## Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

### Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Region</th>
<th>Activity/Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
This orientation is being recorded

The chat feature can be used to:

- Advise of technical difficulties
- Ask questions during the presentation
  - Brief answers will be shared in the chat window, while more in depth questions will be addressed in follow up communications

Kindly mute your line during the presentation
IEEE Educational Activities

Section Education Outreach Committee

Orientation
# Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Role/Certification</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

**Best Practices and Inspirational Education Activities from OUs**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Section Education Outreach Committee

Sohaib Sheikh, SEOC Chair
## Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Presentation/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

### Best Practices and Inspirational Education Activities from OUs

- **Tay Chuan Zhi**  
  Curtin SB, Malaysia  
  **STEM Challenge to Bridge the Education Gap in Malaysia**
- **Conrad Attard**  
  Malta Section, Malta  
  **TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners**
- **Mostafa Mortezaie**  
  Region 6 EA  
  **EPICS in IEEE Expo**
Witold Kinsner
IEEE Educational Activities 2019 Vice President
Educational Activities (EA): Whom do we serve?

Be the recognized and respected portal for educational resources, global in reach, but local in relevance, supporting life-long learning and catalyzing change through education.
Education Across IEEE

Expanding our collective impact in education through:

Coordination and Cooperation
Educational Programs Designed to Connect Throughout an Individual’s Life

Moving from Open-Loop Education to Closed-Loop

- Pre-University
- University
- Young Professionals
- Advanced and Mid-Career Professionals
- Retired Professionals
Moving from Open-Loop Education

Towards Closed-Loop Education

Body of Experience (BoX) must be transferred to the students
2019 IEEE Educational Activities Board
15 Voting, 3 Non Voting
18 Total
<table>
<thead>
<tr>
<th>Name</th>
<th>Role/Title</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

**Best Practices and Inspirational Education Activities from OUs**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/Region</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Jamie Moesch
Managing Director, Educational Activities
Established 5 Year Goals to Guide Educational Activities

- **Become Market Focused**
  - IEEE Customers
    - Institutional
    - Government
    - Association
  - Individuals
    - Members
    - Non-Members
  - Emerging Audiences

- **Research Driven**
  - Product & Services Portfolio
    - Topics
      - Fundamental
      - Emerging
      - Specialized
    - Services
      - Production
      - Support
      - Marketing
    - Platforms

- **$5m+ Revenue**
  - New Products
  - Expanded Services
  - Sponsorship

- **Public Imperatives with more impact**
  - Educational Resources
    - Future Technologists
    - Teacher Training
    - Accreditation
  - Community Service
What Educational Activities is working on?

Expand Our Impact

Grow Our Business

Partner More Effectively
Impact on Member Value

*Educational Activities is working to improve the value of membership*

Enhanced Certificate Program offering CEUs and PDHs

Significant improvements to course program quality

IEEE Learning Network simplifying course discovery and consolidating their learning progress

Micro-volunteering opportunities through programs like Teacher In Service Program (TISP)
Recommendation #2
Develop Pre-College STEM activities for local units
## Educational Activities areas of focus and programs for 2019

<table>
<thead>
<tr>
<th>Priority</th>
<th>Pre-University</th>
<th>University</th>
<th>Life-Long Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH</strong></td>
<td>TryEngineering.org</td>
<td>TryEngineering Summer Institute</td>
<td>IEEE eLearning Library</td>
</tr>
<tr>
<td><strong>MEDIUM</strong></td>
<td>TISP</td>
<td>ABET</td>
<td>IEEE Learning Network</td>
</tr>
<tr>
<td><strong>LOW</strong></td>
<td></td>
<td>EPICS in IEEE</td>
<td></td>
</tr>
</tbody>
</table>

**Awards Program**

- President’s Scholarship
- Faculty Career Development
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
- Over 25 scholarships made possible by IEEE Societies through the IEEE Foundation
Jamie Moesch
Managing Director, Educational Activities

Terri Ciccodacola
IT Business Partner

Roopalee Kharma
HR Business Partner

Rachel Warnick
Manager, Governance & Project Management

Burt Dicht, Director, Student & Academic Education Programs

Jennifer Fong, Director, Product Management, Sales, & Marketing

Marguerite Corazza, Director, Continuing Ed Product & Design Svc

Larry Bolsch & Mike Lombardi
Financial Solutions
## Section Education Outreach - Orientation

| Sohaib Sheikh | SEOC Chair | Welcome |
| Witold Kinsner | Vice President EA | Introduction |
| Jamie Moesch | Managing Director EA | The Future of EAB: 5-year plan and Alignment with other OUs |
| Burt Dicht | Dir. of Student & Acad. Ed. Prog. | Pre-University and University Education Programs |
| Bruce Kraemer | Chair, CEC | Continuing Education Programs |
| Michael Benson | HKN Volunteer | IEEE Eta Kappa Nu (HKN) Programs |
| Sohaib Sheikh | SEOC Chair | Resources for IEEE Volunteers |
| Lorena Garcia | ARC Chair | EAB Awards |

### Best Practices and Inspirational Education Activities from OUs

| Tay Chuan Zhi | Curtin SB, Malaysia | STEM Challenge to Bridge the Education Gap in Malaysia |
| Conrad Attard | Malta Section, Malta | TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners |
| Mostafa Mortezaie | Region 6 EA | EPICS in IEEE Expo |
Student and Academic Education Programs

