

Master's Program in Measurement and Statistics

The M&S master's program offers an M.S. degree in Measurement and Statistics. You may take one of the two tracks toward the degree: thesis track or non-thesis track.

- Master's Thesis Track requires:
 - A minimum of 30 credit hours of coursework; at least 18 of the hours must be letter-graded (e.g., A, B, C; in particular, these credits cannot be earned via directed independent study which is graded U/S).
 - A minimum of 6 thesis hours
 - Passing the thesis prospectus defense
 - Passing the thesis defense
- Master's Non-thesis Track requires:
 - A minimum of 32 credit hours of coursework; at least 21 of the hours must be letter-graded (e.g., A, B, C, in particular, these credits cannot be earned via directed independent study which is graded U/S)
 - Passing grade on the Comprehensive Exam
 - Courses taken more than 7 years prior to the comprehensive exam may not be counted towards these numbers

In order to be eligible for conferral of a degree, the university requires that your cumulative grade point average be at least 3.0 in formal graduate courses. No course hours with a grade below "C-" will be credited on the graduate degree; all grades in graduate courses except those for which grades of "S" or "U" are given or those conferred under the provision for repeating a course will be included in computation of the average. In addition, you are expected to earn a grade of B or better in all M&S required graduate courses. Grades earned at another institution cannot be used to improve a Grade Point Average (GPA) at Florida State University.

Coursework

Students majoring in Measurement and Statistics must take at least nine credit hours per semester to have full-time status. Graduate level courses in the M&S program are numbered in the 5000 through 7000 course codes under EDF. You are encouraged to take relevant courses offered by the Statistics Department, as well as by Educational Leadership and Policy Studies, Economics, and Psychology. You may also want to participate in directed individual studies and seminars, and we strongly hope you will become involved in a personal program of research soon after starting your course work.

In addition to courses, you are expected to attend the M&S Colloquium, which is usually held every other Friday afternoon at 12pm.

Required Courses

- EDF 5400 Descriptive/Inferential Statistics Applications (4 hrs)
- EDF 5401 General Linear Models Applications (4 hrs)
- EDF 5402 Advanced Topics in ANOVA (3 hrs)
- EDF 5406 Multivariate Analysis Applications (3 hrs)
- EDF 5432 Measurement Theory I (3 hrs)
- EDF 5481 Methods of Educational Research (3 hrs)
- EDF 5916 Research Proposal Writing (1 hr extra with EDF 5481 for thesis-track M.S. students)
- EDP 5935 Topics in Educational Psychology (3 hrs)
- EDF 5971 Thesis (Thesis track)
- EDF 8966 Comprehensive Exam (Non-thesis track)

Required Courses: take one of the following two courses

- EDF 5431 Classroom Assessment (3 hrs)
- EDF 5448 Scale/Instrument Development (3 hrs)

Recommended Courses

- EDF 5404 Bayesian Data Analysis (3 hrs)
- EDF 5484 ED Data Analysis (3 hrs)
- EDF 7418 Multilevel Modeling (3 hrs)
- EDF 7489 Meta-Analysis (3 hrs)
- EDF 6937 (Advanced seminars)

Major Advisor

Your advisor or major professor is the person who signs your paperwork and works with you to help you make decisions during your time at FSU. Upon admission to the Master's program, you will be assigned a major advisor who will assist you in selecting courses and planning your study. The student and faculty advisor jointly develop the program of studies that best combines the student's experience, areas of interest, and career goals. If you choose the non-thesis track, the major advisor will guide you through all stages of your study. For thesis track, your advisor also supervises your research. Usually a master's student would only change advisors if your thesis topic differs from the interest area of your advisor.

Supervisory Committee and Program of Study

You and your major professor will select a three-person supervisory committee, which must include your major advisor; at least one of the other two faculty members should be from the Measurement & Statistics program. All committee members should have Graduate Faculty

Status. The supervisory committee will formally approve your program of study and supervise your thesis (if you choose the thesis track).

During your first year of study, you and your advisor should draft your Master's Program of Study. Program of Study Forms are available online through the College of Education website (<https://education.fsu.edu/oasis/graduate-students>) and must be completed by the end of your first year (i.e., signed off on by your supervisory committee). If necessary, you can make revisions before applying for graduation.

Recommended Timetable

A suggested roadmap to a Master's Degree in M&S can be found in Appendix A.

Year 1: Enroll in courses (e.g., EDF 5400; EDF 5401; EDF 5402); Begin core coursework; Complete and turn in a Program of Study in the second term.

For thesis track, begin to plan thesis topic.

Year 2 (and beyond, if needed): For non-thesis-track students, prepare for comprehensive exam; Take comprehensive exam during last semester.

For thesis-track students, take thesis hours, prepare and defend prospectus and final thesis.

