

Civil 3D Level 1

ENGR 211 – 5 Credits/\$400 – August 2010

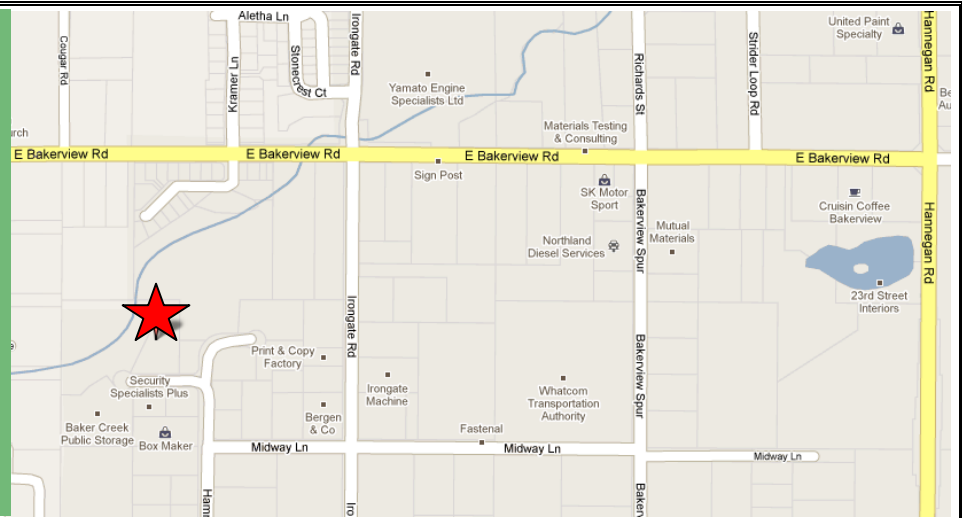


Class Description:

This class is a practical hands-on experience. Students will work through a basic road design project from beginning to end using Civil 3D, showing many different methods of using Civil 3D to accomplish certain tasks and solve problems along the way. The class covers the basics of basemap preparation, preliminary layout, survey plan, surfaces generation, horizontal alignments, profiles, corridor modeling, and grading.

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 August 3rd to August 26th**. This provides (8) evening classes to cover the course material. Please see the Class Calendar on the third page for course material.

Cost, Capacity, and Registration:

The 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**

Class Materials Provided:

- **Hardware:** The school provides a 17" screen laptop for your use during class time.
- **Software:** The school provides Licensed Civil 3D software for your use during class and lab time.
- **Lecture Notes:** Various lecture handouts are provided by the school as needed.

Class Materials Not Provided:

- **USB Drive:** Please obtain a 4GB or larger USB drive prior to the first class.

Instructor

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 Drawing Exam and Grades:

Grades will be determined by attendance character (50%) and a final drawing exam (50%). Students wishing to audit the course do not need to take the final exam.

August 2010 – Civil 3D Level 1 – ENGR 211

| Monday | | Tuesday | | Wednesday | | Thursday | | Friday | | Saturday | | Sunday | |
|--------|--|--|-------------------------------|-----------|--|---|---------------------|--------|--|--|-----------------|--------|--|
| 2 | | 3 | Interface & Styles | 4 | | 5 | Alignments | 6 | | 7 | | 8 | |
| | | 6:00-9:00 PM Orientation Interface Styles | | | | 6:00-9:00 PM Horizontal Alignments Labeling Alignments ASCII Stakeout File Exporting Point Files | | | | | | | |
| 9 | | 10 | Points | 11 | | 12 | Surfaces | 13 | | 14 | | 15 | |
| | | 6:00-9:00 PM Point Description Keys and Styles Point Import and Export Parcel Definition Parcel Line Labels and Tables | | | | 6:00-9:00 PM Surface Definition Breakline Definition Contour Styles Contour Labeling | | | | | | | |
| 16 | | 17 | Parcels | 18 | | 19 | Profiles | 20 | | 21 | | 22 | |
| | | 6:00-9:00 PM Parcel Styles and Labeling Parcel Division by Alignment Parcel Layout Tools | | | | 6:00-9:00 PM Design Grid Profile Styles EG Profiles FG Profiles | | | | | | | |
| 23 | | 24 | Road Corridors | 25 | | 26 | Site Grading | 27 | | 28 | Optional | 29 | |
| | | 6:00-9:00 PM Road Assemblies Road Corridors Road Sections Road Surfaces | | | | 6:00-9:00 PM Grading Feature Lines Grading Criteria Grading Groups and Composite Surfaces Volume Calculations | | | | 9:00-12:00 AM Final Exam for Students that require transcript grade. | | | |
| 30 | | 31 | | | | | | | | | | | |



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 211 – Civil 3D Level 1 |
| Class Month / Date | August 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