Burt Dicht, Director Student and Academic Education Programs
The Organization
Student and Academic Education: Staff Structure

- Burt Dicht
  Director, Student and Academic Education Programs
- Nancy Ost in
  Program Director
  Eta Kappa Nu
- Sadiq Mitchell
  University Programs Manager
- Regina Samson
  Accreditation Program Manager
- Stacey Bersani
  Program Manager
  Eta Kappa Nu
- Dawna Schultz
  Sr STEM Education Outreach Program Manager
- Ray Alcantara
  EPICS in IEEE Program Manager
- Lynn Bowlby
  Program Specialist, Educational Outreach
Pre-University Education Committee

Burt Dicht, Director Student and Academic Education Programs

Supavadee Aramvith, PECC Chair
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
Current TryEngineering Brand

Two-week summer college experiences for 8th to 12th grade students

A pre-university engineering education portal for educators and students

A teacher-guided online learning platform that matches 3rd to 5th graders with mentors from industry
A pre-university engineering education web portal

- Provides in-classroom resources for educators...
- Helps bring engineering into the classroom
- Assists students in preparing for a career in engineering

- 1.5+ Million Annual Visitors
- 140+ Lesson Plans
- 22 Million Lesson Plan Downloads to-date
TryEngineering Together is a teacher-guided online e-mentoring and learning platform that matches students in under resourced areas 1:1 with industry mentors to improve their STEM and literacy skills.

Program to Date

- 11 classrooms
- 220 students/mentors
- 7 sponsors
- 10 learning units

“These kids normally shut down with learning, but they are asking to write their mentors.”

-NJ Fifth Grade Teacher

http://tryengineeringtogether.com/
Two-week summer college experiences that introduce students to the concepts and applications of several fields of engineering through:

- Hands-on activities
- Lectures
- Guest speakers
- Field trip/tours

**2019 Summer Institute Status**

**157 Students Enrolled** (as of 10 July)

**30 Scholarship Students** (Donations from IEEE Units & Individuals)

**Introductory and Advanced Curricula** complemented with Industry Tours and Young Professionals Panels

**Sponsor** - Con Edison; **In-Kind Sponsors** - Solidworks, Autodesk, and Microsoft Xbox

**Session I** – 7 to 20 July

**Session II** – 21 July to 3 Aug

[https://tryengineeringinstitute.ieee.org/](https://tryengineeringinstitute.ieee.org/)
TryE 2.0 - STEM Ecosystem
Section Involvement

Pre-University Activities

› Submit career or student profile to be featured TryEngineering.org

› Suggest hands-on activities that can be turned into lesson plans for pre-university educators

› Suggest high quality opportunities for students to gain skills and experience in engineering, computing, or technology (camps, competitions, research programs)

› Suggest possible company/classroom sponsors for TryEngineering Together

› Host a teacher training workshop (TISP)
University Resources Committee

Burt Dicht, Director Student and Academic Education Programs

Timothy Kurzweg, URC Chair
University Resources Committee (URC)

Mission

• To promote and enhance the content and delivery of engineering, computing, and technology (ECT) education
• Meet the engineering education accreditation needs of the profession and oversee accreditation efforts in IEEE’s fields
Description
• 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

Objectives
• Inspire the next generation of engineers
• Change the way engineering is taught in universities
• Encourage engineering students to solve problems in communities worldwide through service learning

Student Benefits
• Improve technical engineering + problem-solving skills
• Enhanced communication skills
• Develop + expand leadership skills
• Real life experience + measurable result

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

How It Works

NPO BENEFITS FROM THE PROJECT
PRE-UNIVERSITY STUDENTS AND COLLEGE STUDENTS DO SERVICE LEARNING
COLLEGE STUDENTS LEARN THROUGH TEACHING PRE-UNIVERSITY STUDENTS
Accreditation

ABET
• Oversee the accreditation of more than 800 engineering, computing and technology programs in IEEE’s fields of interest
• More than 300 IEEE volunteers (accreditation committees and program evaluators) are involved with accreditation activities

GLOBAL ACCREDITATION
• Guide and support the operations of existing global accrediting bodies
• Facilitate the establishment development and implementation of new accrediting bodies and accreditation procedures
Section Involvement

University Activities

▷ EPICS in IEEE
  - Spread the word to student branches to propose and EPICS in IEEE project at their university
  - Facilitate brainstorming exercises within section/student branches to define a local problem and solution

▷ Accreditation
  - Promote PEV candidate recruitment (very specific requirements)

▷ Faculty Resources
  - Assist the Faculty Resources Committee (FRC) in planning and organizing faculty development virtual workshops
## Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Presentation/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

### Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Continuing Professional Education: Committee Structure

IEEE Educational Activities Board

- N&A
- ARC
- URC
- PECC

- FRC
- CEAA
- CETAA
- SERC
- EPICS

Continuing Education Committee (CEC)

- Certificates Program Committee (CPC)
- Educational Products Editorial Committee (EPEC)
- EAB/SA Standards Education Committee (SEC)
B. Mission: To identify and serve the continuing education needs of industry and by being the resource of choice for quality educational products, programs and services.

C. Scope: To assure that the continuing education products, programs, and services developed by the EAB demonstrate high educational quality. The EAB Continuing Education Committee shall develop strategies and plans for current and future continuing education products, programs, and services. The CEC shall oversee and monitor the execution of these plans.

D. Functions

1. Support the generation of new continuing education programs, products, and services by actively contributing to strategy development, product planning, and establishment of business objectives.

