IEEE Awareness

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Outlines

- **What is IEEE**

- **The Value of IEEE Membership**

- **IEEE Awards & Travel Grants**

- **IEEE Professional Network**

- **IEEE Financial Support**

What is IEEE?

- The IEEE (Institute of Electrical and Electronics Engineers) describes itself as

  "The world's largest technical professional society promoting the development and application of electro technology and allied sciences for the benefit of humanity, the advancement of the profession, and the well-being of our members"

About: IEEE IIT Mandi Student Branch

➤ We are a student-run organization at the IIT Mandi, our motives are to find ***ourselves*** and ***our passions***, to have ***fun and meet new people, gather new experiences, to learn industrial skills to enhance ourselves***, to learn about research and innovation in technology, to help our community and to get inspired to change the world!

Website:
https://ieee.iitmandi.ac.in

IEEE SBC Societies at IIT Mandi

Who are IEEE Students?

- **An international body of innovative members and volunteers** who are digital natives interested in enhancing their professional image, expanding their global network, connecting with peers and giving back to their community.

We are:
  - 100,000+ student and graduate student members
  - 25% of the membership of IEEE
  - In 100+ countries
  - At 2000+ Student Branches

IEEE students

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The Value of IEEE Membership

Knowledge ...
- staying current with the fast-changing world of technology
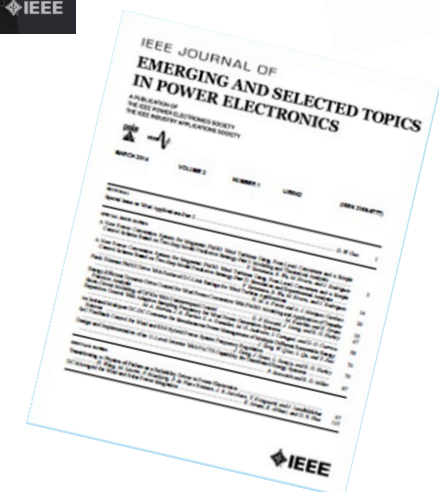
Community ...
- unparalleled networking opportunities, and the buying power into low, members-only rates on benefits and services
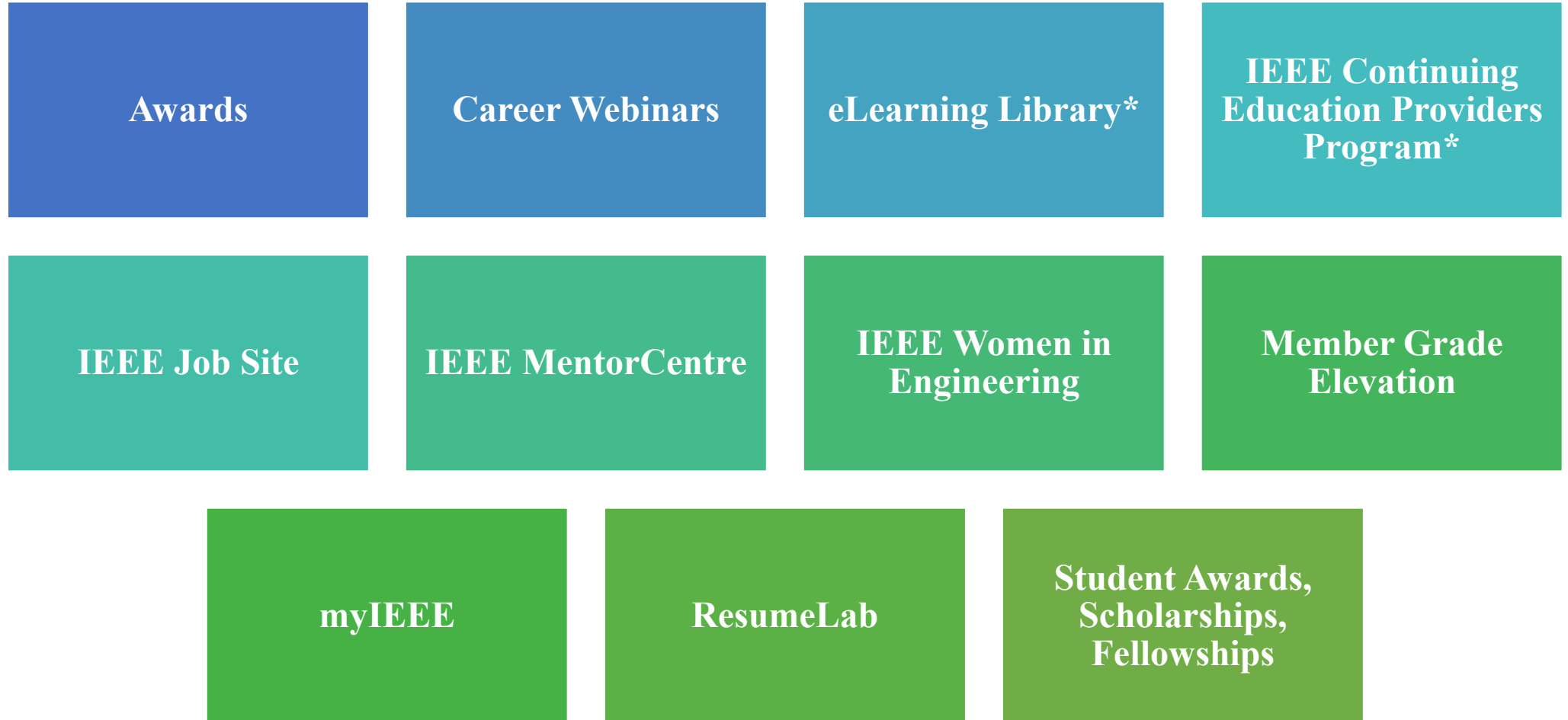
Profession ...
- empowering members to build their careers, and giving back to society

