IEEE Educational Activities
Section Education Outreach Committee (SEOC)

Supavadee Aramvith, SEOC Chair
2021 Section Education Outreach Committee

Supavadee Aramvith
SEOC Chair (Region 10)

Region 1
Vince Socci

Region 2
Steve Bonk

Region 3
Damith Wickramanayake

Region 4
Anu Gokhale

Region 5
David Pierce

MGA R1-6 Rep
Loretta Arellano

Region 6
Mostafa Mortezaie

Region 7
Deyasini Majumdar

Region 8
Conrad Attard

Region 9
Betania Filha

Region 10
Preeti Bajaj

MGA R7-10 Rep
Teofilo Ramos

EA staffs support: Rachel Warnick, Jordanna Coyle, Johanna Perez
IEEE EAB - Section Education Outreach Committee

Mission

To engage and support IEEE Sections and the Section Education Activities Chairs/Coordinators in their efforts to promote and implement EAB’s products and services based on local educational needs.

Scope

The SEOC will have the lead responsibility within EAB for building and maintaining strong working relationships with IEEE Regions, Sections, and Chapters in order to work with these organizational units as partners to promote EAB’s products and services.
IEEE Educational Activities

Stephen Phillips, Vice President Educational Activities
Jamie Moesch, Managing Director Educational Activities
Stephen M. Phillips, Ph.D., P.E.

2020-2021 IEEE Vice President, Educational Activities

Professor and Director of the School,
School of Electrical, Computer and Energy Engineering
Arizona State University
IEEE Strategic
2020-2025

OUR MISSION
We foster technological innovation and excellence for the benefit of humanity.

OUR VISION
We will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology, and of technical professionals in improving global conditions.

CORE VALUES
- Trust
- Global Community
- Partnership
- Integrity
- Service to Humanity

IEEE WILL:
- Drive global innovation through broad collaboration and the sharing of knowledge
- Enhance public understanding of engineering and technology and pursue standards for their practical application
- Be a trusted source of educational services and resources to support life-long learning
- Provide opportunities for career and professional development
- Inspire a worldwide audience by building communities that advance technical interests, inform public policy, and expand knowledge for the benefit of humanity

IEEE will foster a collaborative environment that is open, inclusive, and free of bias and will continue to sustain the strength, reach, and vitality of our organization for future generations.

www.ieee.org/strategic-plan
Approved by the IEEE Board of Directors, November 2019
Education Across IEEE

Expanding our collective impact in education through coordination
IEEE Educational Activities
IEEE Educational Activities

Areas of Focus

Pre-University Activities
TryEngineering.org; Volunteer STEM Portal; Summer Institutes; TryEngineeringTogether

University Activities
Accreditation Coordination; EPICS in IEEE; IEEE-Eta Kappa Nu

Continuing Education
eLearning; Certificates; IEEE Learning Network
IEEE Educational Activities Structure
2021 IEEE Educational Activities Board
Stephen M. Phillips
EAB Vice President
Region 6

Witold M. Kinsner
Past VP, Nominations & Appointments Chair
Region 7

Antonio Ferreira
Treasurer
Region 9

Babak Dastgheib-Beheshti
Continuing Education Committee Chair
Region 1

Timothy Kurzweg
University Resources Committee Chair
Region 2

Lorena Garcia
Pre-University Education Coordination Committee Chair, Region 9

Russ Meier
Technical Activities Board Representative
Region 4

Takako Hashimoto
Technical Activities Board Representative
Region 10

Loretta Arellano
Membership Geographic Activities Board Representative, Region 6

Teofilo Ramos
Membership Geographic Activities Board Representative, Region 9

Avron Barr
Standards Activities Board Representative
Region 6

Ron Jensen
IEEE Eta Kappa Nu President
Region 4

Sohaib Sheikh
Awards & Recognition Committee Chair
Region 8

Supavadee Aramvith
Section Education Outreach Committee Chair
Region 10

Flavia Dinca
Young Professionals Representative
Region 8

Sharon DeVivo
Women in Engineering Representative
Region 1

Jamie Moesch
Secretary

2021 IEEE Educational Activities Board
17 members, 14 voting, 3 non-voting
Learn more about Educational Activities programs

www.ieee.org/education

2021 Virtual Ceremony coming in November

2020 EAB Virtual Awards Ceremony – Awardee Videos
https://iieeetv.ieee.org/event/2020-eab-awards
Jamie Moesch
Managing Director, Educational Activities
j.moesch@ieee.org
Educational Activities Priorities for 2021