2. Regularly oversee Educational Products Editorial Committee (EPEC) and Certificates Program Committee (CPC) to ensure the maintenance of the quality and manage the process of awarding and dispersing Continuing Professional Development credits (as applicable to a local area) and Professional Development Hours (PDHs).

3. Oversee the content diversity, timeliness, and relevance of current and future continuing education programs, products, and services.

4. Identify and acquire quality continuing education content by developing and maintaining relationships with IEEE conferences, societies, councils, other Organizational Units and operating units as sources of content for EAB continuing education programs, products, and services.

5. Monitor progress toward goals and objectives of IEEE EAB continuing education programs, products, and services, and annually evaluate their performance against established metrics, and make appropriate recommendations regarding the creation or continuance of such programs, products and services.

6. Wherever needed, recommend to EAB policies and actions that shall support the mission of the Committee.

7. Maintain communication and dialog with EAB, IEEE Organizational Units and outside organizations that are engaged in continuing education.

8. Provide leadership for EAB, IEEE as a whole, and the engineering community to identify and plan for the emerging needs of continuing education.

9. Evaluate the continuing education needs of industry at a regular basis and ensure that the needs are timely addressed in EAB continuing education products, programs, and services.

Primary activities:

• Identify topics, source or develop, sell and deliver relevant, high quality educational courses and completion certificates to technical professionals.
Notable CPE Customers in 2019

- Texas Instruments
- Salesforce
- Missile Defense Agency
- DEVCOM
- Samsung
- University of Michigan
- Virginia Tech
- English for Engineering
- 2019 Front List
- Autonomous Vehicles & Intro to Blockchain Programs
- IEEE
eLearning Course Topics on ILN
One-stop platform for discovering all IEEE educational products
Course Programs Included in the 2019 eLearning Library Subscription

Enterprise Blockchain for Healthcare, IoT, Energy and Supply Chain

Introduction to IEEE Standard 1547-2018: Connecting Distributed Energy Resources

5G Networks Discover 5G Technology and End-to-End 5G Systems (produced in cooperation with Nokia)

Finite Element Method for Photonics

Now Available
Available Q3
Available Q4
Available Q4
IEEE | Rutgers Online Mini-MBA for Engineers

- Co-branded IEEE/Rutgers product launched January 2019
- Ten self-paced online modules – 3.5 hours of instruction each
  - Topics include: Strategy, Product Development, Negotiation, Economics, etc.
- Live interactive sessions with Engineering and Business faculty
- Customizable Capstone project

https://forms1.ieee.org/IEEE-Rutgers-Mini-MBA-for-Engineers.html
## Recent Course Program Topics

Course Program: A collection of courses about a given topic.

<table>
<thead>
<tr>
<th>Title</th>
<th>Course</th>
<th>Title</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Blockchain Technology</td>
<td>Understanding SMPTE ST 2110</td>
<td>IEEE Guide to Autonomous Vehicle Technology</td>
<td>Modernizing the Smart Grid</td>
</tr>
<tr>
<td>Artificial Intelligence and Ethics in Design: Part 1</td>
<td>Artificial Intelligence and Ethics in Design: Part 2, Responsible Innovation</td>
<td>IEEE Introduction to Edge Computing</td>
<td>Enterprise Blockchain for Healthcare, IoT, Energy and Supply Chain</td>
</tr>
</tbody>
</table>

[http://iln.ieee.org](http://iln.ieee.org)
Topics Under Consideration for Release in 2020

2020 eLearning Library – Topical

- Automotive Cybersecurity and Blockchain (potential partner: Computer Society)
- Robotics Process Automation (potential partner: Robotics and Automation Society)
- Artificial Intelligence/Machine Learning (potential partner: Standards/Computational Intelligence Society)
- Chip Design for 5G (potential partner: Electron Devices Society)

Durable Products

- English for Technical Professionals (in development for release mid-2020)
- CSX Cybersecurity Platform (3rd party co-branded product in partnership with ISACA)
  - Includes related certification from ISACA

CEC will be exploring the potential of adding 3rd party content to ILN in the second half of 2019

Currently working on finalizing list of 2020 topics and engaging society partners/SMEs

Contact Jen Fong Immediately if you have significant demand for a new course.
Earlier product called English for Engineering

Brand new course program from IEEE Educational Activities designed to help learners improve English communication skills in reading, writing, speaking and listening

- Developed by professional communications expert, ESL pedagogical specialist, and instructional designer
- NIC funded product
- Targeted for launch mid-2020

Future plans for IEEE English for Technical Professionals include:

- New content with artificial intelligence feedback tool for 2021
- In-country tutoring programs with partners in China, India, etc?
Encouraging Student Membership with English for Engineering

EA partnered with IEEE Membership to offer English for Engineering courses at a significant discount to encourage student membership renewals.

**Africa**

- Student members in Tunisia were offered English for Engineering courses for free for the first half of the year
  - 3,135 courses were taken during this promotion
- As of 1 June, student members who did not take advantage of the free offer will be able to purchase English for Engineering courses for $5/each
- We’ve extended the $5 E4E access offer to all student members in Africa through the end of 2019.

**Region 9**

- Student members were offered English for Engineering courses for $5/each for the first half of 2019 (through 30 June)
  - 409 courses were purchased during this promotion

English for Engineering courses are $35/each for members (regular price).
What is the IEEE Learning Network (ILN) at iln.ieee.org?