Benefits: Keeping Technically Current

- Certified Software Development Professional*
- e-Book Classics
- IEEE Member Digital Library (Access to)
- IEEE Potentials Magazine - Digital
- IEEE Potentials Magazine - Print
- IEEE Societies*
- IEEE Spectrum Magazine
- IEEE Spectrum Magazine, digital delivery
- IEEE Standards*
- IEEE WCET Certification Program*
- IEEE Xplore Abstracts
- IEEE-USA eBooks*
- IEEE.tv
- Proceedings of the IEEE*

Benefits: Career Resources & Recognition

Awards	Career Webinars	eLearning Library*	IEEE Continuing Education Providers Program*
IEEE Job Site	IEEE MentorCentre	IEEE Women in Engineering	Member Grade Elevation
myIEEE	ResumeLab	Student Awards, Scholarships, Fellowships	

Benefits: Professional Networking

Discount on IEEE Conferences*

GoogleApps@IEEE

IEEE e-mail Alias

IEEE memberNet

Local Meetings

Online Communities

Volunteering

Young Professionals (formerly GOLD)

Membership Benefits Include:

Conferences & Workshops - Online Access to all societies in which you are a member and sponsored conference proceedings. Registration discounts on conferences, symposiums and workshops

Easy access to books, tutorials, webinars, and videotapes, at discounted member rates.. or FREE!

Technical Committees-
Active committees concentrate on such key areas of technology as:
- Power & Control Core Technologies,
- Power Conversion Systems and Components
- Motor Drives and Actuators
- Vehicle and Transportation Systems
- Sustainable Energy Systems
- High performance and Emerging Technologies
- Communication Energy Systems

Membership Benefits Include:

- **Networking**
  - PELS has over 150 chapters, national and international, professional and student
  - Young Professionals enjoy networking events at
    - APEC
    - ECCE: North America, Asia, Europe
    - SPEC
  - Members Participate in
    - Technical committees
    - Conference committees
    - Chapters
  - Women in Engineering events/socials
  - Mentorship

Benefits: Member Discounts

IEEE books and eBooks, journals and articles, conferences and proceedings, standards, society memberships, and continuing education courses

In addition, members have access to a variety of **affinity programs** that offer savings.

IEEE Member Discounts offer substantial cost savings on a variety of products and services as a benefit of IEEE membership.

IEEE Society Membership

1. **Aerospace & Electronic Systems**
2. **Antennas & Propagation**
3. **Broadcast Technology**
4. **Circuits & Systems**
5. **Communications**
6. **Components Packaging, & Manufacturing Technology**
7. **Computational Intelligence (formerly Neural Networks)**
8. **Computer**
9. **Consumer Electronics**
10. **Control Systems**
11. **Dielectrics & Electrical Insulation**
12. **Education**
13. **Electromagnetic Compatibility**
14. **Electron Devices**
15. **Engineering in Medicine & Biology**
16. **Geoscience & Remote Sensing**
17. **Industrial Electronics**
18. **Industry Applications**
19. **Information Theory**
20. **Intelligent Transportation Systems**
21. **Instrumentation & Measurement**
22. **Magnetics**
23. **Microwave Theory & Techniques**
24. **Nuclear & Plasma Sciences**
25. **Oceanic Engineering**
26. **Photonics (formerly Lasers & Electro-Optics)**
27. **Power Electronics**
28. **Power & Energy**
29. **Product Safety Engineering**
30. **Professional Communication**
31. **Reliability**
32. **Robotics & Automation**
33. **Signal Processing**
34. **Society on Social Implications of Technology**
35. **Solid-State Circuits**
36. **Systems, Man, & Cybernetics**
37. **Technology and Engineering Management Society**
38. **Ultrasonics, Ferroelectrics, & Frequency Control**
39. **Vehicular Technology**

Power Energy Society (PES)

The Power & Energy Society (PES) is the oldest society in IEEE

IEEE Transactions on Energy Conversion

IEEE Transactions on Power Delivery

IEEE Transactions on Power Systems

IEEE Transactions on Sustainable Energy

IEEE Transactions on Smart Grid

IEEE Power & Energy Magazine

Industry Applications Society (IAS)

Annual Conferences

❑**IEEE IAS Annual Meeting**
❑**Energy Conversion Congress and Exposition**
❑Applied Power Electronics Conference
❑Cement Industry Conference
❑Industrial Energy Efficiency Workshop
❑Industrial and Commercial Power Systems Conference
❑Petroleum and Chemical Industry Conference
❑Pulp, Paper and Forest Industries Conference
❑Rural Electric Power Industry Conference

https://ias.ieee.org/

Robotics & Automation Society (RAS)

