

Step 1: Determine student involvement

- Will the course run as a curricular or extracurricular experience?
- If curricular integration, determine “fit” of project based on course topics, required vs elective, etc.
 - Determine class structure- will the entire class work one project together, will teams all try to solve the same problem with the “best” solution advancing, or will there be different projects for each team? This determines how many projects/partners you need.
- If extracurricular, determine student motivation for participating, number of students you plan to support with project(s), need for additional faculty advisor/support and the advertising/sign-up process.
 - Consider engaging with the IEEE student group on campus such as IEEE Student Branch, HKN Chapter, IEEE Technical Society student branch.

Step 2: Find a community partner or partnering organization

- If you already have an organization in mind, reach out to determine their interest in the project.
- If you don't have an organization in mind, you can possibly use a campus service-learning office, local non-profit networking events, personal connections of others in your network, or even cold-call or cold-email to find possible partners.
- In addition to the community partner, consider partnering with a local IEEE Section for industry and volunteer support.

Step 3: Scoping the project

- Setup a meeting to discuss the organization's needs, project scope, and student expertise to ensure alignment. Ensure you have a specific contact you will use for regular communication and be up-front about your expected time commitment and communication plan- monthly meeting, weekly emails, etc.
- Determine what scaffolding is needed for the project to fit into the academic experience- dates of partner meetings, timeline, possible site visits or field trips, deliverable requirements, etc.
 - Note one opportunity that may work for some institutions is to run service-learning projects during the summer semesters when students might be looking for internships or paid opportunities, but unable to find one. This project could be added to their resume to help for next year's search.
- Based on desired deliverables, determine source of project funding. Possible costs may include site-visit costs, prototype material costs, event or training costs to bring together the students and community members, etc.
 - EPICS in IEEE provides grants for service-learning projects between \$1,000-\$10,000. For more information on the application process visit the [EPICS in IEEE Website](https://www.epics.ieee.org).
 - Check out the EPICS in IEEE budget training for more information on how to set up a budget for an EPICS Proposal.

Step 4: Kick-off the project

- Kick-off may include a site-visit, presentation by the organization, or even pre-prepared video/photos illustrating the challenge area, key stakeholders, and key points of contact the students will have.
- For projects that are intentionally vague, provide an opportunity for students to interview the partner to scope their own project. We suggest requiring approval of project scope early. This is a great way to build skills such as expanded student curiosity and building connections between academic classwork and a real-world problem.
- Once a solution has been identified by the team, you can submit your project proposal to EPICS in IEEE for potential funding and support. Click here to get started with your proposal and learn about the program's requirements.

Step 5: Provide support for the project

- Regular check-ins are strongly suggested with both student team and partners.
 - EPICS in IEEE projects are required to complete quarterly reports to keep the committee up to date on the progress of the projects- additional support or experts can be requested at this time.
- Provide just-in-time learning that can emphasize specific curricular, project-management, or non-technical skills based on the appropriate scope of the project.
- Determine a plan for deployment if appropriate. Consider legal regulations, liability concerns, and/or IRB protocols that may be necessary for the project to enter any sort of testing phase or in-community deployment.
- EPICS in IEEE offers its projects industry mentors to help them through the process. Some projects may benefit from additional local mentorship as well. Consider using faculty, alumni, or local industry connections, as well as reaching out to local IEEE sections for support.

Step 6: Close-out and Reporting

- Project completion could be determined based on time-span, solution delivery, or other circumstances. After the project is completed (whether successful or not), schedule a debrief with the partner to review their satisfaction with the overall experience and/or solutions.
- Make sure that the teams are tracking their spending and save receipts from purchases for reporting to funders like EPICS in IEEE. EPICS in IEEE requires final budgets to be submitted along with a close out form for the project.
- Consider integrating service-learning best-practices including student reflections and assessment of student/partner experiences throughout the project.
 - EPICS in IEEE can provide resources and sample assessments if needed.
- Consider if there are conferences that the students could present their project work

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Reach out to us directly: epicsinieee@ieee.org