RED RIVER COLLEGE

Structural Analysis

Technology Solutions for the Workplace

INQUIRIES:

Course details:
rrc.ca/techsolutions

Course specific inquiries:
techsolutions@rrc.ca
204.632.2942

Subscribe to our blog:
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Please place Course Code on the Registration form AND include if you are GST exempt

Course description:

The aim of this course is to introduce students to the basic principles of analyzing structures – both qualitatively and quantitatively. The course consists of analysis of beams and frames to determine external reactions and internal forces (axial force, shear and bending moment), sketching approximate deflected shapes for beams, using beam diagrams to predict maximum shear, moments and deflections, and applying the determinacy test to beams and frames to establish degree of indeterminacy and identifying stable and unstable structures. Students learn to calculate normal and shear stresses due to bending, sketch these distributions, and apply them to design decisions. Finally, students are introduced to lateral load resisting systems, as well as Limit States Design as a lead-in to Structural Design.

Each day will end with a quiz to review material taught that day. The final test will be on the Friday.

Prior learning:

- CIVL-1011 Algebra/Trigonometry 1 or equivalent
- CIVL-2023 Algebra/Trigonometry 2 or equivalent
- Statics or Mechanics of Materials (Recommended)

Benefits:

Develop a sense of “structural intuition” related to structural stability, load path through a structure, and the aspects considered preparing a building design. Further you will understand the limit states that form the basis of building analysis & design.

Who should attend?

Individuals who work with Structural Engineers and wish to gain a better understanding of terminology and fundamental principles of how structures work.

Course Dates and Costs:

Dates: May 22-25 &28, 2018
Times: Daily from 8 am – 4pm
Cost: $775
Course Code: CMDP – 2015, Section 2
Location: Red River College, Notre Dame Campus
Registration deadline: April 23, 2018

Registrations to techsolutions@rrc.ca