Annual Conferences

❑IEEE RAS Annual Meeting

❑International Conference on Robotics and Automation (ICRA)

❑International Conference on Informatics in Control, Automation and Robotics

❑Summer School on Singularities of Mechanisms and Robotics Manipulators

❑World Robot Conference

❑International Conference on Intelligent Robots and Systems (IROS)

❑International Conference on Automation Science and Engineering (CASE)
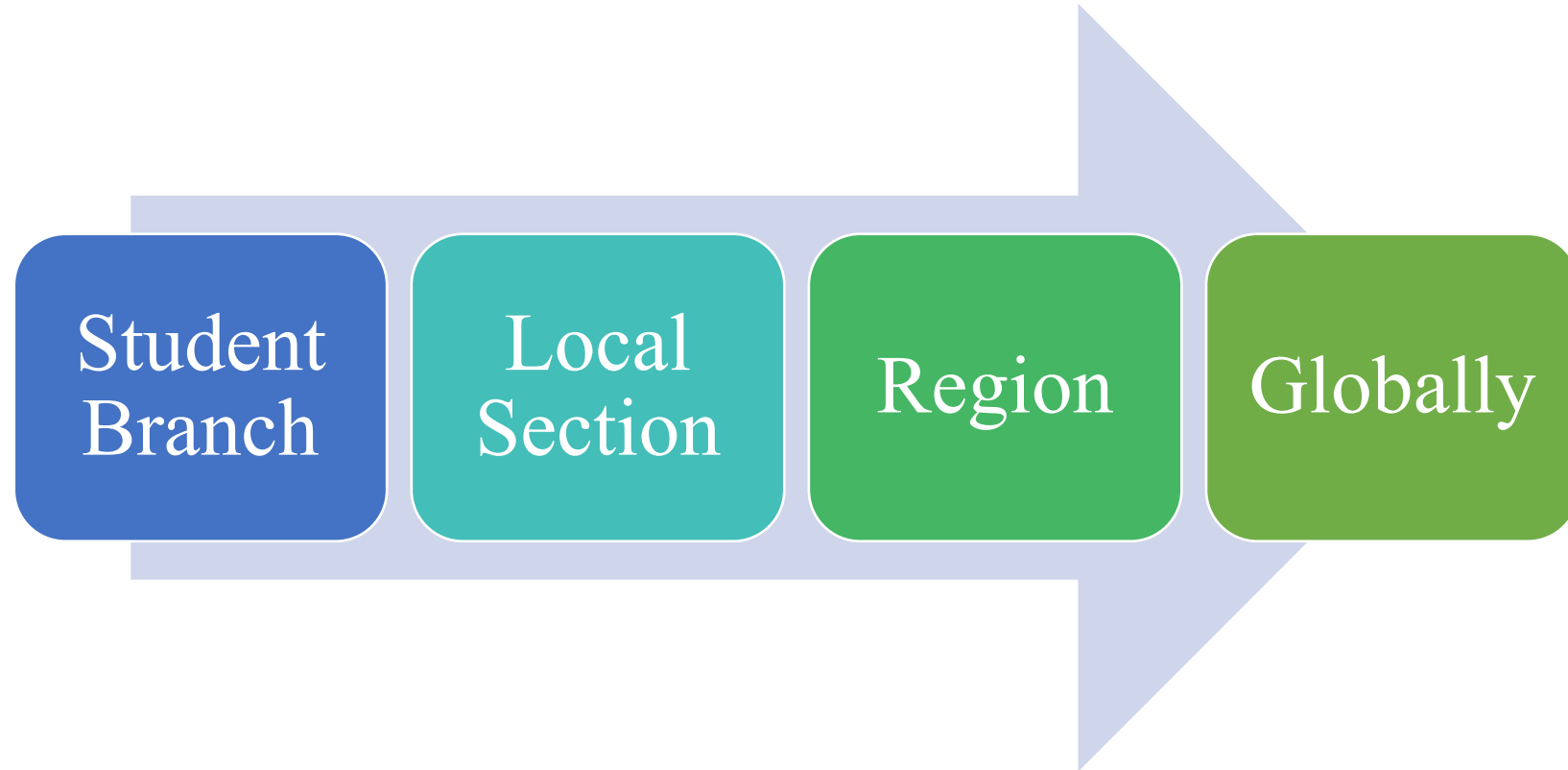
https://ras.ieee.org/

Women in Engineering (WIE)

