

Academic Goals

- Recruit more diverse students & faculty
- Promote certificate program
- Increase course sharing across campuses
- Develop new courses
- Develop industry short courses
- International exchange

Develop students with a high degree of technical knowledge in power and energy systems that will be able to face global challenges.

Increase Diversity

- The total number of female students at CURENT has increased since the first year. CURENT has seen an 11% increase.
- Efforts are being carried out to increase the number of domestic female engineers and domestic minorities.

Additional Faculty

- UTK has hired 3 new faculty members
- RPI has hired 1 new faculty member
- TU and NEU have ongoing faculty searches in power areas.

Diversity Recruitment

- Recruit at local colleges & universities
- Leverage existing university diversity recruitment
- Recruit additional students through REU, sponsored senior design projects and national and local conferences

Long Term Development

- Monitor diversity outreach effectiveness and retention bottlenecks.
- Continue to host all girls summer engineering programs
- Develop sustainable afterschool events for local schools
- Promote high achievers through YSP and identify interested candidates through RET relationships

- Additional faculty with diverse backgrounds may help promote a more diverse culture and attract underrepresented minorities.

Certificate Program

- The graduate and undergraduate certificate programs in power and energy system is designed for graduate students who wish to pursue careers in the fields of power system and electronics engineering. It is also suitable for professionals and managers currently working in the field looking to improve their knowledge and skills.
- The certificate requires the following courses:
 - Ultra-wide-area Resilient Electrical Energy Transmission Networks Course
 - At least four Technical Concentration Courses
 - At least one course in Entrepreneurship, Economics, or Innovation
 - One course in Research and Engineering Ethics
- After one year of the certificate program, three students have received the achievement.

Short Courses

CURENT offered an Introduction to PMU Applications taught by RPI's Joe Chow. The course was taught in the Min Kao Building at the University of Tennessee.

Additionally, student and industry were offered to participate in a National Instruments product course in early August. Another course that builds on the earlier material is being planned for the Spring 2015.

New Courses

Recent new courses include Advanced Power Grid Protection, Power System Economics, Advanced power Electronics/Drives, and Compressed Sensing and It's Applications.

Additionally, ECE692 was a student guided, hands-on course that emphasized practical knowledge of power electronics technologies .



Shared Courses

CURENT offers three online or broadcasted classes. The three classes are:

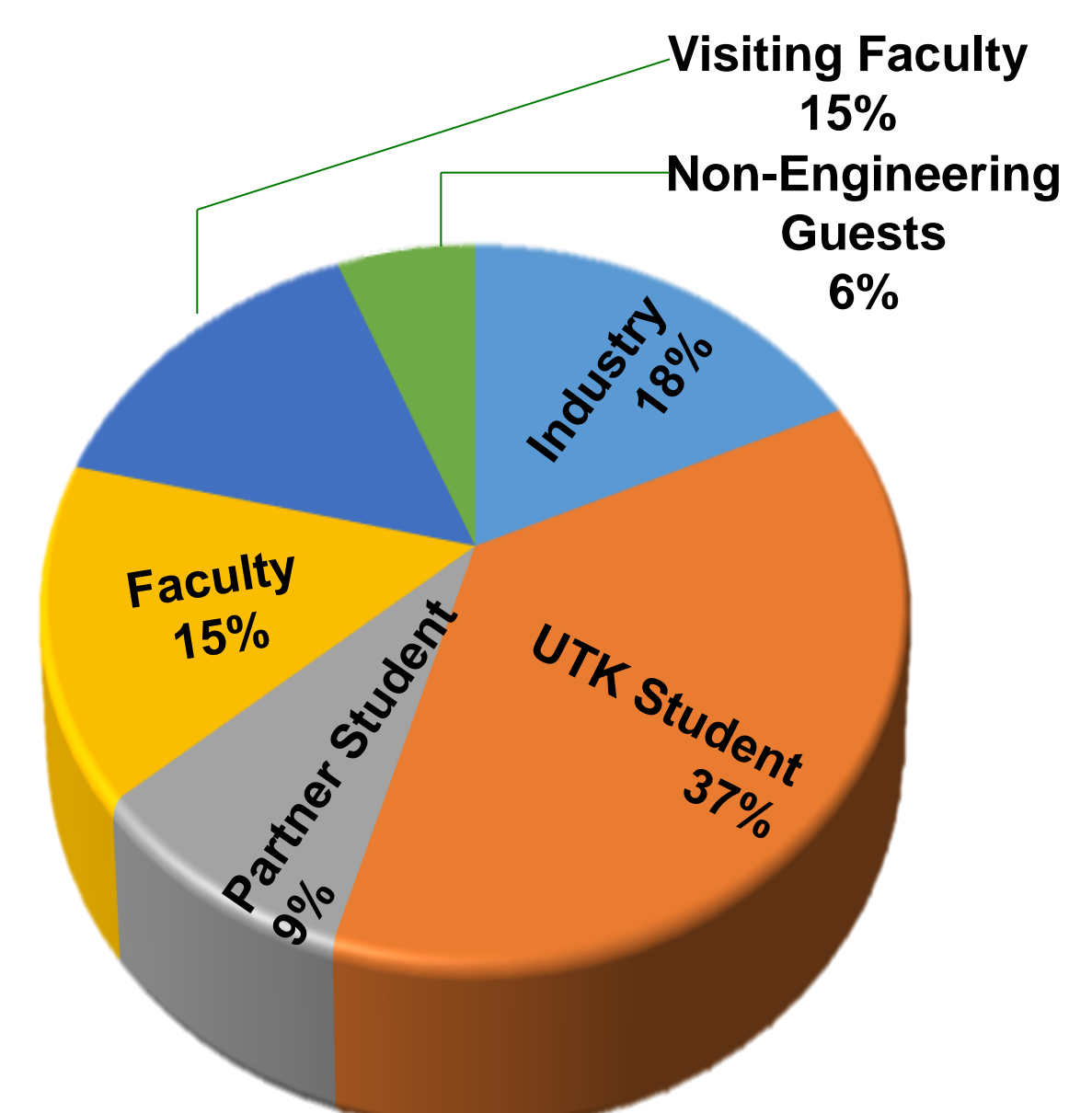
- ECE620, CURENT Course
- ECE691, Graduate Seminar
- ECE619, Constrained Optimization

ECE620 is team taught by approximately 23 faculty members each fall semester and highlights research areas within CURENT.

ECE691 is a student organized seminar that provides students, faculty, visitors, and guests a weekly location to share their research and provide professional development.

ECE619 is broadcast within a specialized classroom that allows for the sharing of the computer desktop and a camera feed of the front and back of the classroom.

Graduate Seminar Speaker Distribution



Women Leadership

To promote the need for a more equitable gender distribution in leadership roles in industry, CURENT has started a Women in Power Seminar Series that introduces undergraduate and graduate students to women that have management positions at major energy sector companies.

International Exchange

- Previous short cultural exchanges have worked well.
- An expanded program that would include multi-month research experiences at overseas partners is being considered.
- Collaboration between existing university international programs and CURENT research connections is being investigated for opportunities.