

SSU EE ABET Accreditation

Update to IAB, May 2nd 2014

What is ABET?

- ABET = Accreditation Board for Engineering & Technology
- ABET is a nonprofit, non-governmental organization that accredits college and university programs in the disciplines of applied science, computing, engineering, and engineering technology. ABET accredits over 3,300 programs at more than 680 colleges and universities in 24 countries. ABET provides specialized, programmatic accreditation that evaluates an individual program of study, rather than evaluating an institution as a whole
- ABET accreditation, is voluntary and achieved through a peer review process
- Provides assurance that a college or university program meets the quality standards established by the profession for which the program prepares its students

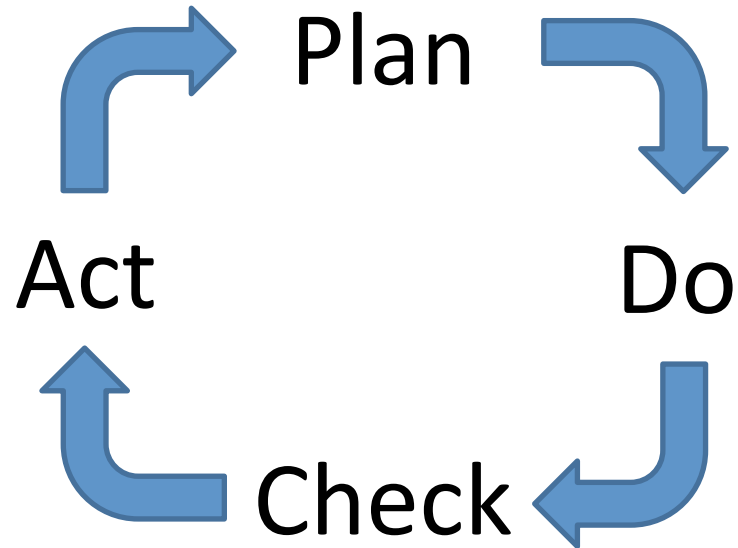
A Brief History

- ABET was founded in 1932 as the Engineers' Council for Professional Development
- Seven engineering societies founded the organization and contributed to its original direction and focus:
 - American Society of Civil Engineers (ASCE)
 - American Institute of Mining and Metallurgical Engineers, now the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME)
 - American Society of Mechanical Engineers (ASME)
 - American Institute of Electrical Engineers (now IEEE)
 - Society for the Promotion of Engineering Education, now the American Society for Engineering Education (ASEE)
 - American Institute of Chemical Engineers (AIChE)
 - National Council of State Boards of Engineering Examiners (now NCEES)
- 580 programs had been accredited by 1947
- Began international accreditation in 1979
- ECPD changed its name to ABET in 1980

Why Should We Pursue Accreditation?

- Accreditation is proof that a collegiate program has met the standards necessary to produce graduates that are ready to enter their profession and excel
- Students who graduate from accredited programs have access to enhanced opportunities in employment; licensure, registration and certification; graduate education and global mobility
- Provides an opportunity for industry to guide the educational process to reflect current and future needs
- Many professional qualifications and many employers REQUIRE education from an accredited university

What does accreditation require?



Criteria
1. Students
2. Program Educational Objectives
3. Student Outcomes
4. Continuous Improvement
5. Curriculum
6. Faculty
7. Facilities
8. Institutional Support

Timeline

Draft self-study report / Readiness for Review
 Request for Evaluation
 Self Study Report
 Evaluation Visit
 Draft report & exchanges
 Accreditation notification

Fall
 End of January
 End of June
 Sep – Dec
 Mar/Apr
 End of August

} ~2 yrs

How Can We Help?

- Review and agree Program Educational Objectives (PEOs)
- Provide regular feedback – see questionnaire
- *Work hand-in-hand* with SSU to provide:
 - Internship opportunities
 - Mentorship
 - Collaboration on projects & research
 - Review/revision of curricula wrt industry needs
 - Other...
- Visible/vocal support of program to all parties

Program Educational Objectives

The program must have published program educational objectives that are consistent with the mission of the institution, the need's of the program's various constituencies, and these criteria. There must be a documented, systematically utilized, and effective process, involving program constituencies, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission, the program's constituent's needs, and these criteria

SSU EE

The mission of the Engineering Science Department at Sonoma State for the Electrical Engineering program is to impart high quality education and training to a diverse group of students who will excel in electrical engineering profession, play leadership roles in advancing the technology, remain engaged in life-long learning and be responsible citizens

SSU EE

Program Educational Objectives:

- A. Practice Electrical Engineering successfully in areas of circuit design, testing, manufacturing, systems and research
- B. Contribute responsibly and ethically to society in their engineering or related careers
- C. Maintain and enhance their professional skills continuously through life-long learning
- D. Communicate engineering results effectively in their individual or team working environment

SSU EE

Program Educational Objectives:

- A. Prepare students for successful careers in electrical engineering and related fields, including graduate studies
- B. Maintain and enhance their professional skills continuously through life-long learning
- C. Be able to lead in their chosen roles, contributing professionally and ethically to society, in a globally competitive world