UC San Diego - WASC Exhibit 7.1
Inventory of Educational Effectiveness Indicators

Academic Program	(2a) What are these learning outcomes? Students graduating with a degree should be able to:	(3) Other than GPA, what data/evidence are used to determine that graduates have achieved stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination)?	(4) Who interprets the evidence? What is the process?	(5) How are the findings used?
Department: Electrical and Computer Engineering **Major:** **B.S. in Electrical Engineering** **B.S. in Computer Engineering** **B.S. in Engineering Physics** **B.A. in Engineering and Society** **(1) Have formal learning outcomes been developed?** **Yes** **(6) Date of the last Academic Senate Review?** **May 2010**	**Written Communication** -Communicate effectively in writing and with visual means -Function on multidisciplinary teams to solve electrical engineering problems	**Written Communication** -Capstone Project Design Course: The department operates two courses designated as Capstone Courses, one of which is required for graduation. These courses emphasize project design, team engineering and project presentations focused on program outcomes and objectives.	**Written Communication**	**Written Communication**
	Oral Communication -Communicate effectively in speech and with visual means -Collaborate effectively with others to design a system, component, or process to meet desired needs	**Oral Communication** -Capstone Project Design Course	**Oral Communication**	**Oral Communication**
	Quantitative Reasoning -Display an understanding of the underlying principles of, and an ability to apply knowledge of, mathematics, science and engineering to electrical engineering problems. -Analyze and interpret data	**Quantitative Reasoning** -Capstone Project Design Course	**Quantitative Reasoning**	**Quantitative Reasoning**
	Information Literacy -Use the techniques, skills, and modern engineering tools necessary for engineering practice, including familiarity with computer programming and information technology	**Information Literacy** -Capstone Project Design Course	**Information Literacy**	**Information Literacy**
	Critical Thinking -Identify, formulate and solve engineering problems -Design and conduct experiments -Have the broad education necessary to understand the impact of engineering solutions in a global and societal context	**Critical Thinking** -Capstone Project Design Course	**Critical Thinking**	**Critical Thinking**
	All other items not color coded -Understand and practice professional and ethical responsibility -Have an understanding of electrical engineering safety issues -Recognize the need for, and the ability to engage in, lifelong learning -Have a knowledge of contemporary issues as they relate to engineering	All other items not color coded -Senior Surveys: Questions are developed based upon objectives and outcomes to determine how graduating seniors feel these were addressed/met -Alumni Surveys: Alumni are polled to obtain feedback regarding how the objectives and outcomes prepared them for work in the field -Industry Surveys: Formal and informal feedback is obtained from industry to determine hoe department graduates perform in the field	All other items not color coded - Undergraduate Affairs Committee: Evaluates all inputs and processes to endure that data collection is accurately identifying achievement of outcomes and objectives, and whether the objectives themselves remain reflective of what the department should be delivering to students and other	All other items not color coded -The Department adjusts requirements and specifics of the objectives based upon feedback from all constituents -Individual instructors utilize feedback to make specific adjustments in their courses -Curriculum/program changes are made based upon inputs

| | | -Grade Distribution Data: Beyond simple GPA, grade distributions in lower division and breadth courses provide information on how students are progressing in the program and indicate areas of concern

-Current Student Feedback: Obtained through Course and Professor Evaluations (CAPE) and internal department course surveys | constituents

-Course Directors: Key lower division and breadth courses are assigned to a specific course director (sub-committee of Undergraduate Affairs) who meets regularly with instructors to determine whether courses are meeting objectives and outcomes

-Curriculum Committee: Sub-committee of Undergraduate Affairs which examines course content to ensure program objectives and outcomes are being addressed across the curriculum

-ABET review

-Industrial Advisory Board: Comprised of University affiliates throughout industry, the Board meets yearly to evaluate all data collected and make recommendations for improvements and future program directions

-Student Honor Society: The department works closely with undergraduate student honor society (Eta Kappa Nu) to obtain their input and interpretation of survey data | |
| Please date the form: 12/15/16 | **(2b)**
Where are the learning outcomes published? Please provide your department/program website address.

http://www.ece.ucsd.edu/undergraduate/abet-wasc-accreditation

UC San Diego General Catalog:
http://ucsd.edu/catalog/curric/ECE-ug.html

ABET documentation/reports

Mission statements posted throughout department | | | |