

**College of Engineering
Department of Engineering Education**

**Doctor of Philosophy (PhD)
Engineering Education**

Engineering Education Core (15 Credits)

EED 6090	Developing an Online Educational Curriculum	3 cr
EED 6150	Teaching, Pedagogy, & Assessment in Engineering Education	3 cr
EED 7010	Role of Cognition in Engineering Education	3 cr
EED 7230	Foundations of Engineering Education	3 cr
EED 7460	Finance & Grant Writing	3 cr

Research Theory Core (9 Credits)

PSY/EDUC 6570	Introduction to Educational & Psychological Research	3 cr
STAT 5200 or EDUC/PSY 6600	Design of Experiments	3 cr
EED 7040	Qualitative Methods in Engineering Education	3 cr

Engineering Elective – Area of Specialization

(6 Credits minimum) Choose from the following:

EED 6910	Special Topics in Engineering	3 cr
EED 7500	Education Internationalizing Institutions of Higher Education	3 cr
EED 7810*	Research Seminar	1 cr
EDUC/SPED 7700	Subject Methods & Design	3 cr
PSY 7030	Instrument Development	3 cr
PSY 7070	Adv Measurement Theories & Practice	3 cr
PSY 7610 And STAT 5200	Research, Design & Analysis II Design of Experiments	3 cr
PSY 7650	Longitudinal Res Design & Analysis	3 cr
TEAL 6150	Foundations of Curriculum	3 cr
TEAL 6410	Educational Foundations	3 cr
TEAL 7300	Historical, Social, & Cultural Foundations of Education (Prerequisite: TEAL 6410)	3 cr

Other appropriate courses may be approved by committee

Dissertation (12 Credits minimum)

PhD Dissertation: Students must take an appropriate number of research credit hours to complement their graduate program and be consistent with the Graduate School requirements.

Additional Degree Requirements

1. Qualifying Examination
2. Proposal Defense
3. Dissertation Defense/Examination
4. One peer-reviewed journal paper submission or a conference presentation with a peer-reviewed paper per 12 dissertation credits. Minimum 1 journal paper submission required.
5. EED 7810* - Research Seminar (1 credit) Attendance is required throughout the entire PhD program. Registration is required a minimum of one time.
6. Teaching experience including one or more of the following:
 - a. Two semesters of guided teaching experience
 - b. Experience as a K-12 teacher
 - c. Experience as university/college/community college faculty
 - d. Other equivalent experience approved by the department head and the student's graduate committee