EECS Vision

The EECS department will be nationally recognized for scholarly activities and applied learning.

EECS Mission

The mission of the EECS department is to advance its disciplines and provide students with a strong foundation to further their careers.

EECS Goals and Objectives

1. Expand and reallocate the student population and expand applied learning and research experiences in the program curricula.
   a. 2013: Degrees: UG 68 MS 93 PhD 11 Enrollment: UG 600 MS 380 PhD 27
      2021: Degrees: UG 132 MS 74 PhD 13 Enrollment: UG 990 MS 231 PhD 83
   b. Undergraduate class size limit: 50. Graduate class size limit: 25. 55 half-time department GTAs, paid competitive rates.
   c. Each research active faculty will have appropriate lab space that includes office space with 24/7 access for graduate students.
   d. Create a funded EECS invited speaker series.
   e. Create a program for visiting scholars.
   f. Create a faculty-driven program to actively recruit and retain high quality graduate students in major areas of the department.

2. Accelerate the discovery, creation, and transfer of new knowledge.
   a. At least half of all PhD students will be fully funded, at competitive rates that include a full tuition waiver, as either a graduate research assistant or graduate teaching assistant during their entire time at WSU.
      i. Each faculty member will fund at least one PhD student as a graduate research assistant. This will require estimated annual research funding of $75,000 per faculty member.
      ii. Half of new PhD students will be funded as graduate teaching assistants during their first year at WSU.
      iii. Graduate research or teaching assistants will be appointed for at least an academic year at a time.
   b. Each research-active faculty will have one of the department GTA positions to appoint to any qualified graduate student. Other GTAs will be appointed by committee or coordinator.
   c. Each research active faculty will publish an average of at least two high quality journal or equivalent conference articles each year, or will be engaged in equivalent technology transfer activities.
   d. One startup company will be led either by an EECS student or faculty member.
   e. At least half of the research active faulty will have a demonstrated record of technology transfer, e.g., successful product delivery to industry or community at large, awarded patents, and licensing.
   f. Create at least four research groups within the department
3. Continuously update and improve our curriculum and delivery methods.
   a. Increase faculty
      2014: 18 tenure track + 2.5 engineering educators
      2021: 40 combined, resulting in student/faculty ratios of UG 24.8 MS 5.8 PhD 2.1 Total 32.6
   b. Create a PhD degree track that accepts qualified students directly from BS programs.
   c. Maintain state-of-the-art BS programs
   d. Increase by 20% the number of online class sections offered

4. Create a new model of faculty loading and faculty and staff assessment, incentive, and reward to accomplish our vision, mission, and goals.
   a. Decrease teaching loads
      2013: 4 courses/year for research-active faculty, 12.5% of academic year salary per course buyout.
      2021: 3 courses/year for tenured research-active faculty, 2 courses/year for untenured tenure-track faculty. Release from one course/year for research center directors or PIs of substantial nationally competitive grants. Otherwise, 12.5% of academic year salary per course buyout. Faculty who choose to not be research-active may compensate with a higher teaching load.
   b. Early tenure and promotion to associate or full professor will be an option for research-active faculty with records of high-quality teaching, nationally competitive funding and/or technology transfer, and exemplary service.
   c. Faculty salaries will be competitive with other regional and comparable research-intensive universities.
   d. Structure department administration that aligns with the vision and mission of the department, for example, adding program directors for the programs within EECS.

5. Empower students to create a culture and experience that meets their changing needs.
   a. Identify 3 areas each in EE and CE/CS for which innovative teaching and laboratory spaces will be created. These will include virtual classrooms and labs and 24/7 access to teaching labs, and technicians and GTAs to support the labs and classrooms.
   b. Reward and support (with summer support and reduced teaching) faculty for implementing innovative instruction and market driven program growth
   c. Create spaces for students to innovate and discover
   d. Empower doctoral advisors and committees to ensure job-market competitiveness of students, i.e., in academia and/or industry, upon graduation.
   e. Students will have secured a degree-appropriate position in industry or academia when they graduate.

6. Be a department that reflects the evolving diversity of society.
   a. Increase percentage of underrepresented groups of faculty, staff, and students to at least 30% each by the year 2021
   b. Actively participate in the college program to meet this goal

7. Recognizing that with three undergraduate programs the EECS department is inherently interdisciplinary, we will work to expand the department interdisciplinary course and research offerings within WSU and with other universities.
   a. Participate in college programs to meet this goal.