Assessment: Assessment Plan

Texas Tech University
Office *of the* Provost
Office *of* Planning & Assessment

Degree Program - ENG - Electrical Engineering (PHD)

CIP Code: 14.1001.00

Degree Program Coordinator: Stephen Bayne
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Modality: Face-to-Face

Student Learning Outcome: Core Knowledge

Students will demonstrate advanced knowledge in a core consistent with the focus of their program.

Outcome Status: Active
Outcome Type: Student Learning
Start Date: 06/13/2015

Assessment Methods

Dissertation - The direct assessment method that will be employed will be the review of the dissertation by a dissertation committee. (Active)

Criterion: 100% of the student's dissertation must meet the requirements set fourth by the dissertation committee.
Schedule: One time at the end of the students study.

Student Exit Survey - This is an indirect assessment method that will be carried out when the students are graduating. Students will be given an exit survey to fill out. (Active)

Criterion: The criterion is to determine the student's attitude about the program.

85%   of the students in the survey give a positive answer to the following question on the exit survey:

Do you agree with the Department Mission: The department of Electrical and Computer Engineering educates, conduct research, and disseminates knowledge through nationally recognized programs in electrical engineering and computer engineering for the benefit of society.

Schedule: Conducted once, during the final semester.

Standardized Test - Student will take the Fundamentals of Engineering (FE) Exam.   This is a direct assessment. (Active)

Criterion: 90% of the students must pass the Fundamentals of Engineering (FE) Exam.
Schedule: Once

Student Learning Outcome: Research Methods and Analysis

Students will demonstrate quantitative and qualitative skills in the design, analysis, and presentation of research projects that is consistent with the focus of their program

Outcome Status: Active
Outcome Type: Student Learning

Degree Program - ENG - Electrical Engineering (PHD)

Start Date: 06/13/2015

Assessment Methods

Oral exam - The direct assessment method that will be employed is the oral defense of the PhD research and the oral defense of the PhD proposal. (Active)
Criterion: 100% of student must pass both the oral proposal defense and the PhD research defense. **Schedule:** The oral proposal is done once, and the PhD defense is done once.

Dissertation - The direct method used is the documentation of research conducted during the study of the PhD in a Dissertation. (Active)
Criterion: 100% of the dissertation must meet the requirements of the PhD committee and the graduate school. **Schedule:** One time at the end of the students study.

Student Learning Outcome: Scholarly Communication

Students will produce written and oral communications of quality, as consistent with the focus of their program

Outcome Status: Active
Outcome Type: Student Learning
Start Date: 06/13/2015

Assessment Methods

Professional Development Activities - Publications in peer-reviewed journals and conferences. Also presentations at conferences. (Active)
Criterion: 80% of Student's work will be accepted for publication, and presentations in a peer-reviewed journals or conferences **Schedule:** Once per year

Dissertation - Review of the students Dissertation by the PhD committee and the graduate school. (Active)
Criterion: 100% written and oral work should get a positive approval from PhD committee and graduate school. **Schedule:** One time at the end of the students study.

Student Learning Outcome: Independent Research

Students will conduct independent research resulting in an original contribution to knowledge in the focused areas of their program

Outcome Status: Active
Outcome Type: Student Learning
Start Date: 06/13/2015

Assessment Methods

Dissertation - The PhD committee will evaluate the student's work for original contribution. (Active)
Criterion: 100% of PhD student's work must meet the PhD committee requirements. **Schedule:** One time at the end of the student study.

Peer Assessments - Students will submit their work to peer-reviewed journals. (Active)
Criterion: 85% of students work must be Acceptance into peer-reviewed journals or conferences. **Schedule:** Once per year

Student Learning Outcome: Professionalism

Students will know and participate in the intellectual and organizational aspects of the profession as applicable to the major area of study including the ethical conduct of research.

Outcome Status: Active
Outcome Type: Student Learning
Start Date: 06/13/2015

Assessment Methods

Professional Development Activities - Participation in Professional activities such as seminars and conferences. (Active)
Criterion: 90% of students must Attend a minimum of 4 professional activities. **Schedule:** Two per year minimum.

Student Exit Survey - Results from the survey will determine how many and what type of professional activities the students participated in. (Active)
Criterion: 65% of the results from the exit interview should answer positive in the exit survey in the areas of participation. **Schedule:** Conducted once, during the final semester.