ILN is:

- An IEEE Xplore for IEEE educational courses
- Learning management system (LMS)
- Integrated with key IEEE systems:
  - IEEE Enterprise eCommerce Cart
  - Siebel Catalog
  - IEEE Customer Record
  - Single Sign On
  - IEEE Customer Profile Application
  - MetaNav
  - Xplore
- One-stop site for discovering IEEE continuing education
Organizations hosting content at launch:
- Educational Activities
- Standards Education
- Future Directions

Organizations with content discoverable at launch:
- Computer Society
- Power & Energy Society
- Communications Society
- Photonics Society
- Electronics Packaging Society
- Industry Applications Society
- Solid State Circuits Society
- Power Electronics Society
- Transportation Electrification Community
- Humanitarian Webinars
Questions? Comments?

Contact: Jen Fong
Phone: 732-562-6349
E-mail: j.fong@ieee.org

Bruce Kraemer
Phone: 321-427-4098
E-mail: brucepkraemer@gmail.com
## Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Presentation/Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

### Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
IEEE-Eta Kappa Nu
The honor society of IEEE
Society Overview

Michael Benson, IEEE-HKN Governor, Regions 3-4
What is IEEE-Eta Kappa Nu?

➢ Honor Society of the IEEE

➢ Founded in 1904 at the University of Illinois.

➢ Merged with the IEEE in 2010.

➢ 260+ Chapters at Universities worldwide.

➢ Over 200,000 inductees spanning regions 1 - 10.
What is IEEE-Eta Kappa Nu?

➢ Candidates are invited to join based on their academic ranking, unimpeachable character, and positive attitude.

➢ Membership is a lifelong designation for individuals who have distinguished themselves as students or professionals in electrical engineering, computer engineering, computer science, and other fields of IEEE interest.
What is IEEE-Eta Kappa Nu?

➢ Recognized around the global as the one honor society that represents the highest values of our profession.

➢ Composed of inducted members and organized into over 260 collegiate chapters and a number of alumni chapters.
Why Do Students join IEEE-HKN?

➢ Employers around the world recognize the designation of HKN and understand that IEEE-HKN members are of the best candidates and are well rounded, articulate, and community minded.

➢ Network with the top students at every major University.

➢ Access to key University decision makers for references, research, and for Graduate School and beyond.

➢ Share a tradition with nearly 200,000 HKN inductees worldwide, this network will help you in your education, career, and professional development.
Benefits of IEEE-Eta Kappa Nu: For Students

➢ Induction into IEEE-HKN recognizes the top-tier of students and professionals. Our members have distinguished themselves academically and have shown outstanding character and a positive attitude.

➢ Provides leadership opportunities for your professional development, such as conferences, service on committees and the Board of Governors, service to your University, Department and fellow students.

➢ The BRIDGE is published 3x per year and all inducted members are invited to submit papers for publication.
Benefits of IEEE-Eta Kappa Nu: For Sections

- IEEE-HKN Inductees are dedicated to serving their communities and their profession.
  - IEEE-HKN inductees answer the call to serve... Do you need to fill a volunteer role in your section, ask an IEEE-HKN inductee and you will likely have a new volunteer.
  - IEEE-HKN chapters host numerous community service and outreach activities.
  - Many of these activities may be open for the public to participate.
  - IEEE-HKN alumni and student members are eager to learn and foster a spirit of excellence.
Benefits of IEEE-Eta Kappa Nu: For Sections

➢ IEEE-HKN Chapters generate IEEE members.
  - IEEE-HKN student inductees pay a one-time fee of $70 USD.
  - $32 of this fee is directed to MGA for a student IEEE membership.

➢ Most faculty within host departments are IEEE-HKN members.
  - Chapters can assist in connecting you with potential speakers at section conferences
IEEE-HKN Board of Governors

L-R  Rakesh Kumar, Enrique Tejera, Preeti Baja, Ed Rezek, Kyle Lady, Karen Panetta, Ron Jensen, Bernie Sander, Katie Brinker, Sean Bentley, Panagis Samolis, John DeGraw, Nancy Ostin, Stacey Bersani, Michael Benson, Steve Watkins
(not pictured: Jim Conrad)
IEEE-HKN Organizational Chart

9 standing committees
6 award sub-committees
10 Ad Hoc Committees
2.5 Staff Support
50+ Volunteers
1180 Chapter Volunteers
Signature Programs of HKN
Who is IEEE-HKN?

- **Larry Page**
  Founder of Google

- **Eric Schmidt**
  CEO of Google

- **Steve Wozniak**
  Founder of Apple

- **Paul and Irwin Jacobs**
  Founders of Qualcomm

- **David Filo**
  Founder of Yahoo!