Master's Comprehensive Exam (Non-thesis Track)

Comprehensive Exam

The Comprehensive exam is required for Master's students pursuing a Master's degree via the non-thesis track who have completed or almost completed their coursework. The purpose of the exam is to ensure graduate students have acquired the knowledge to practice Measurement & Statistics at the Master's level. Students must demonstrate competence in

- EDF 5400 Descriptive/Inferential Statistics Applications
- EDF 5401 General Linear Models Applications
- EDF 5402 Advanced Topics in ANOVA
- EDF 5406 Multivariate Analysis Applications
- EDF 5431 Classroom Assessment, or EDF 5448 Scale and Instrument Development
- EDF 5432 Measurement Theory I
- EDF 5481 Methods of Educational Research

The Master's Comprehensive Exam is given twice a year – during Fall and Spring semesters. Students must officially register for a zero-credit hour course for the Comprehensive Exam (EDF 8966) during the semester when taking the exam. Students may take the exam in one of the following two forms based upon their personal preference:

- Form A: Students take an in-class exam given by the evaluation committee. The in-class exam is given during the second week of Fall and Spring semesters. The written component of the exam consists of two sections, one for Statistics and the other for Measurement. It is given on two days – Tuesday (for Measurement) and Thursday (for Statistics) – of the second week of the term from 9:00am to 1:00pm. Past exam questions are available on the M&S Canvas site. Both sections are administered in a closed book format and each involves a set of questions. An oral exam that covers both sections is required and normally occurs about 2-3 weeks after the written exam.
- Form B: Students submit a portfolio no later than the 8th week of the semester. The portfolio consists of the Program of Study and two papers evidencing the student's knowledge of practice in Measurement & Statistics at the Master's level. One paper should be in the Measurement area and the other should cover topics in Statistics. Papers may be coauthored but students must document how they have made a major contribution to the work in each paper. The papers could be:
 - 1) Based on expanded projects from classes with substantial measurement and statistics content,
 - 2) Conference papers,
 - 3) Journal articles submitted for publication.

An oral exam that covers the submitted portfolio or in-class exam is required and normally occurs 2-3 weeks after submitting the portfolio or taking the in-class exam.

Evaluation Procedure and Grades

Written answers to exams (either in-class exams or portfolio) are reviewed by the student's committee or provisional committee (if the final committee has not been formed). Evaluations are made based on performance on both written and oral portions. At the end of the oral exam, the faculty discuss the student's performance, a pass/fail decision is made, and the student is immediately notified. An official Pass/Fail grade will be recorded for EDF 8966, the Master's Comprehensive Exam course. The student should also submit the Master's Comprehensive Exam Results Form (<https://education.fsu.edu/oasis/graduate-students>) after the defense meeting.

Retake Policy

If you fail the Master's Comprehensive Exam, you may take it during the next semester that the exam is offered. Failing the exam twice leads to termination from the degree program.

Thesis Defense (Thesis Track)

Students are expected to write and defend both a prospectus and final thesis to their committee. M&S committees must be formed according to the rules of the Graduate School and College of Education. The defenses can be held with the assistance of distance technology (e.g., Skype, Zoom). A grade of Pass for the defense of the thesis requires at least a majority approval of the committee (for the M.S., two faculty members). Since revisions to your final document are usually required by the committee and then must be approved by your committee/advisor, it is very important to defend early in the semester you want to graduate. Please carefully follow the Graduate School's deadlines for defense meetings, final document submission, and graduation application so that your plans to graduate are not impeded. The deadline for submitting master's prospectus and thesis documents to the committee is two (2) weeks prior to the defense date. Faculty serve on multiple committees, thus may be scheduled for many meetings around the time the thesis is due to the Graduate School. Thus, it is best to make sure that both (a) the document is ready well before the defense date, and (b) the defense date is scheduled well in advance.

BEFORE scheduling a defense, the document should be approved by your advisor. Your advisor will only approve the document when he or she thinks it has a reasonable probability of passing the committee with few changes. In particular, it does no good to rush a defense because of personal reasons or an impending deadline if the document is not ready. Students should keep in regular touch with their advisor about draft documents and hand in documents with sufficient time for review before scheduling a defense.

Passing the prospectus defense and gaining IRB approval for your study (if the research involves human subjects including secondary data analyses) are required before you begin to collect data. You do not need to register for the prospectus defense per se, but after defending the prospectus your committee members will need to sign an approval form for you. For your defense of the prospectus and final thesis, you must provide the committee with your document 2 weeks prior to the meeting date. Before sending your prospectus or final document to the committee, however, be sure to check your document for plagiarism using the Turnitin portal on the Educational Psychology and Learning Systems Student Canvas site (called EPLS Students) AND to have your advisor's approval. Also, you must register for the EDF 8976 Thesis Defense course as well as for two EDF 5971 Thesis hours during the semester of your final defense.