

## View results

Respondent

24

Harith Palani

49:45

Time to complete

1. Date of this semester progress report submission \*

5/13/2025

2. Name of project exactly as it was listed in your award letter \*

Ghost Electric Motorcycles

3. Date of original award letter \*

April 4th, 2024

4. Date of expiration listed on award letter (or on scope change approval if more recent) \*

04/03/2026

5. How much was your award (i.e., original award plus any approved budget increases)? \*

9981.07

6. How much of your award has been spent to date (in dollars)? \*

9786.34

7. Date of forecasted project completion \*

04/3/2026

8. Have you submitted one or more semester progress reports previously? \*

☒ YES

☐ NO

9. Describe, in detail, what has been completed on the project since the last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? \*

Since our last semester progress report our team has made great strides in the understanding of the engineering process of our bike, both on the mechanical and the electrical teams. The frame team devised a very smart way to ascertain the bike's center of gravity, while the drive train team finished 3-D designing the motor mount and the secondary shaft that will allow the motor to spin both wheels. The suspension team worked very hard all semester to devise multiple calculators that deal with suspension bounce and rigidity that will make physically building the suspension systems into the bike much easier for next semester. The electrical team has done a lot of work with the wiring diagrams for a multitude of safety circuits for the bike, learning good wiring diagram practices and new software's such as EagleCad along the way.

10. Describe, in detail, the project's challenges/obstacles since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? \*

The biggest challenge for the team has been on the electrical side of things. Last semester the team members lacked the basic background knowledge of electrical systems in order to make a big impact on the electrical side of things for the motorcycle. However, this semester we are lucky to have a mentor working with the electrical team. His name is Leo Song, and is a PhD student at the University. He was a co-founder on the Purdue Electrical Formula Car team, and he has been dispensing all of his valuable knowledge to all the members of the electrical team. The addition of Leo to the team has really sped up the design process.

11. Describe, in detail, the project's successes since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? \*

Our main success was finalizing a battery design in CAD. This was a project we worked a lot on and re-designed a multitude of times, but we finally have completed the design and are ready to start manufacturing the battery, as soon as we get back to campus. Another big success was the design of the secondary shaft. A lot of math and design went into this, and getting it done right before the semester ended was a huge success for the team.

12. Did your project have any changes to its team that SSC should know about (e.g., project lead, faculty/staff advisor, departmental financial contact)? \*

**NOTE: If yes, please complete the SSC Project Contact Information Change Form located at this link: <https://forms.office.com/r/uBjx9nmNpG>**

☐ YES

☒ NO

13. Complete and upload the semester financial documentation for your project. You should reflect all expenditures since your last semester project report. We strongly suggest that you also upload supporting financial documentation from Banner for your award CFOP. NOTE: When your project is completed and/or expired (whichever comes first), any remaining project funds will be transferred back to the SSC.

<https://studentengagement.illinois.edu/sites/default/files/2024-09/SSC-Budget-Timeline-SEMESTER-PROGRESS-REPORT-template.xlsx>

\*

 [SSC - Ghost Electric Motorcycles Semester Upd Harith Palani.xlsx](#)

 [Ghost Audited Financials Harith Palani.xlsx](#)

14. (OPTIONAL FOR SEMESTER REPORT) Upload project marketing and/or media not previously submitted in semester progress reports.

**NOTE: Project marketing and/or media must include SSC's logo and/or a statement of which fee(s) funded the project.**