IEEE Educational Activities (IEEE EA) Strategic Focus

The IEEE Educational Activities Department continues to keep in focus IEEE’s 3-5 year Goals when developing programs.

IEEE EA is aligned with the following IEEE goals:

- IEEE will improve the professional competencies of students and professionals through education
- IEEE will increasingly be valued by the global community as a catalyst for a balanced dialogue on engineering, computing and technology-related issues
IEEE Educational Activities Board

- The IEEE Educational Activities Department has an oversight body known as the IEEE Educational Activities Board (IEEE EAB)
- The IEEE EAB is comprised of IEEE Volunteer members
- There are 15 entities reporting into the EAB
EAB’s Goals

- Provide members and all persons involved in IEEE’s technical fields of interest with high-quality opportunities for education on these topics.

- Provide young people and their teachers and parents with opportunities to understand prospects and career paths in engineering, computing and technology.

- Provide the profession’s perspective on all key aspects of higher education in IEEE’s technical fields of interest. Among these are: curriculum, accreditation, recruiting and retention, educational policies, and the research enterprise.
Where to Find EA on the Web

From IEEE’s main page
www.ieee.org
Click on the tab “Education & Careers”
OR
Use URL
www.ieee.org/education
EA’s programs can be located on this page
Sample of
IEEE Educational Activities
Programs
TryEngineering.org
Available to Members in R 1-10

Explore Engineering
Learn about engineering disciplines, career preparation, and profiles of engineers/students

Opportunities
Find information about engineering camps, scholarships, and research programs

University Finder
Find accredited engineering programs at 3,223 institutions in 60 countries

Lesson Plans
Download 114 fun hands-on engineering activities

Insights from Experts
Browse questions answered by engineers or undergraduates

Play Games
Play virtual games

In 9 Languages!
Discover
Find information on exciting computing careers and explore careers using the visual cloud tool.

Study
Explore computing majors and search for accredited computing degree programs around the world.

Work
Browse computing professional career profiles & computing hero profiles.

Champion
Educator lesson plans and tools.

Resources
External computing resources.

Brought to you by the IEEE Computer Society and IEEE EAB.
TryNano.org
Available to Members in R 1-10

- Website created by IEEE EAB and the IEEE Nanotechnology Council. Focuses on nanotechnology to raise awareness about this discipline. It also provides insight into the nanotechnology industry and describes careers in nanotechnology.

- Primary audience: students, parents, teachers, school counselors, and the general public.

- Visitors to the portal can:
  - Explore nonmaterials and learn about different applications of nanotechnology.
  - View spotlights of different companies and universities that apply nanotechnology to products and processes.
  - Find links to university programs in nanotechnology.
  - Find lesson plans for use in the classroom.

Visit: www.TryNano.org
Teacher In-Service Program
Available to Members in R 1-10

- Features IEEE Section volunteers developing and presenting technologically-oriented subject matter to local pre-university educators in an in-service or professional development setting.

- IEEE TISP allows IEEE volunteers to share their technical expertise and to demonstrate the application of engineering concepts to support the teaching and learning of science, mathematics and technology disciplines.

Visit: www.ieee.org/education
Engineering Projects in Community Service (EPICS) in IEEE

- Empowers student branches and IEEE GOLD groups to work with high school students and humanitarian organizations on community service-related engineering projects

- EPICS projects focus on development – by university and high school student teams – of devices and systems addressing the needs in the areas of education, access and abilities, human services or the environment.

Visit:  www.ieee.org/education
IEEE iTunes University Beyond Campus

- iTunes U: Like YouTube for Scholars (MIT, Stanford, Smithsonian, Cambridge, Harvard, Oxford)
- Video, podcasts, pdfs, ebooks
- Some IEEE Societies and IEEE departments have their own home page and control the branding and Web links
- All content must be free and publicly available

Visit: http://itunes.ieee-elearning.org
IEEE eLearning Library
Available to Members in R 1-10

- The premier online collection of short courses and conference workshops
- High-end production, peer-reviewed by Editorial Board
- Many courses technically sponsored by IEEE OUs, with revenue returning to the sponsor
- Corporate and academic subscriptions through IEEE Xplore

Visit: http://ieee-elearning.org
IEEE English for Technical Professionals
Available to Members in R 1-10

- Improve professional communication skills
- Covers language skills that are useful in electrical and computer engineering
- The course content is based on *Cambridge English for Engineering* by Mark Ibbotson with additional material from IEEE
- More than 40 hours of online, interactive content

Visit: www.englishforengineers.ieee-elearning.org
What is IEEE-Eta Kappa Nu?