- **Sabeer Bhatia**
  Founder of Hotmail

- **Martin Cooper**
  Conceived the first handheld mobile phone

- **Henry Samueli**
  Founder of Broadcom

- **Amar Bose**
  Inventor of Bose Speakers
IEEE-HKN Chapters Around the World
The value and Impact of HKN

➢ Current active chapters:

<table>
<thead>
<tr>
<th>Region 1: 45 Chapters</th>
<th>Region 6: 45 Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 2: 32 Chapters</td>
<td>Region 7: 1 Chapter</td>
</tr>
<tr>
<td>Region 3: 41 Chapter</td>
<td>Region 8: 8 Chapters</td>
</tr>
<tr>
<td>Region 4: 33 Chapters</td>
<td>Region 9: 2 Chapters</td>
</tr>
<tr>
<td>Region 5: 41 Chapters</td>
<td>Region 10: 12 Chapters</td>
</tr>
</tbody>
</table>

➢ Chapters induct members, host events, and provide professional development opportunities among many other activities.
The value and Impact of HKN

Chapters spread across the globe host thousands of events each year including:

- Tutoring
- Campus and environmental cleanups
- Educating elderly members of the community on how to use technology
- Corporate collaborations
- K-12 school outreach (teaching, mentoring, promoting the profession, and more)
The value and Impact of HKN

➢ Chapters spread across the globe host thousands of events each year including:

– Building community within the host department(s) including

– Building community with other honor societies including discipline specific societies such as Pau Tau Sigma (Mechanical Engineering) and Tau Beta Pi, The Engineering Honor Society
The value and Impact of HKN

Chapters spread across the globe host thousands of events each year including:

- Collaborating with IEEE Student Branches
- Serving and advising their host department(s) in areas including: Curriculum revision, Alumni outreach, space allocation, and more.
- Organizing scholarly activities such as technical talks, industry visits, and distinguished lectures.
Benefit to the University of an IEEE-HKN Student Chapter

- Chapters provide **service** to the student body including:

<table>
<thead>
<tr>
<th>Tutoring</th>
<th>Programs</th>
<th>Outreach</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework help/tutoring sessions</td>
<td>Tech Talks For all students</td>
<td>STEM outreach</td>
<td>Food Drives Movie Nights Contests</td>
</tr>
<tr>
<td>Exam Prep, Course Guides</td>
<td>Industry Visits, career programs</td>
<td>Community projects (robotics)</td>
<td>Lunch/Dinner with Professors</td>
</tr>
<tr>
<td>Grad School, Research help, Lab sessions</td>
<td>Leadership programs, ceremonies,</td>
<td>Pre-University Engineering Projects</td>
<td>Pre-exam party to relieve stress</td>
</tr>
</tbody>
</table>
Benefits to the Community of an IEEE-HKN Student Chapter

Habitat for Humanity, Engineering 4 Kids, “Rebuilding Together” low income housing restoration, Staff or Professor appreciation day, Food Pantry, Clothing Drives, Inter-Society activities, Engineering Sports Day, Trick or Treat for Unicef, Brushbots, Science Night, Scholarships, Project Accessibility, Lego Robots, Faraday Flashlights, “laser field” at a community day, Augmented Reality Workshop, Junkyard Derby, Admit Day, Highway Clean-up, Resume and Interview workshop, High School Robotics Clubs, charity volleyball tournament, E-day fundraiser, blood drive, snack night socials, and so much more.
Benefit to the Department of an IEEE-HKN Student Chapter

- Recognition of the Scholastic achievements of the student body – recruitment incentive
- Course Guides and peer advising
  - Town Hall for all students, Introduction to Engineering for new students
  - Tutoring and homework help, Exam Prep workshops and labs
  - Ambassadors for the department to prospective students, alumni and donors
Chapters spread across the globe host thousands of events each year including:

- Social activities
- Technical workshops
- MUCH more.
- Recognizing local IEEE-HKN members as well as others in their communities for upholding the values of the society.
IEEE-HKN, as a society, recognizes members and non-members each year through our award program:
- Outstanding Student Award
- Outstanding Chapter Award
- Outstanding Young Professional
- Outstanding Technical Professional

From time to time, IEEE-HKN recognizes the contributions of senior members of the profession for their contributions along with their unimpeachable character and positive attitude by inducting them as an Eminent Member.
What Does an IEEE-Eta Kappa Nu University Chapter Do?

➢ Identifies and invites candidates to join their chapter as IEEE-HKN members.

➢ Organize scholarly activities such as technical talks, industry visits, distinguished lecturers.

➢ Chapters enjoy a close relationship with faculty and often invite faculty for lunch or special sessions.

➢ Chapters assist their peers through tutoring, exam preparation, peer mentoring, technical competitions, community outreach to pre-University students, and to the community at large.
CONTACT FOR IEEE-HKN

For more information, contact

Nancy Ostin
IEEE-HKN Director
Phone: +1 732 465 6611
E-mail: n.ostin@ieee.org

Michael Benson
Governor, IEEE-HKN Board of Governors
Phone: +1 781 249 1465
E-mail: mbenson@ieee.org

Or visit www.hkn.org
Questions
# Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Presentation/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

**Best Practices and Inspirational Education Activities from OUs**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
EAB Resources for Volunteers

Sohaib Sheikh
Chair, EAB Section Education Outreach Committee
EAB Section Education Outreach Committee

- The EAB Section Education Outreach Committee (SEOC) reports to, and is a Standing Committee of, the EAB.