1. IEEE Learning Network

2. IEEE eLearning Library

3. Powered by IEEE TRY Engineering.org

4. TRY Engineering Summer Institute

5. ABET

6. Try Engineering Together

7. TRY Engineering STEM Portal

8. IEEE Eta Kappa Nu

9. EPICS in IEEE

10. EAB Awards Program

11. President’s Scholarship

12. New
IEEE Education Week™ 4-8 April 2022

A celebration of IEEE’s impact in Pre-University STEM, University, and Continuing Professional Education

When?
- Soft Launch: IEEE Day 2021 (5 October)
- IEEE Education Week: April 4-8, 2022

Why?
To highlight the impact of IEEE educational efforts globally and increase usage/attendance

What is Being Planned?
- **Website** where IEEE units can submit educational events, offerings, and websites (available now or in the future), and have them featured
- **Live virtual sessions** throughout the week
- **Gamification** to encourage members to engage with educational offerings, with the opportunity to earn a digital badge
- **Contests and prizes**
- **Special offers** for members on education from IEEE

How Do I Get Involved?
Plan an educational event during the week, submit your IEEE group’s content on our website, and help spread the word about IEEE Education Week!

Sign up for updates: educationweek.ieee.org
Continuing Professional Education

Babak Beheshti
Chair, Continuing Education Committee

Jennifer Fong
Director, Education Product, Sales and Marketing
IEEE Continuing Professional Education (CPE)

Providing professional education for working engineers and technologists

Who We Serve:

- IEEE Members and other working professional engineers with a bachelor’s degree or higher
- Institutions with a need for workforce development training solutions

What We Offer:

- Continuing professional education online courses, virtual events, etc.
- Cost-effective training solutions for institutions on a broad range of engineering topics
- CEUs/PDHs to help maintain professional licenses
IEEE Continuing Professional Education Products

Available Now

- eLearning Library (100's of peer reviewed online courses)
- eLearning Front List (20+ new courses/yr)
- Course Programs (Several courses on a topic)
  Some of our programs:
  - Enterprise Blockchain
  - Artificial Intelligence Standards
  - 5G Networks (with Nokia)
  - Finite Element Method for Photonics
  - Automotive Cyber Security
- English for Technical Professionals
- IEEE | Rutgers Online Mini-MBA for Engineers
- Mars Space Colony Standards Game
- Live Virtual Events (paid and free)
- IEEE Certificates and Digital Badges
- Sponsorship/Advertising Opportunities

New Products This Year

- Course Programs
  - Machine Learning: Predictive Analysis for Business Decisions
  - Digital Transformation: Moving Toward a Digital Society
  - 5G Deployment
  - Designing Blockchain Solutions
  - IEEE Standards for Aerospace and Defense
  - Practical Applications of AR/VR Technology
- IEEE | IAPP Data Privacy Engineering Collection
  - In collaboration with IEEE Standards and the International Association of Privacy Professionals (IAPP)
- ISACA Cybersecurity Nexus Platform (CSX)
Credentials for Learning Achievement

Certificates

EA is charged by the IEEE Board of Directors to administer and manage all CEUs.

EA issues certificates for successful completion of learning events (courses, webinars, workshops, tutorials, etc.) sponsored by EA, IEEE Societies, Sections, Chapters, OUs and pre-approved external organizations.

Types of certificates include:
- Continuing Education Unit (CEU)
- Professional Development Hour (PDH)
- Certificate of Completion (CoP)

Certificates Stats:
- Over 79K certificates issued since 2017
- 52 OUs/providers offered our certificates

Digital Badging

EA launched digital badges in 2020.

- Badges contain embedded metadata that reflects specific skills earned.
- Follows the Open Badge standard
- Can be shared on CVs, social media platforms, and email signatures
- Tied to individual bodies of knowledge that may be delivered via an eLearning course program and/or event (virtual and/or live).
- Credentials are verified by unique blockchain ID.
One platform for discovery of continuing education across IEEE

Shared learning management system for continuing education across IEEE

Built to improve learner experience with continuing education from IEEE
Online Courses from 35 Units Across IEEE

Learn about the latest technologies

Earn certificates, CEUs, PDHs and digital badges that will help you advance your career

Sign up for weekly mailers on the newest courses and educational offerings

Help spread the word to your volunteers. Access ILN Marketing material at ea.ieee.org