Annual Conferences

❑IEEE WIE International Leadership Conference

❑WIE International Leadership Summits

❑Tech Powered by Women Workshop

https://wie.ieee.org/

Volunteering Opportunities

Student Branch → Local Section → Region → Globally

IEEE Societies offering grants

• IEEE Circuits and Systems Society

•IEEE Computational Intelligence Society

•IEEE Communications Society

•IEEE Industry Applications Society

•IEEE Information Theory Society

•IEEE Instrumentation & Measurement Society

•IEEE Microwave Theory and Techniques Society

•IEEE Nuclear and Plasma

•IEEE Power and Energy Society
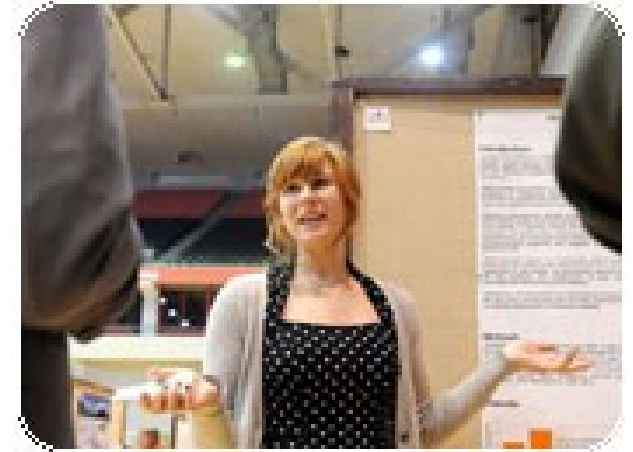
IEEE PES AWARDS

IEEE IAS AWARDS

Andrew W. Smith Outstanding Young Member Achievement Award

Distinguished Service Award

Outstanding Achievement Award

Outstanding Young Member Service Award

Kliman Award

IEEE IAS Student Awards

❑Myron Zucker Programs Design Contest (generally for Final Year Graduate Students)

❑Travel Award Myron Zucker Undergraduate Student Travel Grants are awarded to selected students each year.

❑Annual Meeting Travel Grant Award (AMTGP)

❑IAS CMD Outstanding Member Award

❑ IAS CMD Student Robotics Demonstration Contest

❑IAS CMD Student Thesis Contest

❑Myron Zucker Student-Faculty Grant Program

❑IAS CMD Humanitarian Contest

IEEE WIE Student Awards

❑ IEEE WIE Inspiring Member of the Year Award

❑ IEEE WIE Inspiring Student of the Year Award

❑ IEEE WIE Affinity Group of the Year Award

IEEE Student Project Grant

IEEE Standards Education Grants

❑ The IEEE Standards Education Committee (SEC) grants US $500 for students (per project) and US $300 for faculty mentors to help complete senior, undergraduate or graduate projects.

❑ Projects may be for design, capstone, development or research in which an industry technical standard(s) was applied to complete the project.

IEEE Student Project Grant contd…

The IEEE Foundation invites grant applications exclusively from IEEE organizational units for projects that address the pre-defined theme identified by the IEEE Foundation for each year.

- **The IEEE Lasers & Electro-Optics Society**

- **The IEEE Canadian Foundation**

- **EEE Student Enterprise Award**

- **Darrel Chong Student Activity Award**

- **Graduate Student Research Grants from Computation Intelligence Society (**CIS scholarship varies from $1,000 to $4,000**)**

Coding Competitions

❑**IEEE PROGRAMMING LEAGUE**

❑**IEEE Xtreme** (often abbreviated as **Xtreme**) is an annual hackathon and competitive programming challenge in which teams of IEEE Student members, often supported by an IEEE Student Branch and proctored by an IEEE member, compete in a 24-hour time span against each other to solve a set of programming problems.

What do IEEE Student Members want?

Student Members Want…	The IEEE provides its members…
Access to career and employment resources	Continuing education through a variety of e-learning courses.
Remain technically current through educational resources and programs	Free bi-monthly copies of IEEE Potentials Magazine (the only IEEE publication for students); ability to compete in a variety of contests and for awards.
Expand the network beyond your school	Access to travel grants (for local and global conferences); access to funding opportunities for a variety of activities, projects, and events!

Note: these results were gathered from the 2016 member segmentation study.

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Connect with us

IEEE Collabratec

Global Student Exchange Community

https://ieee-collabratec.ieee.org/

IEEE.tv

IEEE Student Channel

https://ieeetv.ieee.org/

IEEE students

facebook

IEEE Students

www.facebook/com/IEEESTUDENTS

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Do you know?

- **How to ensure your IEEE Member Profile is up-to-date?**
  - Login to your IEEE account (annually) and be sure your personal information is accurate (address, email, school name, graduation date, etc.)

- **How to locate your IEEE Member number?**
  - Login to IEEE account to obtain your member number and remember to save it ☺. Download your Membership Certificate via [IEEE Collabratec](#).

- **How to find other IEEE Student Branches?**
  - Visit [students.ieee.org](#) and search on the worldwide map for a listing

- **How to find professional IEEE Members?**
  - Visit the Member Directory via IEEE Collabratec.
  - Search [IEEE Rosters](#) (volunteers only) to locate names and emails of members and volunteers.

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Beyond the Student Branch

IEEE Member Directory via

Access to all active IEEE student and professional members allowing for networking and collaboration.

The IEEE Member Directory is exclusively accessible via IEEE Collabratec using the people search function.

Mentoring and resume features can also be found here!