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.
## Committee Members

<table>
<thead>
<tr>
<th>Position</th>
<th>Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section Educational Outreach Committee (SEOC) Chair</td>
<td>Sohaib Sheikh</td>
</tr>
<tr>
<td>Member and Geographic Activities Board (MGA) Representative Region 1-6</td>
<td>Mary Ellen Randall</td>
</tr>
<tr>
<td>Member and Geographic Activities Board (MGA) Representative Region 7-10</td>
<td>Antonio Ferreira</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 1</td>
<td>Marjaneh Issapour</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 2</td>
<td>Stephen Bonk</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 3</td>
<td>Sonya Dillard</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 4</td>
<td>Anu Gokhale</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 5</td>
<td>David Pierce</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 6</td>
<td>Mostafa Mortezaie</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 7</td>
<td>Rossitza Marinova</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 8</td>
<td>Stamatis Dragoumanos</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 9</td>
<td>Thiago Barbosa</td>
</tr>
<tr>
<td>Region Educational Activities Chair (REAC) Region 10</td>
<td>ChunChe ‘Lance’ Fung</td>
</tr>
<tr>
<td>IEEE Vice President, Educational Activities and Chair, EAB, Officer</td>
<td>Witold Kinsner</td>
</tr>
</tbody>
</table>
Resources
EA.IEEE.ORG

- Information related to EA programs
  - Links to websites
  - Flyers/promotional brochure links
  - https://ea.ieee.org/ea-programs

- EAB news
- Volunteer Development resources
- Position papers
- Contact details
- ... and much more!

- Access using your IEEE account
Collabratec - Community of Practice for Educational Activities

- For IEEE members, STEM Educators and enthusiasts of educational practices
- Promote your events
- Discuss best practices and challenges with peers
- Get guidance from experienced volunteers
- Expand your network
- Get inspired!

Webpage: https://ieee-collabratec.ieee.org/app/community/1312/Community-of-Practice-for-Educational-Activities/ or https://collabratec.ieee.org/ and search for community name
Volunteer Manual

- Volunteer Manual containing
  - Information regarding EAB programs and resources
  - Guidance on volunteer roles
  - Contact information
  - Available in English and Spanish

Webpage: Access on https://ea.ieee.org or directly via
EA Insight

- Newsletter from EAB containing
  - News
  - Updates on program, products and services
  - Announcements
  - Resources

- Produced thrice per year

- Sent to all Section EA Chairs, Section Chairs, Region Directors and any position title that indicates education
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Best Practices and Inspirational Education Activities from OUs</td>
</tr>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
IEEE Educational Activities Awards Program

Lorena Garcia, Chair EAB Awards & Recognition Committee
IEEE Educational Activities Board (EAB) Awards recognize and honor major contributions to engineering and technical education.
2017-2019 EAB Awards Nominations & Scholarship Applications by Region

Region 1
Region 2
Region 3
Region 4
Region 5
Region 6
Region 7
Region 8
Region 9
Region 10
NA

2017
2018
2019

2017
2018
2019
**Meritorious Achievement Award in Accreditation Activities**

The Meritorious Achievement Award in Accreditation Activities was established in 1984 by the EAB to provide recognition for efforts to foster the maintenance and improvement of education through the process of accreditation of engineering, engineering technology, computer science and applied science programs.

**Meritorious Achievement Award in Continuing Education**

The Meritorious Achievement Award in Continuing Education was established in 1984 by the EAB to provide recognition for dedicated contribution to the design, delivery and support of continuing education courses and programs in the fields of interest to IEEE Members.
Major Education Innovation

The Major Education Innovation Award was established in 1984 by the Educational Activities Board of the IEEE to recognize individuals who have distinguished themselves for outstanding educational innovation in a field of interest of the IEEE.

Meritorious Achievement Award in Outreach and Informal Education

The Meritorious Achievement Award in Outreach and Informal Education was established in 2006 by the IEEE Educational Activities Board (EAB) to recognize members, who volunteer time and effort for the informal education community, and highlight the benefit that their work provides to pre-university and university teachers, students, parents of students, and the public. These volunteers will have served in advisory, educational or fiduciary positions and used their professional background to enhance understanding and involvement in IEEE’s fields of interest by users of the informal education system.
Meritorious Achievement Award in Pre-University Education

The Meritorious Achievement Award in Pre-University Education recognizes individuals for work in a pre-university school, or those that influence school-based activities for pre-university students. These individuals should have inspired an appreciation and understanding of Mathematics, Science and Technology and the engineering process in pre-university students, and who have encouraged them to pursue technical careers.

Meritorious Service Citation

The EAB Meritorious Service Citation was established by the IEEE EAB in 1988 to recognize those dedicated volunteers who have given outstanding and sustained service to the aims and objectives of the EAB.
Section Professional Development

The Section Professional Development Award was established by the IEEE EAB in 2001 and recognizes IEEE Sections for major contributions to IEEE members in the areas of lifelong learning, continuing education, and professional development. This award is given to Sections whose contributions to continuing education and professional development are outstanding as evidenced by their quality, comprehensiveness, innovation or impact. This award was first offered in 2003.

Society / Council Professional Development

The Society/Council Professional Development Award was established in 2003 by the IEEE EAB and recognizes an IEEE Society or Council for major contributions to the professional development of its members through the provision of outstanding products, services and support in the areas of lifelong learning, continuing education, and professional development.
Employer Professional Development

The Employer Professional Development Award was established in 1995 by the IEEE EAB and recognizes organizations employing IEEE members for contributions to employee continuing education and professional development. The award is given to organizations whose contributions to employee continuing education and professional development are outstanding as evidenced by their quality, comprehensiveness, innovation, or impact.