IEEE Aerospace and Electronics Systems Society
IEEE Author Engagement, Tools & Support
IEEE Biometrics Council
IEEE Boston Section
IEEE Brain
IEEE Broadcast Technology Society
IEEE Communications Society
IEEE Computer Society
IEEE Consumer Technology Society
IEEE Continuing Education for Engineering Professionals in Africa
IEEE Educational Activities
IEEE Electronics Packaging Society
IEEE Engineering in Medicine & Biology Society
IEEE Entrepreneurial Program
IEEE Future Directions
IEEE Geoscience and Remote Sensing Society
IEEE Humanitarian Activities Committee
IEEE Industry Applications Society
IEEE Instrumentation and Measurement Society
IEEE Intelligent Transportation Systems Society
IEEE Intellectual Property Rights
IEEE Microwave Theory and Techniques Society
IEEE Photonics Society
IEEE Power & Energy Society
IEEE Power Electronics Society
IEEE Product Safety Engineering Society
IEEE SIGHT
IEEE Signal Processing Society
IEEE Smart Cities
IEEE Smart Grid
IEEE Standards Association
IEEE Solid State Circuits Society
IEEE Transportation Electrification Community
IEEE USA
IEEE Women in Engineering

iln.ieee.org
Pre-University Education Committee

Lorena Garcia, PECC Chair
lorenagarcia@ieee.org

Burt Dicht, Director Student and Academic Education Programs
b.dicht@ieee.org
Pre-University Education Coordinating Committee (PECC)

Mission

- Promote and enhance the level of technological literacy of pre-university educators and students,
- Be the primary source of resources, curricula and pedagogical practices for pre-university educators
- Encourage students to aspire to IEEE related careers
TryEngineering Programs

TryEngineering.org
• All lesson plans converted to new format
• New lesson plan content
• Translation initiative
• New STEM field content
• Integration with STEM Portal

TryEngineering Tuesday
• Working in partnership with IEEE Societies
• Monthly webinars featuring a 4-Step Blog (Explore, Discover, Inspire, Share)
• 14 Sept - Solar Power (PES)
• 21 Sept – Girls in STEM (WIE)

TryEngineering Together
• 2020-2021 academic term - 37 classrooms, 845+ students and mentors, 10,000+ letters exchanged
• 2021-2021 academic term - 36 classrooms and 820+ students confirmed
• 5 new curriculum topics added by December
Volunteer STEM Portal

- The Volunteer STEM Portal leverages the reach of IEEE’s global communities and volunteers
- Objective is to engage and impact as many students as possible in pre-university STEM outreach
- The portal is a “go-to” resource for volunteers and features:
  - A searchable library of current STEM programs
  - “How-to” resources to facilitate STEM outreach activities
  - Impact data and the ability to share results
  - STEM guides and resource materials
- Currently 36 programs in portal library
- 90 STEM outreach events reported as of 31 July
Volunteer STEM Portal Grant Program

- The **IEEE Volunteer STEM Portal Grant Program** is designed to spur innovative STEM outreach programs and to test new ideas.
- 83 proposals were received.
- 18 grants were awarded totaling $35.5K.
- Activities completed by 1 Dec, impact data reported, and program added to the STEM Portal library.
- Plans for the 2022 program are in development.

IEEE STEM Ambassador Program

- The **IEEE STEM Ambassador Program** recognizes IEEE volunteers for their contributions to pre-university STEM outreach.
- Ambassadors will organize STEM activities, share results, and help build a community of STEM volunteers.
- Application window opened on 1 July and closed on 20 August.
- 80 applications received and selections to be announced on 15 Sept.
- Ambassadors will conduct one STEM outreach event by 31 December.
IEEE STEM Summit (New)

- Designed for IEEE members and volunteers interested in pre-university STEM outreach
- The objective is to build our STEM community by coming together and encouraging, supporting and inspiring each other

Topics Include:
- Inspiring a Passion for STEM Education
- Engaging in STEM Outreach
- Assessing the Impact of STEM Outreach
- STEM Outreach Tips
- Family Build Challenge

Seven virtual sessions featuring experienced IEEE STEM Outreach Volunteers and STEM Education Leaders
1 to 6 November 2021
Look for more details soon
University Resources Committee

Timothy Kurzweg, URC Chair
kurzweg@ieee.org

Burt Dicht, Director Student and Academic Education Programs
b.dicht@ieee.org
A signature program of the IEEE Foundation and EA that organizes university and high-school students to work on engineering-related projects with local community organizations.

