

# PhD in Educational, School, and Counseling Psychology with Emphasis in Statistics, Measurement, and Evaluation in Education

The Statistics, Measurement, and Evaluation in Education program offers courses in applied statistics, from the quantitative foundations of educational research to advanced methods such as multivariate statistics, multilevel modeling, and latent variable modeling. We also offer a number of courses in educational measurement, covering topics such as classical test theory, item response theory, and generalizability theory. In addition, our students have the opportunity to take a wide range of advanced statistics and quantitative methods courses, from probability, sampling methodology, and categorical data analysis to stochastic theory, time series analysis, Bayesian statistics, and other cutting-edge quantitative techniques. Our students also take courses in learning theories, aspects of human development, and program evaluation.

## Degree Requirements

<b>I. General Core Courses</b>	<b>33</b>
Core Statistics and Measurement	24
ESC_PS 8020	Overview of Research Methods
ESC_PS 8082	Foundations of Educational and Psychological Measurement
ESC_PS 8655	Item Response Theory
ESC_PS 8850	Quantitative Foundations in Educational Research
ESC_PS 9660	Generalized Linear Modeling
ESC_PS 9710	Structural Equation Modeling
ESC_PS 9720	Multilevel Modeling
ESC_PS 8087	Seminar in Educational, School, and Counseling Psychology
General Core Courses	9
ED_LPA 8957	Qualitative Methods in Educational Research I
Human Learning (Relevant Course)	
Human Diversity (Relevant course)	
<b>II. Advanced &amp; General Elective Courses</b>	<b>21</b>
Possible elective areas include other departments in the College of Education, Statistics, Psychological Sciences, and/or as approved by advisor.	
Advanced Measurement Elective	
Advanced Statistics Electives	
Program Evaluation Elective	
Statistical Programming Elective	
Research in Statistics and/or Measurement	
<b>III. General Electives</b>	<b>6</b>
Elective courses can be taken from Educational, School, & Counseling Psychology or from other departments such as Psychological Sciences, Statistics, or Information Science and Learning Technology.	
<b>IV. Dissertation</b>	<b>6-18</b>

## Sample Plan of Study

The plan of study will depend on the student's career goals and research interests, and it should be completed in consultation with the doctoral dissertation committee.

## Qualifying Process

Acceptable performance on the departmental qualifying examination is defined as achieving a grade of "B" or better in each of the courses comprising the selected courses. If a student receives lower than a "B" on a course, the student must retake the course. Failure to receive the appropriate grade a second time could result in dismissal from the program. For Statistics, Measurement, and Evaluation in Education, these courses are the following:

- ESC\_PS 8082 Foundations of Educational and Psychological Measurement
- ESC\_PS 8020 Overview of Research Methods
- ESC\_PS 8850 Quantitative Foundations in Educational Research

## Comprehensive Examination Process

To complete the comprehensive exam, students must complete: 1) Curriculum Vitae including teaching experience, 2) Demonstration of knowledge via written exam, 3) Demonstration of research via published work, submitted manuscript, conference paper presentation, or a literature review created specifically to meet this requirement; 4) Oral exam on both the demonstration of knowledge and demonstration of research items from above.

## Dissertation Requirements

The student works with an academic advisor to develop a dissertation proposal. The student meets with the doctoral program committee to obtain approval of the written dissertation proposal. Upon study completion, the student defends the dissertation to the doctoral program committee. The defense can occur only when MU is officially in session.

## Admissions

Applicants are required to meet two sets of minimum qualifications for admission: the requirements of the PhD in Educational, School & Counseling Psychology program (<https://gradschool.missouri.edu/degreecategory/educational-school-and-counseling-psychology/>) and the minimum requirements of the Graduate School (<https://gradschool.missouri.edu/admissions/eligibility-process/>).

Apply online by submitting the following documents using the MU Graduate School (<https://applygrad.missouri.edu/apply/>) application form by January 15th for the next Fall cohort.

1. The three letters of recommendation
2. Curriculum Vitae
3. Unofficial academic transcripts of all previous undergraduate and graduate work
  - a. Minimum undergraduate GPA of 3.0 from an accredited institution in psychology, education, or a related major.
4. Statement of purpose addressing the following:
  - a. Describe (1) your research interests that you hope to pursue in graduate school, (2) your career objectives, and (3) how being accepted into MU's program will benefit your career aspirations (500 words max).

- b. Describe your experiences in educational measurement, assessment, or evaluation (250 words max).
  - c. Describe interests and experience in analyzing empirical data. Briefly describe why you have chosen particular statistical models to answer the research questions (250 words max.).
  - d. Describe experiences that demonstrate your potential in applied, theoretical, and/or computational statistics that you believe distinguish you as a candidate for graduate study (250 words max).
5. Official Graduate Record Examination (GRE) scores for tests taken within the last 5 years should have a combined Verbal and Quantitative score of 305.
  6. TOEFL for international students (preferred score of 580 for paper test, 92 iBT, IELTS 6.5 or higher).