Vice President’s Recognition Award

The EAB Vice President’s Recognition Award was established in 2001 by the IEEE EAB to give the Vice President, Educational Activities an opportunity to recognize IEEE Graduate Student Members, Members, Senior Members or Fellows, or organizations for contributions that do not fit within formal EAB award structure, and that have had a significant and substantial effect on the practice of engineering and of engineering education related to the mission of the EAB.
Standards Education Award

EAB/SA Board of Governors Standards Education Award was established by the Educational Activities Board (EAB) and the Standards Association (SA) Board of Governors to recognize significant contributions in support of the IEEE Standards Education mission of:

- Promoting the importance of standards in meeting technical, economic, environmental, and social challenges
- Disseminating learning materials on the application of standards in the design and development aspects of educational programs
- Actively promoting the integration of standards into academic programs and providing short courses about standards needed in the design and development phases of professional practice
IEEE Life Members Graduate Study Fellowship in Electrical Engineering

The IEEE Board of Directors established the IEEE Life Members Graduate Study Fellowship in Electrical Engineering in February 2000. The IEEE Life Members Fund finances the fellowship. The fellowship is awarded to a first year, full-time graduate student for work in any area of electrical engineering at an engineering school/program of recognized standing worldwide.

The Charles LeGeyt Fortescue Graduate Scholarship

Established in 1939 as a memorial to Charles LeGeyt in recognition of his valuable contributions to the field of electrical engineering; the Charles LeGeyt Fortescue Scholarship is awarded to a beginning graduate student, every year for one year of full-time graduate work in electrical engineering. The Charles LeGeyt Fortescue Graduate Scholarship Fund sponsors it.
2018 EA Awards Recipients

Ikhlaq Sidhu - Major Education Innovation Award

Jorge Contreras – Standards Education Award

Aravindhan Anbazhagan - Meritorious Achievement Award in Pre-University Education

Augusto Herrera - Meritorious Achievement Award in Pre-University Education

Tariq Durrani - Meritorious Service Citation

Richard Cliver - Meritorious Achievement Award in Accreditation Activities

Franc Noel - Meritorious Achievement Award in Accreditation Activities

IEEE Power & Energy Society - Society/Council Professional Development Award

Hunter Gene DesRoches - IEEE Life Members Graduate Study Fellowship in Electrical Engineering

Mohd Toaha Umar - The Charles LeGeyt Fortescue Graduate Scholarship
2019 EA Awards Program
Recipients will be announced soon

2020 EA Awards Program
Deadline: May 4, 2020

https://www.ieee.org/education/awards/index.html
# Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

## Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Vision: IEEE will be essential to the global technical community and to technical professionals everywhere; as well as being universally recognized for the contributions of technology and of technical professionals in improving global conditions.

STEM Challenge 2019 Miri Division is a programme initiated by IEEE Curtin Malaysia Student Branch and supported by Chumbaka Miri Branch and All Aboard Young Leader Centre (AAYLC). This programme is aimed to bridge the following three education gaps in Malaysia:

- Low esteem in learning science and mathematics among youth causes the alarming decreasing number of students taking up the STEM education.
- Lack of programming knowledge and learning in the secondary school syllabus.
- Critical problem-solving skill is not well presented in the classroom teaching.

Organized by:

Supported by:
Highlighted Activities:
• Monthly Mentor Meeting
• Train the Trainers (TTT)
• School Visit for mentoring
• Secondary School Bootcamp
• Judging Day in IEEE STEM Playground in the Park
• Finalist will join the National competition in Kuala Lumpur

Goal of STEM Challenge:
• To reach out and create awareness/interest in Science, Technology, Engineering and Mathematics (STEM) education to the secondary school students.
• To mentor student groups from secondary schools to innovate to solve real-life problems and participant in Sime Darby STEM
• To increase the interest of science among youth to solve the real-life problems.

Activities for Secondary School Students:
• Problem Statement defining
• Prototype building
• Pitching

2019
25 Schools
78 teams
Achievement of secondary school:
2015 - SMK Merbau and SMK Pujut were qualified for final.
2016 - SMK St. Joseph won the bronze award of National Competition.
2017 - The selected team qualified for National Top 15 YIC are SMK Pei Min and SMK Riam.
2018 - SMK Lutong was awarded the first runner up in the National Competition

IEEE Curtin Malaysia Student Branch’s Achievement:
• 1st Place in Malaysia Section Outstanding Student Branch Award, 2017.
• 1st Place in IEEE IAS Humanitarian Project Contest, 2017.
• IEEE IAS Outstanding New Chapter Award, 2017.
• IEEE R10 SAC Student Branch Award, 2017.
• Datuk Lee Kim Shin Outstanding Student Community Contribution Award, 2017.
• IEEE HAC Event Grants Award, 2018.
• FOES Community Engagement & Student Leadership Award, 2019.
# Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Presentation/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

### Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/Region</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
IEEE Educational Activities

Conrad Attard Chair IEEE Malta. TISP activities in collaboration with Ministry of Education in Malta and Industry Partners
TISP Event – in a nutshell
Make it a success – IEEE Malta Section

Cool and Fun

Let them get to know each other

Make them your ambassadors

Recognize them

Do not use school setups

shorturl.at/fsEH7
shorturl.at/swGM3

Like us on FB /ieeemalta
Our Recipe

IEEE Educational Activities – Malta Section

▸ Outreach and recruiting teachers.
▸ Training volunteers from IEEE to help you on the day.
▸ Venue: Collaborate – Example: Ministry of Education, Microsoft Innovation Center and next year Church Schools.
▸ Quality of Event. Brand it! & Make it the best!
▸ Document everything through photography and videos. Focus on the important things.
  - Does this pic reflect what was really happening? –
▸ Do not create a school setup. Make it look fun!
▸ Start with something fun and cool! Get to know each other.
▸ Spread the word around. Make them your ambassadors
▸ Give them resources
▸ Recognize their achievement. Keep in touch with them after.
THANK YOU
# Section Education Outreach - Orientation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