Your voice at IEEE - The IEEE Student Activities Committee (SAC)

The IEEE SAC is comprised of volunteers from all around the world who are responsible for student programs and activities. These volunteer members provide important viewpoints and information and represent the voice of the 100,000+ IEEE Student and Graduate Student Members worldwide.
The mission is to:

"deliver a common, high quality IEEE Student member experience globally, for lifelong, professional success through IEEE membership."

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Student Activities at your local IEEE Section

As an IEEE Student Member, you are automatically a part of a larger network of units that advance the mission of IEEE – your local IEEE Section. IEEE Sections provide their members a venue to share technical, professional, and personal interests locally, with their fellow student and professional IEEE members who live and/or work in close proximity. It is our hope that the local Section can help IEEE to become vital to your Student Branch.

These two positions at your local Section as they are there to support you:

✓ Section Student Representative (SSR)
✓ Section Student Activities Chair (SSAC)

Strengthening the relationship between local Student Branches and their parent Sections is critical to the future of the IEEE. Your Branch Chair and Counselor can help!

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Financial Support

Members

TRAVEL GRANTS

EDUCATIONAL SCHOLARSHIPS

HUMANITARIAN PROJECTS

CONFERENCES

AWARDS

Volunteers

STUDENT PROFESSIONAL AWARENESS ACTIVITIES

VIRTUAL AND IN-PERSON LEADERSHIP TRAINING

STUDENT BRANCH ACTIVITIES/PROJECTS

REGIONAL CONFERENCES

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Compete for recognition and prizes!

1. Member Get a Member (MGM)

Recruit new IEEE Students by sharing your experience with your friends and colleagues. You can earn awards for you and your local IEEE Student Branch!

2. IEEE Into Focus Photo Contest

Share your IEEE photos each month for a chance to be featured in IEEE promotional materials and win great prizes!

3. Gift of Membership

Holiday or birthday coming up for someone you love? Give them the gift of IEEE Student Membership.

4. IEEE Day

Celebrate with all IEEE Students worldwide, every year, in October. Participate in local events, collaborate on a project and share your photos with us for a chance to win!

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IEEE Provides Educational Resources