**Student Benefits:**
- Improve technical engineering and problem-solving skills
- Enhanced communication skills
- Develop and expand leadership skills
- Real life experience and measurable result

**Community Benefits:**
- Obtain a solution to a problem or need
- An immediate impact on humanity
- A measurable result

### 2021 Status

<table>
<thead>
<tr>
<th>Submitted UEF Grant Proposal</th>
<th>Working with the Foundation to raise funds to reach this year’s development goal</th>
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</thead>
<tbody>
<tr>
<td>Sharing success stories and impact of projects and programs</td>
<td>Implemented new metric reporting system</td>
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Accreditation

- Oversee the accreditation of 800+ engineering, computing and technology programs in IEEE’s fields of interest
- More than 400 IEEE volunteers (accreditation committees and program evaluators) are involved with accreditation activities

<table>
<thead>
<tr>
<th>2021 Status</th>
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<tbody>
<tr>
<td>Program Evaluations Conducted Virtually for 2020 and 2021</td>
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<tr>
<td>Supporting Program Criteria in IEEE’s Fields of Interest</td>
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<tr>
<td>Completed training of 2020 PEV Candidates</td>
</tr>
<tr>
<td>Promoting Role of Accreditation through Webinar Series</td>
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How an IEEE Program Evaluator prepares for University Visit – Webinar
4 August 2021
The Faculty Resources Committee (FRC) in collaboration with the Education Society – conducted the Engineering Education 2.0 Webinar Series featuring Dr. Arnold Pears in 2020 – 2021

- Session 1 – 30 Sept 2020
  - Models, Methods and Techniques for Innovation
- Session 2 – 11 Nov 2020
  - Approaches to Innovative Instructional Design
- Session 3 – 11 March 2021
  - Interviews in the Field
- Session 4 – 29 June 2021
  - Digital Transformation of Teaching in a Post-Pandemic World
Held on 3 August – the Town Hall featured an array of recognized experts in the field

Attendees left with tips and guidance they could put into action immediately

The focus was on how remote learning has changed pedagogical practices and what that means for in-person instruction

Panelists:
- Manuel Castro
- Aruquia Peixoto
- Sean Bentley
- Kathleen Kramer
- Olugbemiga Olatidoye

Moderated by Tim Kurzweg and Steve Watkins

The Next Opportunity for Engineering Education

The Next Opportunity for Engineering Education: Redefining the Model

3 August 2021, 11:30 am ET

Brought to you by IEEE Educational Activities Board and IEEE Education Society
A collaboration between IEEE Educational Activities Board and the IEEE Education Society

Description

• Designed to provide professional development resources to those teaching at the university level

• Content (blogs, articles, events) developed by experts from IEEE Education Society and EA Faculty Resources Committee

Launched April 2021

Hub Update

» Articles, events and resources are now posted to the site
  - 9 articles in library
  - 8 events posted

http://teaching.ieee.org

To contribute articles, events and resources contact sadiq.mitchell@ieee.org
IEEE-Eta Kappa Nu (IEEE-HKN) is the international honor society in the IEEE fields of interest, recognizing technical excellence, community service, exemplary character, a positive attitude, and leadership. The Society inducts Student and Professional Members who uphold the tenets of the society and desire to advance the mission of IEEE-HKN.

- Members must be invited to join
- 268 Chapters worldwide
- More than 200,000 members inducted
- Lifetime Designation
IEEE-Eta Kappa Nu: What We Do

- Recognize Excellence and inspire future leaders
- Provide Professional Development
- Provide Chapter and Student Leadership Development
- Network, Mentor, Tutor
- Community Service: 60,000 hours logged by Chapters in 2021
- Recognize outstanding individuals and chapters through our Awards Program
- Produce THE BRIDGE, our award-winning Magazine
Section Education Outreach Committee

Supavadee Aramvith, SEOC Chair
Resources for Education Volunteers & SEOC Activities

- **EA Programs page available on ea.ieee.org**
  - Details on EA’s programs, links to flyers, slides
  - Added feedback link
- Piloted program to **support Region/Section leaders with EA information and product outreach**
- **Orientation for Sections and Chapters Education Volunteers**
- Integration into **EA Insight** newsletter
- **Leveraged IEEE Collabratec Community of Practice for Educational Activities**
  - Aligns with EA’s overall social media plan
- Launched **partnership program** for local units
Resources

- Educational Activities Volunteer Website
  - https://ea.ieee.org/

- 2021 Educational Activities Board Member List
  - https://rosters.ieee.org/home.html

- 2021 Educational Activities Committee Rosters
  - https://rosters.ieee.org/home.html

- 2021 Educational Activities Staff Listing
  - https://ea.ieee.org/contacts/educational-activities-staff-contacts
Stephen M. Phillips, Ph.D., P.E.

