

Degree Requirements: Instructional Systems and Learning Technologies PhD

Program Milestones

- Qualifying Review
- Selection and Appointment of Major Professor
- Appointment of the Doctoral Advisory Committee and Approval of Program of Study
- Preliminary Examination
- Research Paper
- Enrollment for Dissertation Work
- Defense of Dissertation Prospectus
- Dissertation
- Defense of Dissertation
- Clearance for Degree
- Residence Requirements

Curriculum:

The curriculum requires the successful completion of a minimum of 92 credit hours. These credit hours consists of core courses in instructional systems and learning technologies (17 hours) and a related focus area (12 hours), courses in inquiry and research methods (27 hours), an outside minor (12 hours), and dissertation credits (24 hours). See [prescribed course sequence](#) for first and second year doctoral students.

Instructional Systems Courses		15 credits
Instructional Systems, Theory, Design, Development		
EME5601	Intro. to Instructional Systems	3
EME5603	Systematic Instructional Design	3
EDG6925	Instructional Materials Development	3
EDP5216	Theories of Learning and Instruction	3
Trends and Current Issues		
EME5608	Trends/Issues	3
Inquiry and Research Core		31 credits
Quantitative data analysis/methods		
EDF5401	General Linear Model	4
<i>(Note: EDF 5400 is a prerequisite for EDF 5401)</i>		
Select 1 from:		3
EDF5402	ANOVA	
EDF5406	Multivariate Analysis	
EDF5409	Casual Modeling	
EME6937	Meta Analysis	

Degree Requirements: Instructional Systems and Learning Technologies PhD

		<i>(Note: EME 6937 is a seminar number and can represent different courses in different semester)</i>
Qualitative data analysis/methods (e.g., EDF 5464: Qualitative methods of evaluation)		3
Instructional System and Learning Systems Research Methods		
EDF5481	Methods of Educational Research	3
EDG6362	Instructional Systems Research Seminar	3
EDG6363	Practicum in Experimental Design and Analysis	3
EME6635	Reviewing the Literature	3
		<i>(Note: EME 6635 is a seminar number can can represent different courses in different semester)</i>
Measurement (e.g., EDF 5432 Measurement Theory)		
Research Apprenticeship (Registered under EDF 5906)		3
One additional inquiry course:		3
Foundations of Inquiry (e.g., EDF 5710)		
Evaluation (e.g., EDF 5461 Program Evaluation)		
Quantitative or qualitative data analysis course		
Minor (see p. 7)		12 credits
Focus Area (see p. 7)		12 credits
Preliminary Exam <i>(Note: Register for EDF 8964 in the semester you take the Preliminary Exam)</i>		0
Dissertation (24 units)		24 credits
Total Credits (actual number will vary depending on your program):		94 credits

Research Apprenticeship:

The research apprenticeship is an important component of the doctoral program, ideally taken early in the program: 2nd – 4th semesters (first and second year students). The research apprenticeship should be scheduled together with the faculty member who will serve as a mentor so that the student is exposed to the entire research process (as much as possible) from research design process through data collection and analysis/writing results. A minimum of three total units is required and they can be split across semesters if most appropriate (e.g., 1 unit Fall, 2 units Spring). Register for the Research Apprenticeship under “Supervised Research,” EDF 5910.

Focus Area:

The focus area should consist of a cohesive set of four courses (consisting of at least 12 units) within instructional systems, and must include at least one doctoral research seminar (EME6635). Each semester a different doctoral research seminar is offered, with

Degree Requirements: Instructional Systems and Learning Technologies PhD

different topics depending on the instructor. Doctoral seminars are regularly offered in Learning Science and Technology (Fall) and Motivation (Spring).

Minor:

The minor should consist of a cohesive set of four courses (consisting of at least 12 units) outside of the Instructional Systems and Learning Technologies program. The set of courses may be interdisciplinary in nature (e.g., from several different colleges, such as in cognitive science), or foundational in a given discipline (e.g., core courses in psychology). The set of courses will be developed in consultation with the student's advisor. Students should consider building a minor area of emphasis that is related to their career goal. Students wishing to work in academe might want to minor in psychology or educational psychology, or organizational behavior. Students wishing to work in applied settings such as business and industry might want to minor in management or organizational behavior. Students wishing to work in government could consider public administration. Note that the areas listed below are sample areas; with advisor consultation, other areas can be approved.

Possible minors include:

- Business
- Communication
- Psychology
- Information Sciences
- Medical Education
- Computer Science
- Human Computer Interaction
- Cognitive Science
- Adult Education
- Public Administration