- IEEE-Eta Kappa Nu (IEEE-HKN) is the honor society dedicated to encouraging and recognizing excellence in the IEEE designated fields of interest.

- Members consist of students, alumni, professionals and eminent scholars worldwide who have demonstrated exceptional academic and professional accomplishments.

- IEEE-HKN members possess the following characteristics:
  - **Academic Talent:** Though academic criteria is established individually depending on country and college/university, members are typically the top students in their second, third or fourth year of their first academic degree.
  - **Character:** Members are of exceptional character; they demonstrate such character to their peers.
  - **Attitude:** Members have the proper attitude to work hard, continually challenge himself/herself, are willing to help others, and use their talents and superior skills in service to their community, school, department and peers.
What is IEEE-Eta Kappa Nu?

- HKN was founded in 1904 at the University of Illinois at Urbana-Champaign; in 2010, HKN merged with IEEE and became IEEE-HKN
- More than 180 Chapters at colleges and universities worldwide
- Candidates are invited to join based on their academic ranking, character and attitude; goal is to be the catalyst for the development of “The Complete Technical Professional”
- Employers around the world recognize the designation of IEEE-HKN and understand that IEEE-HKN members are of the best candidates that are well-rounded, articulate and community-minded
Why Join IEEE-Eta Kappa Nu?

- Network with top students, professors and professionals from around the world.

- Access to key university decision makers for references, research, graduate school and beyond.

- Share a tradition with nearly 200,000 IEEE-HKN inductees worldwide that will open up a network that will help you in your education, career and professional development.

- For more information about IEEE-HKN, visit www.hkn.org and follow IEEE-HKN on Twitter (@IEEEHKN and #IEEEHKN) and on Facebook (“IEEE Eta Kappa Nu” page)
Educational Activities Board
Awards Program
Available to Members in R1-10

- EAB Awards honor individuals and companies for major contributions to engineering, computing and technology

- Awards Timeline
  - The EAB Awards website is operational by 1 January
  - The call for EAB Awards nominations goes out in January
  - Nominations close 30 April
  - Award winners are decided at the June IEEE Meeting Series
  - Presentation of awards at the November IEEE Meeting Series

For a listing of all the IEEE EAB Awards
Visit:  www.ieee.org/eab-awards
IEEE Standards Education
Available to Members in R1-10

- Offers online learning modules and resources to enhance the understanding of technical standards

- Provides an IEEE Standards Education Web Portal that offers
  - Standards-related Tutorials and Case Studies
  - Student Application Papers based on Senior Design Projects
  - IEEE eLearning Library courses for practicing professionals and students
  - And More...
Standards Education also has...

Available to Members in R1-10

- Call for Student Grants
  - Offering grants to both students and faculty mentors to help with senior or capstone design projects
  - Final Student Application Papers are published by the IEEE

Visit: standardseducation.org
Real World Engineering Project Library (RWEP)
Available in Regions 1-10

- Goals of Library:
  - Provide a repository of projects that can be used by faculty members teaching first-year students which demonstrate theory to engineering, computing and technology practices
  - Demonstrates social relevance of the engineering profession

- Ready to use curriculum modules:
  - 25+ completed, classroom-ready modules are available

Visit: www.realworldengineering.org
Accreditation.org
Available in Regions 1-10

- Comprehensive source for worldwide listings of accreditation organizations for degree programs in engineering, computing and technology

- Search function allows users to obtain listings of accredited programs in specific nations

- This website provides information on Accrediting and Recognized Bodies, Accredited Institutions, and various Accreditation Resources.

Visit: www.accreditation.org
Thank you