www.ieee.org/education

Trynano.org

Itunes University

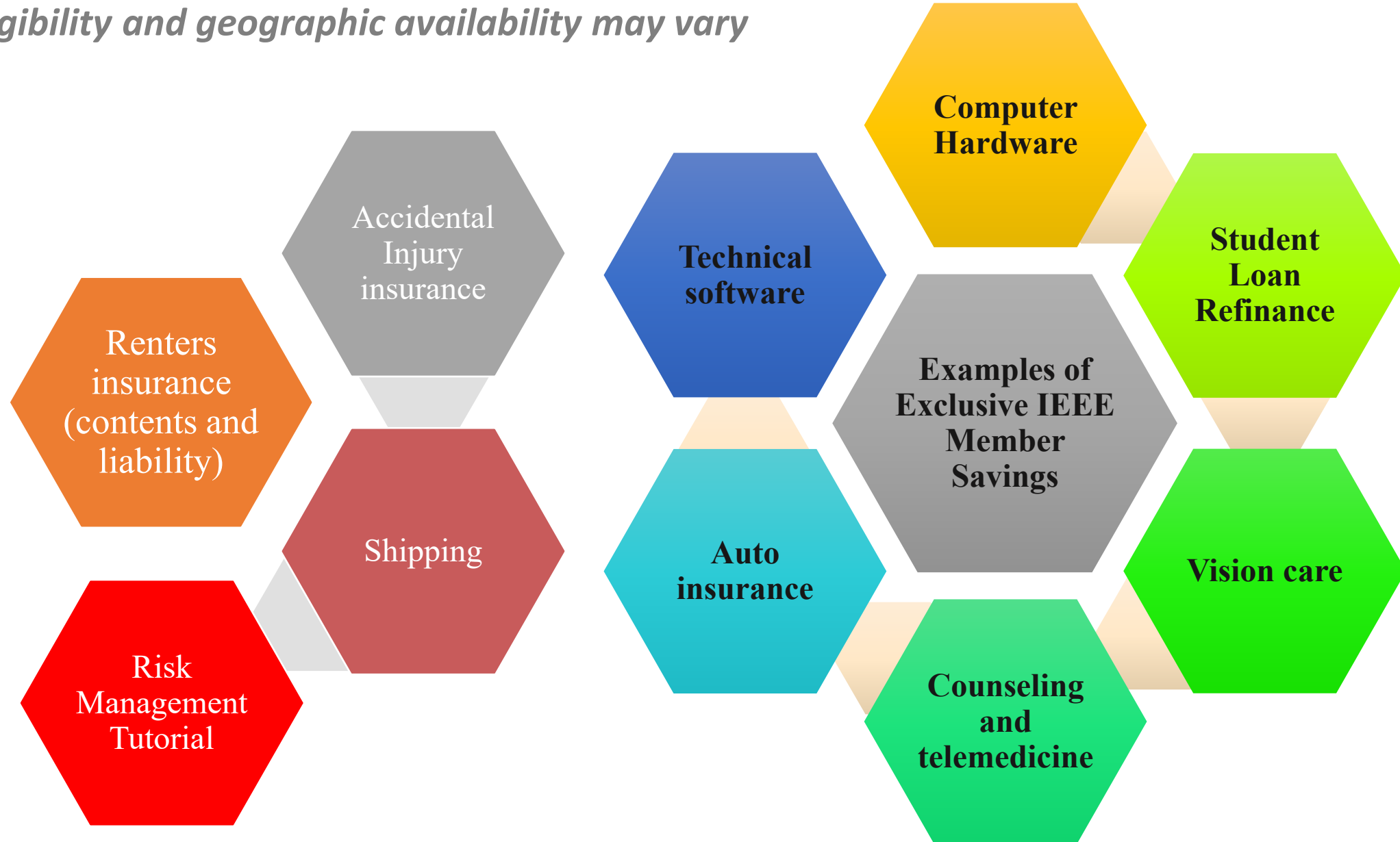IEEEXplore Digital Library

IEEE.tv

Try computing.org

IEEE E-learning Library

IEEE students

Co-branded Member Discounts*

eligibility and geographic availability may vary

- Computer Hardware
- Student Loan Refinance
- Technical software
- Examples of Exclusive IEEE Member Savings
- Accidental Injury insurance
- Renters insurance (contents and liability)
- Shipping
- Risk Management Tutorial
- Auto insurance
- Counseling and telemedicine
- Vision care

Get involved with IEEE HAC/SIGHT!

- Benefits to engaging in humanitarian technology and sustainable development activities at IEEE:

  - Learn and develop professional skills through participation in projects and events

  - Connect with like-minded IEEE members around the world

  - Work toward a greater purpose on projects that align with your personal motivations and skill set

  - Make a real difference in your local community!

- Join with IEEE HAC/SIGHT to Get Involved!

  - Become an IEEE SIGHT member (add it to your IEEE student membership; it's free!)

  - Form a SIGHT Group at your IEEE Student Branch to assess needs in your local community, apply for financial resources, and implement a sustainable technological solution

  - Volunteer on a Committee

  - Check out the free, online resources from HAC/SIGHT on the IEEE Learning Network (ILN) and SIGHT website that equip participants with a basic understanding of humanitarian technology and sustainable development topics

  - Network with other members with similar interests through the HAC/SIGHT social media platforms

    - Humanitarian Activities Committee Facebook page

    - SIGHT Facebook group

- *Questions? Write to sight@ieee.org*

Did you know there are additional groups you can join?
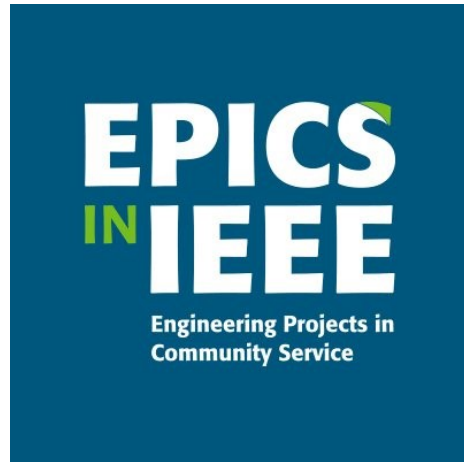
The IEEE Student Branch Program

- Local IEEE Student Members attending a college/university

- Attend all IEEE student meetings, activities, programs

- Participation in competitions, awards, projects, community service

- Leadership development and training for volunteers

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Recognize your Student Branch

Student branches are crucial to the growth and development of IEEE Student members. Student branches create a local network of students and give students the opportunity to meet and learn from fellow students, as well as faculty members and professionals in the field.

Your Student Branch can be recognized for several awards for their educational, technical, projects and professional activities including:

- Larry K. Wilson Regional Student Activities Award

- IEEE Regional Exemplary Student Branch Award

- IEEE Outstanding Branch Counselor and Branch Chapter Advisor Award

- The Darrel Chong Student Activity Award

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Student Branch Reporting

- Student Branch Reporting serves as a valuable historical document to aid future Student Branch leaders in their yearly planning.

- It includes the Branch finances, so it is important that the Student Branch Treasurer is involved in the preparation of the report.

- Be sure to involve your Branch Counselor as he/she will be required to approve the report before it is sent to the IEEE Operations Center.

- It's just 3 easy steps to report your Student Branch activities and newly elected officers yearly (bookmark these links!):

1. **Officers:** https://officers.vtools.ieee.org/
2. **Annual Plan:** https://sbr.vtools.ieee.org/
3. **Meetings/Events:** https://events.vtools.ieee.org/

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Benefits of Reporting Activities

- Reporting demonstrates proof of meetings, events, and keeps IEEE informed your Branch leadership information.

- A record of all activities will be housed in our database for historical purposes and can be used for awards, etc.

Note:

- An incentive allotment of US$100 is given if a Student Branch has 50 or more members. If a Student Branch has fewer than 50 members, the incentive is US$50.

- In addition, an incentive rebate of US$2 per Student or Graduate Student member (based on membership statistics as of 31 December of the previous year) is also given for reports received prior to the deadline.

