**2025 Spring Engineering Project Showcase (EPS)**

**TEMPLATE for Collecting Information Needed for Team Registration**

This template was designed to help teams ***collect information*** required for their team registration during a team meeting and then the primary member will use this information to register the team at the Showcase Portal. *You do not need to submit this form anywhere.*

* **PRIMARY MEMBER** – Choose a member who will serve as the primary contact for the team. Primary contacts will be responsible for registering the team, have access to the portal to see the judge scores and comments, and be responsible for sharing that information with the team.

\_\_\_\_\_\_\_Adrian Guzman\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **PROJECT CAPSTONE CATEGORY** - The major within which your capstone falls under.
  + \_\_\_Aerospace Engineering
  + \_\_\_Architectural Engineering
  + \_\_\_Biological & Agricultural Engineering
  + \_\_\_Biomedical Engineering
  + \_\_\_Chemical Engineering
  + \_\_\_Computer Science & Engineering
  + \_X\_Electrical & Computer Engineering
  + \_\_\_Electronic Systems Engineering Technology
  + \_\_\_Manufacturing & Mechanical Engineering Technology
  + \_\_\_Multidisciplinary Engineering Technology
  + \_\_\_Industrial & Systems Engineering
  + \_\_\_Interdisciplinary Engineering
  + \_\_\_Mechanical Engineering
  + \_\_\_Material Science & Engineering
  + \_\_\_Ocean Engineering
  + \_\_\_OTHER CAPSTONE – Large Capstone Teams – (10 or More Members)

\_\_\_\_\_Electrical & Computer Engineering\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **PROJECT TITLE –** Choose a title for your project which will be used in (you will not be able to change it):
  + Your Poster Title
  + Your team identification within the judging portal by the judges
  + Your project title in the Showcase booklet

\_\_\_\_\_Multi-Axis Cobot for Factory Automation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **PROJECT DESCRIPTION – Short project description (550 – 700 characters).** *The judges will read this before meeting with your team during the Showcase. Your description should address questions such as: What problem are you solving? What engineering challenge do you have in this project? How would your solution benefit the sponsor?* ***Character count: 789 / 5000 (550 min)***

Factories and commercial industries use cobots to perform tasks that are unsafe and

require numerous movements that would be considered strenuous for humans. Thus, the goal of this cobot is to make the production process safer and more efficient. For this

project, we are developing a multi-axis cobot that will facilitate the movement of objects within a factory setting. The cobot will operate through Texas Instruments DRV816x motor drivers and the C2000 family of microcontrollers. Furthermore, it will be wirelessly controlled using a mobile application and powered through a 48V battery. This cobot solution will demonstrate functionality of TI’s new DRV816x class of motor drivers while also integrating the motor drivers to a full system, creating a fully functional end equipment.

* **TEAM SIZE – How many members are part of your team, including you?**

**4**

* **TEAM MEMBERS –** Add all members of your team, including the primary member

|  | First name | Last name | TAMU email |
| --- | --- | --- | --- |
| Member 1 – Primary | Adrian | Guzman | cppolar269@tamu.edu |
| Member 2 | Emily | Hamsa | eh870545@tamu.edu |
| Member 3 | Ethan | Woods | ewoods738@tamu.edu |
| Member 4 | Jaishil | Shah | jaishilshah@tamu.edu |
| Member 5 |  |  |  |
| Member 6 |  |  |  |

* **FACULTY INFORMATION**

|  | First name | Last name | TAMU email |
| --- | --- | --- | --- |
| Faculty Member | Prasad | Enjeti | enjeti@tamu.edu |

* **PROJECT SPONSOR**
  + **TYPE** – Choose one from the list below:
    - \_X\_Industry sponsored capstone
    - \_\_\_Government sponsored capstone
    - \_\_\_Faculty sponsored capstone
    - \_\_\_Not for Profit Organization
    - \_\_\_Student Sponsored
    - \_\_\_Other
  + **NAME** – List the name of the organization who is sponsoring your project. Please do not include names of individuals, only organizations. Examples: Boeing, US Air Force, TAMU – Department of Mechanical Engineering

\_\_\_\_Texas Instruments\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + **SPONSOR APPROVAL** –All teams are required to have approval from their project sponsor for presenting at the Showcase. Check one below:
    - \_\_X\_\_**YES,** we have received sponsor approval
    - \_\_\_\_**NOT YET**, we are still waiting for sponsor approval
  + **NON-DISCLOSURE AGREEMENT (NDA) –** Has your team signed a Non-Disclosure Agreement (NDA) with your sponsor?
    - \_\_\_\_**YES,** we signed an NDA
    - \_\_X\_\_**NOT YET**, we did not have to sign an NDA
  + **INTELLECTUAL PROPERTY (IP)–** Has your team signed an Intellectual Property (IP) Agreement with your sponsor?
    - **\_\_\_\_YES,** we signed an IP Agreement
    - **\_\_X\_\_NOT YET,** we did not have to sign an IP Agreement
* **ELECTRICITY REQUIREMENTS** – We have limited number of booths with power. Do you anticipate requiring power to support your prototype on the day of the Showcase? We will not be able provide power to charge laptops unless your prototype includes a software demo.
  + \_X\_Yes
  + \_\_No
* **EXTRA SPACE REQUIREMENTS** – Your team will be provided access to a 72inx30in table to place your poster and prototype. Do you anticipate requiring extra space to display your prototype?(Choose one)
  + \_X\_No, we need a regular booth inside ZACH
  + \_\_\_Yes, we need a booth inside ZACH with extra space to accommodate a large project
  + \_\_\_Yes, we need a booth outside ZACH
* **PRIMARY MEMBER AGREEMENT** – I understand that I am the primary contact for the team and the only person who will be able to update the team information and receive updates regarding the event
  + **\_X\_\_ I understand**

**What is NEXT?**

Your primary team member will use this information to register your team by the deadline (02/29/2024) at the **Engineering Project Showcase (EPS) Portal** ([link](https://tamueps.secure-platform.com/students/))

**Note:** To register your team, you DO NOT need to create an account. At the **EPS Portal** ([link](https://tamueps.secure-platform.com/students/)), choose **STUDENT REGISTRATION** and then click on the **TAMU SSO** box and then Continue to Awards Portal.

Use your TAMU credentials to access the team registration page.

**If you have any questions, email us at inp@tamu.edu**