

## Civil Engineering Capstone Design Course at Schulich School of Engineering

### Information for potential industry advisors

In the fall and winter terms, 4<sup>th</sup> year Civil Engineering students take a design course, ENCI 570:

*Team design project applying engineering and project management principles to civil engineering design problems; Consideration of technical, resource allocation and business aspects of project; Development of project scope, design, specifications, scheduling and documentation; Elements of practical team management and leadership; Specific guidance provided by academic and industry advisors.*

**Student teams:** There are typically about 12 teams, each comprised of about 4 to 8 students. Each team works on one project from September to April with advice from an industry advisor and an academic advisor. Each student should work about 200 hours on the project (100 hours per semester).

**Source of projects:** Some academic advisors identify a project in consultation with their industry contacts, who often becomes the industry advisor. Sometimes industry leaders contact the course coordinator ([Jacob.lamb@ucalgary.ca](mailto:Jacob.lamb@ucalgary.ca)), or vice versa.

**What makes a good student project?** One from which the students will learn about the design process and from working on a design team. Often this is a potential project that may or may not be designed and built. If the scope is vague, the student team, in consultation with their advisors, need to develop a specific scope early in the fall term. Projects may be cross disciplinary or may fit into traditional sub-disciplines, e.g. structures, transportation, geotechnical, environmental. Most projects are in the Calgary area or southern Alberta and many involve site visits.

**Benefits of being an industry advisor:** We hope given you are reading this document that you agree that advising students and being involved with the Schulich School of Engineering is a rewarding experience in of itself. Beyond the community contribution advising represents, industry collaborators get to interact with a team of talented 4<sup>th</sup> year students curious in your project and company, and advisors will receive copies of the student final reports and designs, which may be helpful if the project is subsequently pursued.

### What is required of an industrial advisor?

In consultation with an academic advisor or the course coordinator, develop a half-page description of the project between May and mid-August. Projects must involve engineering design and analysis.

Provide a clear description of the project, the expected outcome and deliverables, and the type of support (financial/technical) that your company will provide. Also, assign a representative who will be liaising with the students and the course instructor over the course of the academic year. Financial support from the industry side is not necessary. Industry advisors are expected to attend a few sessions for project presentations and evaluations at the university at various stages of project progress.

**Got an idea for a project? Or seeking further information?** Please contact Jacob Lamb at [Jacob.lamb@ucalgary.ca](mailto:Jacob.lamb@ucalgary.ca)