Research, Measurement, and Evaluation: Ph.D.

Program Components and Courses

The Ph.D. program consists of 63 credits, with an expected timeline to completion of approximately four years of full-time study. The first year of study focuses on in-class coursework covering the requisite methodological approaches. Beginning in the second year, students begin developing an expertise in one or more areas related to applied statistics and measurement and begin contributing to research in that area under the mentorship of RME faculty. The third and fourth years of the program are expected to be devoted to individual research in an area of concentration related to applied statistics and measurement.

The curriculum of the Ph.D. in RME is structured around five components: (a) a core set of 33 credits (11 courses of 3 credits each) of required coursework covering the fundamentals of research design, measurement, and statistical analysis; (b) 6 credits of a research apprenticeship whereby the student conducts mentored research under the supervision of an RME faculty member; (c) a field experience in educational research whereby the students plays an active role in the design and analysis of an applied research or evaluation project; (d) the doctoral qualifying exam; (e) the doctoral dissertation; and (f) a set of elective courses. The specific details of the curriculum are given below.

(A) Core Courses (33 credits are required)

EPS 651 Survey Research Methods
EPS 654 Program Evaluation
EPS 661 Measurement and Psychometric Theory
EPS 662 Item Response Theory
EPS 670 Introduction to Research Methods
EPS 671 Group Comparative Research Designs and ANOVA Methods
EPS 672 Regression Methods
EPS 673 An Introduction to Structural Equation Modeling
EPS 674 An Introduction to Multilevel Modeling
EPS 675 Qualitative Research Methods I
PSY 698 Structural Equation Models (SEM)*

*PSY698 (SEM) is taught in alternate years and is likely to extend the material from EPS 673, which should be taken prior to PSY 698.

(B) Research Apprenticeship (6 credits are required)

A minimum of 6 credits must be taken in relation to a research apprenticeship in which the student works under the mentorship of an RME faculty member (or an approved faculty member outside of RME) in conducting original research pertaining to research, measurement, and evaluation. It is expected that the work completed during the apprenticeship culminates in a

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manuscript of publishable quality to be submitted for publication in an academic journal. The 6 credits of apprenticeship are currently documented as two 3-credit blocks of EPS 607 (Advanced Individual Study). The research apprenticeship must be completed prior to the commencement of dissertation hours (EPS 730).

(C) Field Experience in Educational Research (6 credits are required)

A minimum of 6 credits must be taken in relation to a field experience in educational research. The field experience involves providing methodological assistance to a research or evaluation project being conducted at the University of Miami, or an approved organization (i.e., the evaluation division of Miami-Date County Public Schools). The nature of the field experience must be approved by the student's advisor prior to commencing the credit hours. The field experience credits are currently documented as EPS 659.

(D) Doctoral Qualifying Exam

Students must successfully pass the doctoral qualifying exam prior to the commencement of the doctoral dissertation.

(E) Dissertation Hours (12 credits are required)

EPS 730 Doctor of Philosophy Dissertation

(F) Electives (6 credits)

At least 6 credits of any combination of the courses listed below may be taken.

Other courses may be substituted as an elective upon the Advisor's approval. EPS 607 (Advanced Individual Study) and EPS 659 (field experience in Educational Research) can be taken over and above the credits required for the apprenticeship (6 credits) and field experience (6 credits).

EPS 568 Computer Applications in Educational and Behavioral Sciences Research
EPS 607 Advanced Individual Study
EPS 652 Nonparametric Methods for Quantitative Analysis
EPS 650 Meta-Analysis Methods
EPS 659 Field Experience in Educational Research
EPS 676 Qualitative Research Methods II: Case Studies and Grounded Theory
EPS 677 Qualitative Research Methods II: Interviewing and Content Analysis
EPS 678 Applied Multivariate Statistics
MTH 524 Introduction to Probability Theory (Department of Mathematics)
MTH 542 Statistical Analysis (Department of Mathematics)
MTH 525 Introduction to Mathematical Statistics (Department of Mathematics)
MTH 625 Multivariate Analysis (Department of Mathematics)
MAS 602 Multivariate Statistics (School of Business)
MAS 603 Design of Experiments (School of Business)

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Program Components and Courses
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In addition, a variety of other graduate courses may be taken in the fields of computer science, psychology, and education, as well as other areas of interest.

Although the progression through the courses of the Ph.D. can vary, an example of a progression for a full time student is as follows:

YEAR 1	
Fall	**Spring**
EPS 670 Research Methods	EPS 654 Program Evaluation
EPS 672 Regression Methods	EPS 673 Introduction to SEM
EPS 671 ANOVA Methods	EPS 661 Measurement
YEAR 2	
Fall	**Spring**
PSY 698 Structural Equation Modeling	EPS 662 Item Response Theory
EPS 674 Multilevel Modeling	EPS 651 Survey Methods
EPS 675 Qualitative I	EPS 607 Research Apprenticeship I
YEAR 3	
**Qualifying exam given in August prior to beginning of classes in Year 3*	*******Dissertation proposal successfully completed by Spring of Year 3*
Fall	**Spring**
EPS 607: Research Apprenticeship II	EPS 659 Field Experience
EPS 659: Field Experience	EPS 730 Dissertation
Elective	Elective
YEAR 4	
Fall	**Spring**
EPS 730 Dissertation	EPS 730 Dissertation
EPS 730 Dissertation	Dissertation defense