EPICS in IEEE

STUDENTS ENGINEERING A BRIGHTER FUTURE

Samarth Deo - Chair EPICS in IEEE
What is EPICS in IEEE?

An IEEE Foundation Signature program that supports projects and programs that advance technology and benefit humanity.
Vision to change the world

• Empowering Students. Improving Communities.
• The heart of EPICS in IEEE is service learning

152
EPICS in IEEE supported & deployed projects globally that provide challenging and unique educational experience to over 11,000+
Pre-University and University students who have used knowledge gained in classrooms to engineer real solutions for their communities.

VISION TO CHANGE THE WORLD

EPICS in IEEE’s vision is a world where Engineering Education is Intimately Connected to Community Service.

The program strives to assist educators and students alike to apply their knowledge in engineering disciplines to build not just products, but to build and improve community!
INNOVATION POWERED BY STUDENTS & VOLUNTEERS

PRE-UNIVERSITY STUDENTS: 4000+
UNIVERSITY STUDENTS: 6800+
IEEE VOLUNTEERS: 530+

INVESTED IN OUR STUDENTS BY DONORS: $694,227

100% PARTICIPANTS
Now see engineering as a means for social change
Showed improvements in leadership and communication skills

38% OF PARTICIPANTS ARE WOMEN

Key performance indicators
Student-focused
- Student numbers and demographics
- Pre-university student numbers and demographics
- Discipline knowledge
- Design Knowledge
- Critical Thinking
- Leadership
- Persistence in discipline

Community or Beneficiaries
- Number of Project funded
- Project types funded
- Project location
- Number of people directly impacted
- Long-term impact of project
- Lifespan of Project

IEEE Involvement
- # of volunteers by category (YP, life members)
- # of student members
- # of students who continue IEEE membership
- # of local sections involved

Donors
- # of donors
- # of multi-year donors
- Domestic and Global donor breakdown
- Micro donations vs larger donations
- Unrestricted vs restricted donor breakdowns

School and University
- # of University Partners
- # of universities
- # of pre-university partnerships
- # of faculty impacted
- # of teachers impacted

Industry
- # of industry partners
- # of industry mentors
- Longevity of industry involvement
- # of employee hours volunteered
EPICS in IEEE funding

Funding usage: project supplies, $1k-10k

Multi-year projects are approved and reviewed annually

Any IEEE member or section can apply (professional or collegiate)

No deadlines: proposals accepted year round!

Must have students involved (K-12 or college)
Partnerships

To ensure you are helping and not hurting, all EPICS in IEEE projects collaborate with NGOs or nonprofits

• Relationships with local community and understanding of the needs
• Provide maintenance and support for solution after deployment
STEM FOR ALL
Oregon State Univ. students developed new and exciting courses and activities that enable people with disabilities to experience and learn STEM related concepts.

BUDDY THE DOG
Students from Stevens Institute of Tech. developed the first transtibial canine robotic leg for buddy the dog.
FLOOD SENSORS
Santa Clara University Students deployed a system of sensors that will give early warning should the local creeks flood.

Future Engineers
University students in Ecuador introduced students from underserved communities how to code and how renewable energy sources work.
Disaster Relief
In the aftermath of Hurricane Maria, EPICS in IEEE supported a project to build charging stations in communities throughout Puerto Rico. In 2019, the success of the project helped lead communities in Puerto Rico to consider “Micro grids” as a long-term solution to future natural disasters.
EPICS in IEEE EXPO's
Where CAN my project be?

To apply for funding for a project or to support/donate to the program, please visit us at www.EpicsInIeee.org
Thank You!

For more information or to learn how you can get involved with EPICS in IEEE please visit us at:

www.EpicsInIeee.org

Or email us at Epics-info@ieee.org