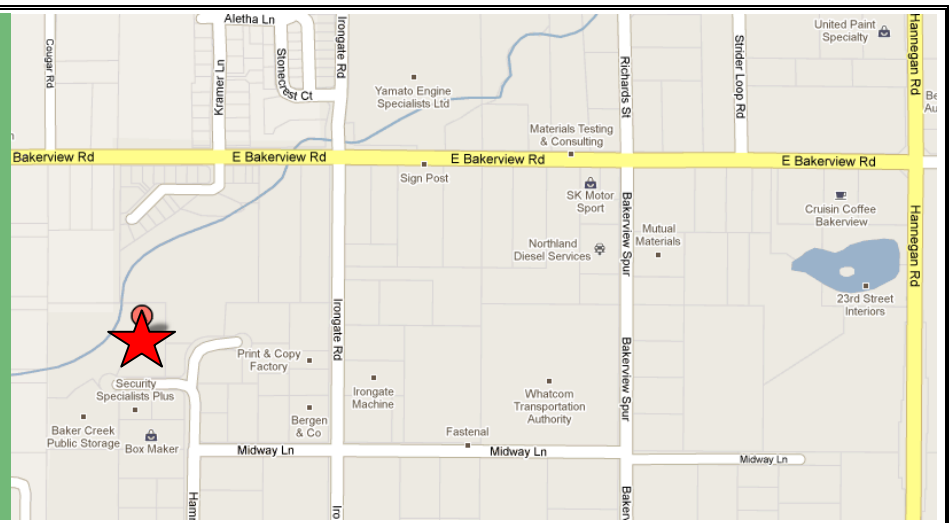


Class Description:

This is an entry level CAD class for the Civil / Survey professions. Students will learn AutoCAD software by conducting Civil Engineering and Surveying applications. Thus students are learning fundamentals of the profession at the same time as learning CAD. Course material includes site feature mapping, topographic mapping, plan view utilities, and road cross sections.

Location:

**Building Industry Association of
Whatcom County
1650 Baker Creek Place
Bellingham, WA 98226**



Dates and Times:

The class is scheduled to run on **Tuesday and Thursday evenings at 6:00-9:00 PM from July 6th to July 29th**. This provides a total of (8) evening classes to cover the course material. Please see the Class Calendar on the third page.

Registration and Class Capacity:

This 5-credit class is limited to (12) students and costs \$400. Please send your completed registration form and check payable to Washington Engineering Institute to the registration office:

**Washington Engineering Institute
Registration Office
PO Box 483
Custer WA 98240**

School Provided Materials:

- **Hardware:** The school provides a 17" laptop during lecture and lab times.
- **Software:** The school provides the AutoCAD software during lecture and lab times.
- **Lecture Notes:** The school provides lecture handouts as needed.

Student Provided Materials:

- **USB Drive:** Please purchase a 4GB or larger USB drive prior to the first day of class.
- **Personal Computer:** It is highly recommended that students have a personal computer to continue their studies at any time. Students are encouraged to take advantage of the Autodesk Education Community to obtain a student version of AutoCAD while they are registered as a student.
- Positive, motivated, respectful, and helpful classroom character

Instructors

Dave C. Bren, PE, MSCE

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 instructed the Civil Engineering Technology program at Bellingham Technical College from 1997-2006 while continuing to consult in the industry. Mr. Bren continues to consult in the industry while teaching at the Washington Engineering Institute.

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

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 (20%) and class drawings projects (80%).

July 2010 – Civil / Survey CAD Level 1 – ENGR 111

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
						1		2		3		4	
5		6	Chapter 1	7		8	Chapter 2	9		10	Optional CAD Lab	11	
		6:00-9:00 PM AutoCAD Interface Drawing Setup Lines, Points, and Text <u>EX-1:</u> Property Boundary				6:00-9:00 PM Drawing Orientation Layers and Properties Modelspace Plotting <u>EX-2:</u> APWA Titleblock <u>EX-3:</u> Modelspace Plotting				12:00-6:00 PM Prepare 24x36 Titleblock Submit DWG by email 4-11-10 <u>DWG-1:</u> APWA Titleblock			
12		13	Chapter 3	14		15	Chapter 4	16		17	Field Survey & Lab	18	
		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				6:00-9:00 PM Temporary & Running Osnaps Offset, Divide, & Measure Filters & Transparent Commands <u>EX-6:</u> Radial Survey				12:00-6:00 PM 8-11 AM Field Survey Prepare Radial Survey Drawing Submit DWG by email 4-18-10 <u>DWG-2:</u> Radial Survey			
19		20	Chapter 5	21		22	Chapter 6	23		24	Optional CAD Lab	25	
		6:00-9:00 PM Text Style and Importing Paperspace DVIEW and UCS <u>EX-7:</u> Paperspace Plotting				6:00-9:00 PM Editing Commands <u>EX-8:</u> Plan View Fundamentals				12:00-6:00 PM Prepare Plan View drawing Submit DWG by email 4-25-10 <u>DWG-3:</u> Plan View Drawing			
26		27	Chapter 7	28		29	Chapter 8	30		31	Optional CAD Lab		
		6:00-9:00 PM Polylines and Area Fills <u>EX-9:</u> Profile View Fundamentals				6:00-9:00 PM Drawing Data <u>EX-10:</u> Utilities Fundamentals				12:00-6:00 PM Prepare Utilities drawing Submit DWG by email 5-2-10 <u>DWG-4:</u> Utilities Drawing			

Washington Engineering Institute, PO Box 483, Custer WA 98240

website: www.weiedu.org

email: admin@weiedu.org

phone: (360) 739-1428



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	ENGR 111 – Civil / Survey CAD Level 1
Class Month / Date	July 2010

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