IEEE Educational Activities

Programs & Capabilities with Increasing Impact

Jamie Moesch, Managing Director Educational Activities
IEEE Goals

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 service and resources to support life-long learning
- Provide opportunities for career and professional development
- Inspire a worldwide audience by building communities that advance technical interest, inform public policy, and expand knowledge for the benefit of humanity
Education Across IEEE

Expanding our collective impact in education through:

**Coordination** and **Cooperation**
IEEE Educational Activities

**Areas of Focus**

**Pre-University Activities**
- TryEngineering.org; Teacher/Volunteer Training; Summer Institutes; TryEngineeringTogether

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

**Continuing Education**
- eLearning; Certificates; IEEE Learning Network
Impact on Member Value

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

IEEE Learning Network simplifying course discovery and consolidating their learning progress

Enhanced Certificate Program offering CEUs and PDHs

Significant improvements to course program quality

Micro-volunteering opportunities through Volunteer STEM Portal in development
Members can now find continuing education from across IEEE in one place!

Visit ILN and start learning today! iln.ieee.org
New full course programs topics that are in demand

Lowered standard pricing by up to 70%
  • Courses now US$29 for Members, US$19 for Students

Numerous other discounts offered
  • E.G. IEEE Day, 10 Courses available for $10 each

Learn more about free courses and discounts from across IEEE here:
https://innovationatwork.ieee.org/iln-promotions/
14 hours of **online instruction**

Each lesson includes modules on **reading**, **writing**, **listening**, and **speaking** skills

Reoccurring characters bring the lessons to life as they interact with each other and the learner through **animated business scenarios**

Short **assessments** and **exercises** throughout each lesson to help improve skills, with **final test** at the end of each lesson

Provided non-native English speakers with working knowledge of English techniques and vocabulary that are helpful for work in the technical workplace.
New Programs Responding to needs during the COVID-19 Pandemic

- 6 Events
- 2,856 total registered
- Partners: Future Directions, Standards Association

- 5 Events
- 9,314 total registered
- Partner: IEEE MSD

- 5 Events
- 16,000+ total registered
- Partners: IEEE Foundation, IEEE Education Society, Digikey

- 4 Events
- 841 total registered
- Partner: Oceanic Engineering Society

- 6 Events
- 1,908 total registered
- Partners: Engineering Tomorrow, IEEE REACH, Spectrum (ROBOTS.org)

TryEngineering.org Translations

- **Google Translate Button**
  All 108 languages are currently available

- **Lesson Translation: Launch January 2021**
  Lessons will be able to be translated and printed

- **Improving Translations Pilot**
  Using G-Translate, words and phrases that did not translate accurately can be edited. 3-5 volunteers are needed to pilot translation accuracy. For more information contact Dawna Schultz at d.j.schultz@ieee.org.
2020 IEEE Board of Directors Strategic Retreat

18-19 January 2020, Fukuoka, Japan

- Attendees: IEEE Board of Directors, Management Council, Japan Council Chair, IEEE WIE Committee Chair, and IEEE Young Professionals Chair
- Focused on the educational needs of our members, technical professionals, and engineers
- Explored expanding opportunities to provide continuing education as a unique value proposition
Observed consensus and a willingness for action towards a Continuing Education strategy.

1. **Consensus on the importance of Continuing Education for members:**
   At a high level, there was alignment on the value of education for expanding member value.
   
   “Continuing Education must be a pillar in IEEE’s mission—we have all the raw materials for it.” - Board Member

2. **Need for a shared organizational vision and plan:**
   Board members agreed that for IEEE to move ahead with Continuing Education, in addition to consensus, there is need for a strong organization-wide strategy and plan.
   
   “IEEE will need an orchestrated plan and strategy for Lifelong Learning.” - Board Member

3. **Importance of internal collaboration to deliver educational offerings:**
   With various organizational units already providing educational offerings to members, the need for better internal collaboration to build a cohesive plan of action was articulated.
   
   “Success [of Continuing Education] requires buy-in across OUs.” - Board Member
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<td>Stephen Phillips</td>
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<td>Miriam P. Sanders</td>
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<td>Jamie Moesch</td>
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Steps of Development

Select Target Area for Pilot

Selected: Artificial Intelligence (AI), Internet of Things (IoT), Smart Grid

Curate and Assemble Content

Work with applicable society, council, technical communities

Measure and Analyze

Measure usage and conduct member surveys

Launch and Market Prototype

Curation & Learner Journey – Happen in Parallel

Audience segmentation and outreach activities

Build Learner Journey

Engage applicable society, standards, future directions, instructional designers, etc.
Learner Journey

Existing Content
- eLearning course
- Conference Tutorial Workshop
- Distinguished Lecturer recorded webinar
- Conference or Journal article

New Content
- Introduction to academy (objectives)
- Video with background for workshop
- PPT summarizing workshop and leading to Distinguished Lecturer
- Build new content to fill technical gaps in existing courses
- Academy conclusion
Coming in 2021 from the IEEE Ad Hoc Committee on Continuing Education and Lifelong Learning

IEEE Academy on Smart Grid

IEEE Academy on Artificial Intelligence

IEEE Academy on Internet of Things
IEEE Educational Activities Board (EAB) Awards recognize and honor major contributions to engineering and technical education.

Nominations Accepted mid-February to 3 May
For complete details or to nominate visit: http://bit.ly/EABAardsProgram
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