THE UNIVERSITY of TENNESSEE

College of Education, Health, and Human Sciences

David T. Bailey Graduate School of Education

Department of Educational Leadership and Policy Studies

Evaluation, Statistics, and Methodology
PhD Program Handbook

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Welcome from the ESM Program Faculty

The Evaluation, Statistics, and Methodology (ESM) program faculty are pleased to welcome new and returning students to our doctoral program within the Department of Educational Leadership and Policy Studies. The ESM program offers unique opportunities for students to develop the knowledge, skills, and competencies necessary to succeed in the areas of program evaluation, applied statistics, and methodology. Four major expectations and strengths of our doctoral program are:

1. **One-on-One Mentoring:** We have accomplished full-time faculty with a variety of scholarly backgrounds, areas of expertise, and research interests, which promotes the matching of admitted students to advisors.
2. **Collaborative Environment:** We offer numerous opportunities to collaborate with faculty and other students on research projects, conference presentations, and publications. Networking opportunities with professionals in the fields of evaluation, statistics, and methodology are promoted and encouraged.
3. **Small, Cohesiveness Program:** ESM is a relatively small program; thus, students get to know each other and establish professional relationships as well as friendships. In addition, more advanced students serve as mentors to newer students by assisting them with their transition into the program.
4. **Field-based Experiences Linking Theory to Practice:** Each semester students are expected to engage in applied field work, linking theory to practice.

T*his program handbook is designed to assist you in navigating your doctoral study. Nevertheless, you are responsible for obtaining a current copy of the graduate catalog (*http://catalog.utk.edu/index.php*) and familiarize yourself with the information presented – that catalog and graduate school policy are the final word on policy.* Please refer to this program handbook and the graduate catalog as needed, and do not hesitate to discuss your questions with your ESM faculty/advisor.

Sincerely,
ESM Faculty

Introduction to the ESM Program

The Ph.D. in Evaluation, Statistics, and Methodology (ESM) has been strategically and carefully designed and refined to provide students with an integrated, sequenced, and experientially-based doctoral program leading to a meaningful professional career. Typical professional careers of our graduates include roles as: 1) evaluation, applied statistics, and assessment/measurement faculty members in various higher education settings; 2) external evaluator employed by an evaluation group or organization providing evaluation services; or 3) internal evaluator/in-house ESM consultant serving the needs of the organizations in which they are employed. Located within the University of Tennessee's Department of Educational Leadership and Policy Studies, the ESM program integrates evaluation, statistics, and methodology theory, content knowledge, technical skill, and highly relevant and meaningful field experiences to enable graduates to function as esteemed professionals, productive scholars, and leaders in their particular sub-fields of interest. For more detailed information regarding the ESM program, its faculty and support personal, please refer to the program brochure and visit the program website. For specific handouts, exemplars, and program forms go to our shared Google folder (see email invite for link).

The ESM program supports and advances the land-grant mission of the University of Tennessee and the mission of the Department of Educational Leadership and Policy Studies (ELPS) where the Evaluation, Statistics, and Methodology (ESM) resides. For example, the ELPS department mission is to (1) be nationally recognized for graduating outstanding, innovative, and courageous leaders and for producing significant educational research that influences policy and practice, and (2) to embed the core values of civility, candor, courage, responsibility, compassion, community, persistence, service, excellence, and justice. Fore more about ELPS, please visit the department website.

Tips for Success in the ESM Program

Attending Regular Meetings with the ESM Faculty

During the first two years of your graduate studies, it is especially important to attend regular meetings (at least once a month) with your ESM faculty. Generally, the ESM faculty will meet with your student cohort on a monthly basis and on an individual basis as needed. The purpose of regular meetings with the ESM faculty and student cohort is to assist with your transition into and through the doctoral program and to ensure that you have the best opportunities to achieve your educational goals.

We will discuss a variety of topics at these meetings. For example, discussions may involve program planning, which focuses on which courses to take in the future and when these are offered. You will then use this information to create a plan of study. This document will assist you in planning the courses you want to enroll in and when you want to take these courses. In addition, you will talk about your involvement with evaluation projects, research projects, teaching responsibilities, and assistantships. Designing your curriculum vitae (CV) is also a topic that you should discuss with your ESM faculty because continuously updating your CV will allow you to engage in an important self-assessment process. Furthermore, this process will help you determine what you have accomplished thus far and what additional experiences you should seek out in the future.

Faculty Advisor

After completing your first two years of doctoral studies and getting to know all program faculty, you will have the chance to select your permanent advisor for the remaining years of your doctoral program.

