## CVET 240C : Timber and Steel Design

The study of structural steel and timber that involves the design and analysis of beams with regard to bending, shear, and deflection. Columns are studied with respect to axial and eccentric loading. Miscellaneous structural elements such as beam-bearing plates, column base plates, and welded and bolted connections are also designed. The student is taught to make calculations manually then with the aid of computer software. The lab time (2 hours per week) is dedicated to activities during which the student is fully involved in the design, analysis, construction, and testing of timber and steel beams, columns, connections, bracing systems, load packages, and simple frames. The observations and results are documented through calculations, drawings, photos, and computer-aided design.

Credits 4 Lab/Practicum/Clinical Hours 2 Lecture Hours 3 Prerequisite Courses ARET 120C ARET 150C