## Best Practices and Inspirational Education Activities from OUs

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Region 6 Educational Activities
July 15, 2019
Mostafa Mortezaie, Region 6 Educational Activities Chair
mortezaie@ieee.org
EPICS Expo

Event: Evening Program on February 18, 2019
- Networking
- Overview of EPICS in IEEE
- Student Projects Demo
- Student Presentations
- Awards Presentation

Collaborators:
- San Jose State University’s EPICS program
- Santa Clara University’s Frugal Innovation Hub
- EPICS in IEEE
- IEEE Foundation

Purpose: Bringing visibility to EPICS in IEEE
- Non-profit organizations
- Universities
- Corporations
- Fund raising

Awards:
- San Jose State University ($10,000)
- Santa Clara University ($10,000)

Major San Francisco Bay Area Television network stations covered the EPICS Expo and provided coverage on the night of the event.
EPICS Example

FLOMOSYS project
Providing SC Water District with a real-time information system that will deliver water level height information of Coyote Creek, facilitating the prediction and evacuation process. Developed for San Jose Mayor’s Office and the Santa Clara Water District.

Safe Storage 2.0
Homelessness is a major issue in the Bay Area. SJSU students working with Gilroy Compassion Center and AtHack designed storage units for homeless. Features include safe storage facility, multiple electrical charging plug options, and digital lock mechanism.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Presentation/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Welcome</td>
</tr>
<tr>
<td>Witold Kinsner</td>
<td>Vice President EA</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jamie Moesch</td>
<td>Managing Director EA</td>
<td>The Future of EAB: 5-year plan and Alignment with other OUs</td>
</tr>
<tr>
<td>Burt Dicht</td>
<td>Dir. of Student &amp; Acad. Ed. Prog.</td>
<td>Pre-University and University Education Programs</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Chair, CEC</td>
<td>Continuing Education Programs</td>
</tr>
<tr>
<td>Michael Benson</td>
<td>HKN Volunteer</td>
<td>IEEE Eta Kappa Nu (HKN) Programs</td>
</tr>
<tr>
<td>Sohaib Sheikh</td>
<td>SEOC Chair</td>
<td>Resources for IEEE Volunteers</td>
</tr>
<tr>
<td>Lorena Garcia</td>
<td>ARC Chair</td>
<td>EAB Awards</td>
</tr>
</tbody>
</table>

**Best Practices and Inspirational Education Activities from OUs**

<table>
<thead>
<tr>
<th>Name</th>
<th>Region/Location</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tay Chuan Zhi</td>
<td>Curtin SB, Malaysia</td>
<td>STEM Challenge to Bridge the Education Gap in Malaysia</td>
</tr>
<tr>
<td>Conrad Attard</td>
<td>Malta Section, Malta</td>
<td>TISP Activities in Collaboration with Ministry of Education in Malta and Industry Partners</td>
</tr>
<tr>
<td>Mostafa Mortezaie</td>
<td>Region 6 EA</td>
<td>EPICS in IEEE Expo</td>
</tr>
</tbody>
</table>
Contact us

Volunteer Portal: https://ea.ieee.org
Website: https://www.ieee.org/education
Email: askeducation@ieee.org
Facebook: https://www.facebook.com/IEEEeducation/
Twitter: @IEEEeducation
Collaboratec Community: https://ieeecollabratec.ieee.org/app/community/1312/Community-of-Practice-for-Educational-Activities
Appendix
Professional Leadership Team

Jamie Moesch
Managing Director, Educational Activities

Larry Bolsch &
Mike Lombardi
Financial Solutions

Terri Ciccodacola
IT Business Partner

Roopalee Kharma
HR Business Partner

Rachel Warnick
Manager, Gov. and Project Management

Burt Dicht, Director,
Student & Academic Education Programs

Marguerite Corazza,
Director, CE Product & Design Services

Jennifer Fong,
Director, Marketing, Product Mgmt & Sales
Student and Academic Education: Staff Structure
Professional Education: Staff Structure

Marguerite Corazza
Director, Continuing Education
Product & Design Services

Jill Bagley
Content Production Manager

John Obenchain
Instructional Design Manager

Amelia Slover
Program Specialist

Jennifer Fong
Director, Marketing, Product Management, and Sales

Angelique Parashis
Marketing Manager, IEEE Educational Activities

Jennifer McClain
Senior Standards Education and Business Development Manager

Amy Recine
Sr Educational Technology Product Manager

Open
Digital Marketing Specialist

Christine Cherevko
Education Sales Specialist

Ingrid Donnelly Scott
Continuing Education Product Manager

Allison Moy
Marketing Specialist
Governance and Project Management: Staff Structure

Rachel Warnick
Manager, Governance and Project Management

Jordanna Coyle
Sr Governance & Project Management Administrator
2019 IEEE Educational Activities Board

15 Voting, 3 Non Voting
18 Total
Governance and Administration: Committee Structure
Continuing Professional Education: Committee Structure

IEEE Educational Activities Board

N&A  ARC  URC  PECC

Continuing Education Committee (CEC)

Certificates Program Committee (CPC)

Educational Products Editorial Committee (EPEC)

EAB/SA Standards Education Committee (SEC)

FRC  CEAA

CETAA  SERC

EPICS