2020-2021 IEEE Vice President, Educational Activities

Professor and Director of the School,
School of Electrical, Computer and Energy Engineering
Arizona State University
Working together to expand our impact

The future success of Educational Activities relies on our ability to partner across IEEE

- Partnering with numerous IEEE societies, Future Directions, Standards, MGA, Legal and Human Resources, IT and Publications on development

- Partnering with Standards, Future Directions, IEEE Marketing & Sales and many IEEE societies on course development and marketing

- Key partnership with the IEEE Foundation

- Toolkit for volunteers to manage local events for pre-university students
Call for 2022 IEEE Educational Activities Volunteers
Applications & Nominations due by 3 October

IEEE Educational Activities Board
- Treasurer
- Member and Geographic Activities (MGA) Board, R1-6 Rep
- Member and Geographic Activities (MGA) Board, R7-10 Rep
- Standards Association (SA) Representative
- Technical Activities Board (TAB) Representatives

Educational Activities Liaisons
- IEEE Conference Committee
- IEEE Future Directions Committee (FDC)
- IEEE Member Engagement and Life Cycle Committee (MELCC)
- IEEE Publication Services and Products Board (PSPB)
- IEEE TAB/PSPB Products and Services Committee

Committee Chairs & Members
- Continuing Education Committee (CEC)
- Credentialing Program Committee (CPC)
- Educational Products Editorial Committee (EPEC)
- University Resources Committee (URC)
- Faculty Resources Committee (FRC)
- Engineering Projects in Community Service Committee (EPICS) in IEEE
- Pre-University Education Coordinating Committee (PECC)
- Awards & Recognition Committee (ARC)
- Section Education Outreach Committee (SEOC)

Click here to apply or visit ea.ieee.org
Join the Conversation

Facebook
@IEEEeducation
@IEEE.continuing.education

Twitter
@IEEEeducation
@IEEELearn

LinkedIn
@ieee-educational-activities
Questions, Comments

Send along to r.o.warnick@ieee.org following call.
Core Purpose
To develop and deliver educational products and services to our members, professionals, educators, and students that excite and inspire understanding of IEEE’s fields of interest; support career preparation and professional enhancement, foster diversity, and ensure access to lifelong learning opportunities.

Core Values
- Commitment to quality and ethics: Ensuring high value to users
- Grounded in knowledge and expertise: Vetting technical and educational excellence
- Inspirational to lifelong learners: Relevant learning in IEEE’s fields of interest
- Maximizing impact: Make a difference at scale
- Collaboration: Leverage relationships and partnerships within IEEE and beyond to reach our goals
- Fiscal stewardship: Getting the most impact from our resources

Areas of Focus
- Member value
- Impact on the profession
- Resource for practitioners
- Service provider to all of IEEE
- Global relevance of our offerings with assured local quality
- Resource for pre-university educators
- Customer value
- Revenue generation to invest in impact

Core Users
- Members
- Practitioners (Young Professionals, Seasoned Professionals)
- Educators
- Students (kindergarten, primary to high school, colleges, universities, post-graduate)
- Retirees
## For More Information

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<thead>
<tr>
<th>Program</th>
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<tr>
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<td><a href="https://cricketmedia.com/tryengineeringtogether/">https://cricketmedia.com/tryengineeringtogether/</a></td>
<td>Burt Dicht</td>
</tr>
<tr>
<td>Ambassador Program</td>
<td><a href="https://tryengineering.org/volunteer-stem-portal/ieee-stem-ambassador-program/">https://tryengineering.org/volunteer-stem-portal/ieee-stem-ambassador-program/</a></td>
<td>Lynn Bowlby</td>
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<tr>
<td>STEM Summit</td>
<td>In Development</td>
<td>Dawna Schultz</td>
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<td>EPICS in IEEE</td>
<td><a href="https://epics.ieee.org/">https://epics.ieee.org/</a></td>
<td>Ray Alcantara&lt;br&gt;<a href="mailto:r.alcantara@ieee.org">r.alcantara@ieee.org</a></td>
</tr>
<tr>
<td>Accreditation</td>
<td><a href="https://www.ieee.org/education/accreditation.html">https://www.ieee.org/education/accreditation.html</a></td>
<td>Regina Samson&lt;br&gt;<a href="mailto:r.m.samson@ieee.org">r.m.samson@ieee.org</a></td>
</tr>
<tr>
<td>Webinars and Town Halls</td>
<td>Various (Check “Events” on the Teaching Excellence Hub)</td>
<td>Sadiq Mitchell&lt;br&gt;<a href="mailto:sadiq.mitchell@ieee.org">sadiq.mitchell@ieee.org</a></td>
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