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Changes to Annual Reporting

- **Student Branch Annual Plan**
  - Replaces the current Student Branch Activity Report
  - Opens 1 August annually
  - Closes 1 February annually

- Students should connect with their local Section to assist with developing yearly plan and ask for support/resources.

vTools Officer Reporting v2.3.0 has been released

- All new officer reports require a term end date be provided

- Term limit of six(6) years in a position will be enforced

- Note: View an officer's term dates by hovering cursor over the name displayed in the online roster page

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Note: if a Branch does not meet the minimum membership requirement of **10 members**, they risk losing their IEEE Student Branch status and being placed on probation in June, annually.

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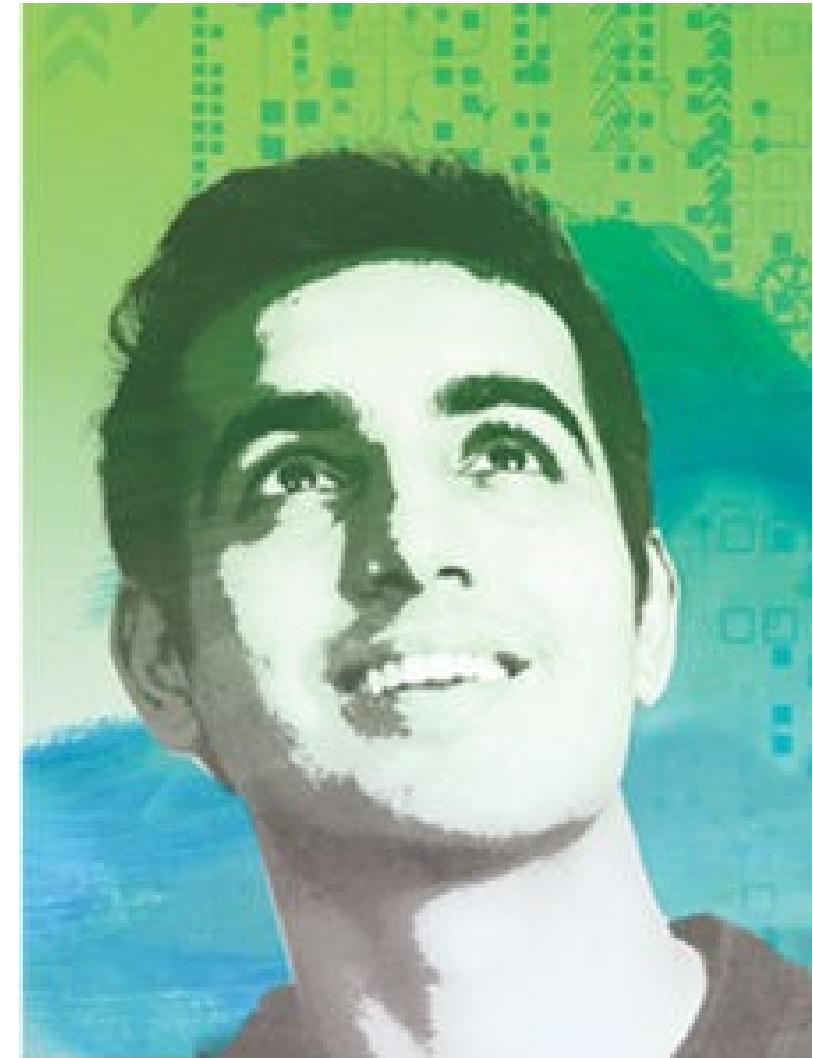
Key Resources for Student Volunteers

As a student volunteer, it is essential that you understand the tools that assist you with connecting with your branch members and local volunteers to support your efforts. Familiarize yourself through the various tutorials and trainings.

Student Branch Membership Data is available in OU Analytics. Click on the Student tab.
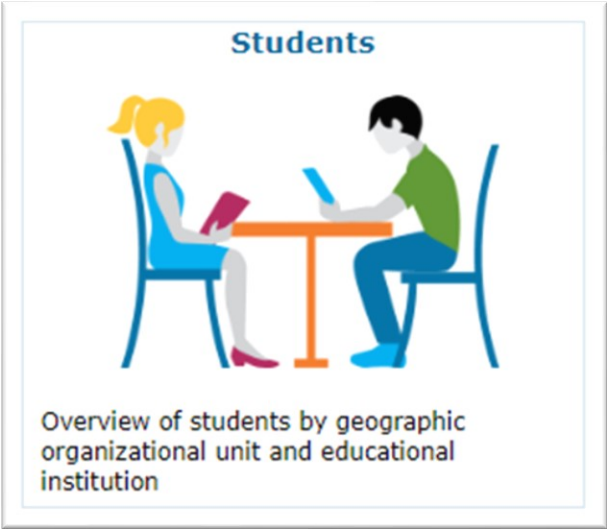
Overview of students by geographic organizational unit and educational institution

IEEE OU Analytics

Students - Dashboard

This dashboard provides interactive views for the members attending educational institutions in your organizational unit.
• Refine data through filters or click within a visualization to view results and details.
• Hover over a visualization to display a tooltip with statistical facts.

