#### **DESIGN SPONSORSHIP INFORMATION**



Dear Project Sponsor,

We would like to thank you for considering the sponsorship of an engineering design project for fourth year students of the Schulich School of Engineering, University of Calgary. Our fourth-year capstone design courses bring groups of students together to apply their academic and engineering skills in a single unique project. Listed below are the potential benefits of your participation via project sponsorship.

- Give back to the community and create a strong corporate connection with the University of Calgary.
- Experience personalized professional development by mentoring a group of engineering students. Note that mentoring time from participating in this program can be reported as PDH with APEGA.
- Get help on back-burner type projects that have been lingering in your company.
- Find a new perspective on old issues by working with engineering students through a disciplined engineering design process.
- Gain recruiting exposure with the graduating class of engineering students.

Through our experience connecting industry with design education, we have found the following project criteria that help both the students and the project sponsors succeed.

- Projects should involve the aspects of design, engineering analysis, and verification.
- Projects should have a scope suitable for a group of 4-6 students working over an 8-month period. The
  expected number of hours spent on all aspects of this course is 260 hours of work per student over an 8month period. This includes individual studies, technical work, meetings, documentation, and project
  management.
- Projects should not have urgent or strict deadlines.
- Projects should be flexible and allow for multiple solution ideas.
- Project outcomes should satisfy a demonstrable need.
- Projects leading to physical prototypes are preferred; as long as prototype can be made at a reasonable cost, but this is not necessary.
- Projects should use known technology there is not enough time in the course for large technological uncertainties.

If you agree to sponsor a design project, please fill in the Project Proposal Form below, providing 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.

Based on the past experience, there is a clear correlation between the quality of the projects and the level of engagement of the project sponsor. It is expected that the students be provided with a reasonable amount of advice and mentorship from your side over the term of the project to make the project a success. The minimum expectation is for the students to meet the industry representative at least two times during the Fall semester and at least once during the Winter semester. The objective is to ensure the project's progress, and the final

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outcome meets the sponsor's expectation. Furthermore, interactions with the project sponsor would provide students with the opportunity of working with fellow industry professionals and gain real-world problem solving exposure and experience. The following are the contractual notes that apply to this sponsorship relation.

Contractual Notes				
Deliverables	While functional prototypes are sometimes developed through the completion of projects, the only deliverable that the Department of Mechanical and Manufacturing Engineering can guarantee is a final report drafted by the student group working on the project. Furthermore, we cannot guarantee that the report will contain significant findings.			
Project Costs	While limited supports for the prototype development are available (e.g., materials, 3D printing and access to machine shop), the Department of Mechanical and Manufacturing Engineering will not provide any other financial support for completing the project (e.g., any unusual or major single item expenses involved with fabrication of the prototype). Costs need to be discussed, decided upon, and borne by the student group and/or the project sponsor.			
Intellectual Property	It is the responsibility of the sponsor to take action to secure and protect any intellectual property that may arise.			
Due Diligence	Since these projects are conducted by engineering students who have not yet been accredited with Professional Engineering status, the sponsor must perform due-diligence on any design or information that arises from the course before utilizing or implementing the design. Therefore, the University cannot take any responsibility for liability.			
Mentorship	A company representative should meet with the student group at least three times: two times in the Fall term and at the final presentation. However, there is a strong correlation between sponsor engagement and project outcomes. In addition to a mentor, it is nice to have a champion within the company that is interested in the successful outcome of the project and can provide ongoing support and mentorship to the students.			
Confidentiality	The Department and the University will not contract for confidentiality associated with the sponsorship of a project in this course. As an educational institution, we need to have the flexibility to discuss the project with the students and faculty project advisors. Further, we do not have the control over our students that occurs within an employee/employer relationship, making it difficult to maintain confidentiality.			
Educational Mission	In this course, the mission of the University is educational. While sponsors can derive great benefit from their involvement and sponsorship, ultimately the sponsor must be receptive to the course curriculum and support of the educational objectives.			
Voluntary Financial Support	A design project involves various material and overhead costs (e.g., faculty / technician time, teaching assistants, course administration, building and testing prototypes, and design and simulation software). To sustain high-quality engineering design education, it is appreciated if the sponsoring companies can consider voluntary financial support.			

### **DESIGN SPONSORSHIP INFORMATION**



Please do not hesitate to contact the following instructors if you need further information

Multidisciplinary design projects: Arief Budiman (403-220-6171; <a href="mailto:rbudiman@ucalgary.ca">rbudiman@ucalgary.ca</a>)

We look forward to a rewarding relationship between your organization and our students over the course of this fourth-year capstone design project.

Sincerely,

Arief Budiman Instructor of ENGG 501/502 Schulich School of Engineering University of Calgary

# **PROJECT PROPOSAL FORM**



## Multidisciplinary Capstone Design Project (ENGG 501/502)

If your project is determined to be outside of the scope of the course or the capabilities of the students, you will be contacted and provided input to help re-define your project.

help re-define your project.  You will be notified by mid-August if your project has been accepted. However, we cannot confirm if a student team will be assigned to your project until after classes begin.					
Company Name:					
Company Contact Person for Project:					
Contact Name:					
Phone:		Email:			
Mailing Address:					
Preliminary Company Project Advisor (if different from contact)					
Voluntary Financial Support (please select one): ☐ <u>Yes</u> , Amount: ☐ <u>No</u>			□ <u>No</u>		
Project Title:					
Brief Project Description:					
Expected Outcome and Deliverables:					