



January 2012 Course Outline

C2 Effective Structural Modeling

Offered via the classroom and web cast

Purpose: This course will develop the student's ability to solve common structural analysis problems using commercial frame stiffness and finite element software. The focus is on building efficient and effective computer models that are truly representative of a structure's behavior under loading. Access to a standard desktop computer is required. Students will receive version 10L of S-Frame[®] software (limited capacity educational version) by S-Frame Software Inc. as part of the course materials.

Selected Topics: Frame analysis concepts; introduction to the finite element method; frame structures; walls and diaphragms; roofs, floors and slabs; beams on elastic foundation; foundations and soil-structure interaction; special material property considerations.

Instructor: *Bob Schubak*, Ph.D., P.Eng., BC Hydro

Contact: *Bob Schubak*, e-mail: bob_schubak@shaw.ca

Communications: Notices to students and questions outside of class will be handled strictly through e-mail.

Submission of Assignments: Web cast students will be expected to submit electronic course assignments in the format prescribed by the instructor. All other students are required to submit their assignments at the beginning of the next class in hardcopy.

Student Code of Conduct: Registration in this course confirms that the student has read, and will abide by, the Student Code of Conduct: http://seabc.ca/documents/course_outlines/StudentCodeOfConduct.pdf

Schedule: 12 Tuesdays, 6:30 to 8:30 P.M., January 24 to April 17, 2012 (**Mid-term break:** March 6)

Venue: Alma Van Dusen room, Vancouver Public Library, 350 West Georgia Street, Vancouver

Internet: This course is being offered **via the internet** as well as in the classroom. As it is a live transmission, the dates and times of the classes are the same as in the classroom. Should you wish to take this course via the internet, please complete the application form provided for internet courses.

System requirements for CSE Program LIVE e-learning Training:

- ✓ Any DSL or Cable Connection better than 56K. (Boosted 56K also works. Please test to be sure)
- ✓ A microphone and speakers or headset plugged into your PC.
- ✓ PC with Windows 2000 or XP running a processor greater than 750 MHz. with Ram of 256 or greater.