Region R5   **Grade** (All)   **IEEE Status** Active

Student Count by Section and School

School Section	School Name	Total
	Minnesota Univ Of - Twin Cities	3
Arkansas River Valley Section	Arkansas Tech Univ	28
Arkansas Section	Arkansas State University	7
	Arkansas Univ Of-Little Rock	16
	Harding University	15
	Univ Of Central Arkansas	1
Baton Rouge Section	Louisiana State Univ - Baton Rouge	55
	Southern Univ - Baton Rouge	11
Beaumont Section	Lamar Univ	29
	Mcneese State Univ	4
	Stephen F Austin State Univ	10
Central Texas Section	Angelo State Univ	1

Student Count by Gender

Female 13.50%
Unknown 23.23%
Male 63.26%

- Female
- Male
- Unknown

Student Count by Grade

Region	Council	Section	Grade	Total
R5	Region 5 - No Council	Arkansas River Valley Section	Graduate Student Member	3
			Member	2
			Student Member	27
		Arkansas Section	Graduate Student Member	14
			Member	3
			Student Member	41
		Baton Rouge Section	Graduate Student Member	35
			Member	6
			Student Member	25
		Beaumont Section	Associate Member	1
			Graduate Student Member	5
			Member	5
			Student Member	31
		Central Texas Section	Affiliate	1

Student Count by Field of Study

Field	Count
Engineering	2,912
Computer Sciences and Information Technologies	642
Other	76
Physical Sciences	41
Biological and Medical Sciences	40
Technical Communications, Education, Management, Law and Policy	29
Mathematics	20
Unknown	2

Note: Data displayed is based upon volunteer access privileges.
Data made available through this platform is IEEE Confidential Information. Please review the IEEE Guide to Classification of Documents policy for more information.

IEEE students

Why connect with my section?

- Collaborate on local projects / initiatives
- Network with professional IEEE Members from industry, government, and academia
- Be mentored by engineering professionals
- Receive career guidance and support
- Engage with the larger IEEE network

Sections (300+) → **Student Branches (2000+)** → **YOU!**

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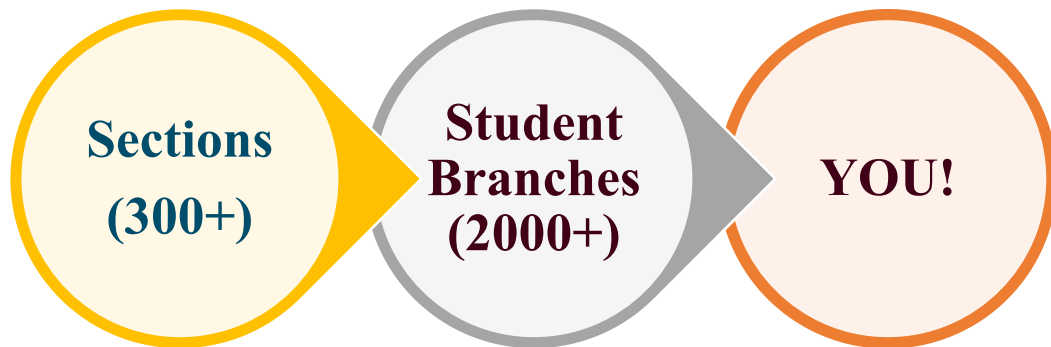
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3 steps to connecting

Step 1: Know your Section representation: rosters.ieee.org

- ✓ Section Student Activities Chair (SSAC)
- ✓ Section Student Representative (SSR)

Step 2: Involve your Section representation on the following:

- ✓ Coordination of Branch activities - be sure to log all activities in vTools Events
- ✓ Development of your Branch Annual Plan is due 1 February annually.
- ✓ Financial support for your initiatives

Step 3: Review the Best Practices video to learn more about the IEEE Section – Branch connection

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Important Reminders

- Student Branches are officially under the local Sections' organizational structure
  - Similar to local chapters and affinity groups.

- To form a new Student Branch, approval is required from the Region Director and The Region Student Activities Coordinator. Section Chairs are informed of all new units within their boundaries.

- Rebates are based on students who attend schools within the Section.

- For Student Branch reporting and rebates:
  - All individual activities/events still need to be reported via vTools Events
  - All officers must be reported as they change via: https://officers.vtools.ieee.org/

- **Student Branch Annual Plan**
  - Launch date: August annually
  - Via the Student Branch Reporting Tool
  - Must be reported by 1 February annually to be eligible for rebates

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IEEE Member and Geographic Activities

Operations Manual

MGA Operations Manual

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Student Resources

- ✓ Branch Formations
- ✓ Branch Calendar
- ✓ Web Hosting for Branches
- ✓ Membership Development Kits (Branch Chairs only)
- ✓ Funding
- ✓ Branding and Visual Identity
- ✓ Awards
- ✓ Funding
- ✓ SPA Program
- ✓ IEEEXtreme

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Student Resources

- Volunteer Training - [Branch Leadership Training](#)

- Video Training - [Best Practices for Student Branches](#)

- Website - [students.ieee.org](#)

- Visual Identity - [Resources and Toolkit](#)

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IEEE Support Staff – Student Services

Web: students.ieee.org

Email: student-services@ieee.org

JOIN IEEE

- Join the World's Largest Professional Association.

You make a difference when you join IEEE.

www.ieee.org

IIT MANDI Student Branch

Thank You