Program Overview

EPICS (Engineering Projects in Community Service) is an innovative and highly successful model for design education where teams of students work on engineering and technology-centered projects to serve the needs of the local community. Started at Purdue University in 1995, EPICS programs are now operating in over twenty universities across the country and globally. The success of this educational model at the university level has encouraged us to expand the model to provide early exposure to the fields of engineering and computing through service learning.

The educational goals of EPICS include broadening students’ 21st century skills through an extended design experience in which they define, design, build, test, deploy, and support real systems. Partnerships with local community/not-for-profit organizations provide motivated and engaged partners who serve as customers and clients. The expectation that their designs will be deployed and used provides a compelling learning environment for students. The resulting experience is well-matched with desired attributes for those who may be interested in pursuing a college education in engineering, computer science, business, liberal arts, consumer and family sciences, or several other disciplines. Preliminary data also suggests that the social context for technical design appeals to underrepresented groups within varying subject areas.

EPICS also seeks to meet the needs of local community service and education organizations that are facing an increasing dependence on technology for the delivery, coordination, accounting, and improvement of the services they provide. These groups often possess neither the expertise to use, nor the budget to design and acquire technological solutions. The EPICS model of service-learning provides long-term and sustained support for these organizations.

Apply to Join EPICS

Completed Memorandums of Understanding (MOU) must be submitted to the EPICS Program Office at Purdue University. Applications will be evaluated when received and the EPICS staff will contact applicants with requests for additional information and/or the status of their application. Schools are required to renew this agreement each year and complete annual reports to be submitted to the EPICS office.

Requirements of EPICS Schools

1. Complete an annual report which includes numbers of students served, estimate of gender and ethnicity, list of community partners, a sample description of a successful project, photo of project.
2. Have students complete an EPICS online pre and post survey by the end of the EPICS class. The surveys will be used by EPICS staff for evaluation and assessment purposes.
3. Participating schools are asked to accommodate site visits by a representative of the EPICS Program upon request.
4. One teacher involved in coordinating and administering EPICS at each individual school is required to participate in an in-person or online EPICS Teacher Training within one year of the signing of this agreement.
5. All EPICS school programs must use the EPICS name and/or logo (provided to you) on all printed materials or items used for promotion of the program.

Guidelines for EPICS Schools

1. Student Participants
   a. Broad participation: While one of the goals is to interest more students in fields of engineering and computing, schools should be open to a wide range of students participating in the EPICS program. Service Learning and the team work required by the EPICS projects will benefit a wide range of students. EPICS schools would be expected to draw from a diverse population of students.
   b. Multidisciplinary collaboration: While each EPICS project is engineering/computing-centered, effectively meeting the community needs requires more than just technology. EPICS design teams need students with diverse expertise and interests.
2. **Willingness and ability of the institution to meet the EPICS core values.**
   a. EPICS students participate in long-term, team-based design projects that solve technology-based problems in the community.
   b. EPICS programs establish partnerships with not-for-profit/community organizations to fulfill the educational needs of student participants as well as the need for community organizations to have access to technology-based solutions for the delivery, coordination, accounting, and improvement of the services they provide.
   c. EPICS community partners assist the student teams in understanding community needs and context for the designs, work with the students throughout the development of their project, and deploy successful projects in the community without obligation for remuneration to the EPICS program.

3. **School Commitment**
   a. The school administration commits to enabling the development of the EPICS program and sustaining it.
   b. The school administration commits to supporting the EPICS teacher(s) and is committed to the program’s success.
   c. The school commits to developing relationships with partners in the community in an effort to address their needs.

4. **Institutional Commitment**
   a. Institutional commitment and administrative support: Commitment of the institution and administration to enable the development of the EPICS program, and a commitment to sustaining it.
   b. Appropriate teacher and administrative leadership: Teachers who are committed to the EPICS program and are appropriately placed in the institution are vital components for a successful program.
   c. Support systems to assist in the community contacts: Companies, university departments, or support services that can assist with local community contacts facilitate the identification of community projects.

5. **Sustaining and institutionalizing school programs.**
   Schools are expected to develop plans in place to sustain and institutionalize the program. Purdue University along with their partnering Universities, High Schools and corporate partners will work with the schools to prepare to sustain their programs and connect them with resources as needed if available in their area.

To read more on EPICS, please go to: [https://engineering.purdue.edu/EPICSHS](https://engineering.purdue.edu/EPICSHS)

**CONTACT INFORMATION**
If you have questions about this request for a Memorandum of Understanding, the EPICS model, the EPICS K12 Program, or expectations in this document, please direct inquiries to the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
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<tbody>
<tr>
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</tbody>
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E-mail completed MOU to epics.high@purdue.edu

Or mail to: EPICS Program
Purdue University
Neil Armstrong Hall of Engineering, Rm. 1214
701 W. Stadium Avenue
West Lafayette, IN. 47907

Please complete the following information.
Contact's Name:  
Institution:  
Department:  
Phone:  
Fax:  
E-mail:  
Address:  
City:  
State:  
Zip:  

Program Summary Form

Local Community’s Population:  

Institution’s Total Enrollment:  

Estimate the number of students you expect to participate in your EPICS program:  

Percentage of Students on Free & Reduced Lunch at your school:  

Program Model (Circle One)  After-school  Core Curriculum  Elective  Other  

If you answered other, please explain:  

Please list the departments/grade levels that will be participating in your school’s EPICS program.  

Memorandum Content and Format (please include as separate attachment)

Program Narrative –The narrative should highlight your EPICS program summary and touch on the bulleted items listed below.

a) Describe the course or program or what course or after school program will this be integrated. What are the learning goals? Projected number and demographics of students who will participate.

b) How does the program integrate design into the course or experience?

c) Describe the community partner for the project.

d) List the key contributors to this project including their roles.

Approval Signatures

By signing this MOU with Purdue University, I agree to the contents of the MOU and commit our institution to participating in the EPICS High Program.