

# Elizabethtown College - Etown Engineering Engage Industry-Sponsored Capstone Project Proposal Form

This Project Proposal relates to and shall be incorporated into the Sponsorship Agreement for Student Projects entered into between Elizabethtown College and the Sponsor. For questions about your proposal, contact Stephanie Zegers at <u>zegerss@etown.edu</u>.

Note that you may use this pdf to submit a project, but we prefer for you to fill out this information in the web form at <a href="http://www.etown.edu/engage">www.etown.edu/engage</a>

# **Sponsor Information**

**Company Name:** 

Location:

	Primary Technical Liaison	Secondary Technical Liaison
Name:		
Title:		
Email:		
Phone:		

The Technical Liaison Engineer(s) are the primary technical point of contact for the project team. They are expected to be available to meet with students at least biweekly (likely virtually), participate if requested in key design reviews and feedback sessions, support students with necessary resources such as data, access to company facilities, or materials (if applicable), and provide feedback to improve the program for future industry partners.

#### **Project Type**

If you don't have a specific project in mind, but want to engage with our students and support our programs, you are welcome to select the Extended Entrepreneurial Option. Both options are supported with a \$5000 fee. For context, that is about the same investment as a summer intern paid at \$15/hour for 8 weeks (320 hours), but with the capstone projects, teams put in about 600-1200+ hours of student work).

Extended Entrepreuerial Option	Traditional Option
~18 months	~9 months
Engineering only	CS or Engineering
Spring (Phase 1 Exploration & Problem	
<b>Definition):</b> Student teams conduct background	
research, define a problem of their choosing, and	
develop early design concepts.	
Fall (Phase 2 Detailed Design & Prototyping):	Fall: (Background, Design & Prototyping): Students
Students refine their approach, conduct feasibility	conduct background research, conduct feasibility
studies with engineering analysis, and develop initial	studies with engineering analysis, and develop initial
designs, prototypes or solutions.	designs, prototypes or solutions.
Spring (Phase 3 Testing & Implementation): Final	Spring: (Testing & Implementation): Final design
design iteration, prototype testing, and preparation of	iteration, prototype testing, and preparation of final
final deliverables.	deliverables.

Select one:

- □ Extended Entrepreneurial Option (18 months, Engineering only)
- □ Traditional Option (9 months, Engineering or CS)

# **Extended Entrepreneurial Option**

*If you selected the Traditional Option, please proceed to that section.* For the Extended Entrepreneurial Option, please help us understand about potential opportunities students could identify in your company.

- **Company Overview (2-3 sentences):** Describe a bit about what your company does.
- **Identifying Opportunities:** Generally, what roles and processes might students interview and observe to identify an opportunity to design something for your company?

• **Design Aspects:** How might an identified opportunity result in design work for the students?

- **Desired Skills:** *Identify key knowledge awares that may be beneficial to the project (e.g., mechanical design, programming, thermodynamics)*
- Additional Information: Please provide any additional information not already described above that might be useful to the student team when working on this project.

# **Traditional Project Information**

This information will be disclosed publicly to advertise the project and should be safe to share publicly without requiring a signed confidentiality agreement. This information will be shared during the student project selection process. The project title and description should excite the students and entice them to select your project. Think of this as your sales pitch to the students!

- Project Title:
- **Project Overview (2-3 sentences):** Summarize the challenge and goals of the project.

• **Project Background & Motivation:** Describe the problem or opportunity this project addresses, why it is important, and how it aligns with your organization's needs.

• **Desired Skills**: Identify key knowledge areas that may be beneficial to the project (e.g., mechanical design, thermodynamics, software development, database design, or UI/UX).

# **Scope & Deliverables**

• **Project Scope:** Clearly define what the students will (and will NOT) work on, including any limitations or boundaries.

• **Project Design Components:** Describe how students will engage in an iterative design process, applying engineering or computing principles to develop a system, component, or process that meets specified needs. Highlight opportunities to analyze trade-offs (e.g., performance vs. usability), optimize solutions, and work within realistic constraints such as cost, security, maintainability, or scalability.

• **Deliverables:** List the expected final deliverables/outputs to be provided (e.g., prototype, report, software, analysis, etc.). Include specific deliverables, baseline and stretch goals, along with critical measures by which the team can be evaluated against. For software projects, please describe the expected level of documentation, testing, and maintainability (e.g., user guides, code repositories, hand-off notes).

• **Assumptions:** What is required for the project's success? (e.g. Sponsor resources, special skills, site visits, equipment, space requirement) If this project extends an existing tool, database, or codebase, please describe its structure, programming language(s), and any documentation that will be made available to the student team.

#### **Implementation & Impact**

• How does your company plan to use or implement the results of this project? *Please* describe the organization's plans for implementation of this project once it is completed. (Note, if this project is one component of a larger process, please describe how this project fits into the larger context.) For software-related projects, describe how the system will be integrated into existing workflows or maintained after the project ends.

• What potential business or operational impact could this project have? What are the business reasons/ benefits of the project? Please provide quantitative estimates if possible, e.g. A solution to this problem could save our company \$100,000 per year.

• Additional Information: Please provide any additional information not already described above that might be useful to the student team when working on this project.

# For All Project Types:

#### Legal & Compliance Considerations

- Will this project require an NDA? 
  Ves 
  No
- Are there export control restrictions?  $\Box$  Yes  $\Box$  No
- Are there U.S. Citizen restrictions?  $\Box$  Yes  $\Box$  No
- Are there safety concerns or material hazards?  $\Box$  Yes  $\Box$  No (If yes, please describe.)

# **Payment & Administrative Details**

Preferred Payment Method: 
Check 
Electronic Transfer EFT/ACH

Does Etown need to be set up as a vendor?  $\Box$  Yes  $\Box$  No

Does your organization require a Purchase Order number to process payment? If possible, the executed sponsorship agreement will serve as the project invoice.  $\Box$  Yes  $\Box$  No

	Executive Sponsor Executor of the project agreement	Invoicing/Accounts Payable Contact
Name:		
Title:		
Email:		
Phone:		

#### **Next Steps**

- Submit completed forms to EngineeringEngage@Etown.edu
- Questions? Contact Stephanie Zegers at zegerss@etown.edu