Annual Assessment of Student Progress

As detailed in the Student Outcome Annual Review (SOAR) section of this handbook, ESM faculty have developed an annual review of ESM student progress to provide guidance, support, and annual formative feedback to each student as they enter and progress thought the program. The process provides guidance and feedback for ESM PhD students on the following aspects of their academic journey: a) program planning, b) implementation, c) self-assessment of performance, and d) faculty assessment of student progress. This process will remain in effect until a student achieves Ph.D. candidacy.

Choosing Your Courses

You will take courses, work on evaluation and research projects, and perform assistantship duties (for those that do not work full-time) during the course of your graduate studies. This combination will keep you busy and constantly engaged in scholarly work as well as ensure that you gain the necessary knowledge, skills, and competencies to work in the fields of evaluation, statistics, and methodology. The courses you take will be from six primary areas: 1) ESM core, 2) Advanced ESM core, 3) Research core, 4) Applied professional experiences, 5) Electives, and 6), Dissertation credits. Please refer to the Curriculum section in this handbook for a more detailed description of course requirements.

The ESM program is focused on both practical experiences and collaboration; thus, courses often include practical experiences, group projects, and self-reflections as part of the course requirements. These practical experiences, group activities, and self-reflections supplement lectures, readings, and other homework assignments.

ESM Related Projects

You will work on a variety of ESM related projects during your graduate career. Some of these projects may be your own while others may be shared team projects. The courses you are enrolled in may require you to engage in client and faculty sponsored projects. ***Recognize that this is a key element and focus of the ESM PhD, and faculty, graduates, and employers of graduates view this as a key strategic strength of the program.*** You will gain invaluable experience planning, managing, and conducting these applied projects, which will also allow you to gain additional practical experiences. At times, you will work on these projects with ESM faculty members and ESM students. Faculty members rely on student assistance with their projects, and for the graduate students, this presents an opportunity to gain work experience and learn non-technical skills.

Choosing Internships

The ESM program requires students to complete internships (6 credit hours minimum; typically as two 3-credit internships); however, many students choose to complete additional internships. For each internship, students receive 1-3 credit hours and work at the site for 33-100 hours (depending on number of credit hours; 33hrs for 1 credit,

66hrs for 2 credits, and 100hrs for 3 credits) over the course of one semester. Students may choose to do their internships for an educational or community setting. Please refer to the Internship section of this handbook for additional information.

Securing Assistantships

Depending on your financial situation, you may choose to have an assistantship throughout your entire graduate career. The departments do not have sufficient assistantships for every doctoral student; therefore, assistantships are competitive among students. For most departmental assistantships, you will be assigned to a faculty member within the department. Duties for your assistantship may include assisting with evaluation and research projects, assisting with writing for publication, or assisting faculty with their teaching preparations.

You will be responsible for securing assistantships. Please let the ESM Program Coordinator know that you are interested in an assistantship and the coordinator will assist you in finding the best opportunity for you. Early on in the spring semester you will hear about available assistantships. ***It is your responsibility to find and apply for assistantships.*** Program faculty also sends emails to students using the listserv as they become aware of assistantship openings.

Choosing your Advisor/Dissertation Chair

You will have the chance to choose an advisor ***after you have completed two full years of doctoral study in the ESM program***. You will then have your established advisor for your remaining years of doctoral study. While it is possible to switch advisors after choosing one, this practice is not common. During your first two years of study, you will get to know all program faculty and their research areas and they will get to know you and your scholarly work. ***Choosing a permanent advisor is a mutual decision between the advisor and the student***, thus, leading to a better student-advisor fit.

Prior to choosing an advisor, ensure that you have a good fit with your advisor on a variety of characteristics. It is important that you and your advisor are aligned on research interests and personalities. Moreover, each of the ESM program faculty has a unique advising style. While no advising style is superior, some may work better for certain students than for others. Building relationships with each of the ESM faculty will make your decision regarding which advisor is right for you much easier.

Choosing a Doctoral Committee

The advisor directs the student's dissertation research and chairs the dissertation committee. Together, you will identify a doctoral committee composed of at least four faculty members holding the rank of assistant professor or above, three of whom, including the chair, must be approved by the Graduate Council to direct doctoral research. You must include two ESM faculty members (one as chair, one as a member) on your doctoral committee. At least one member must be from an academic unit other than that of the student's major field. The selection of the doctoral committee occurs around the end of the third year of your doctoral study prior to defending your comprehensive examination.

Both your advisor and other students who are more advanced in the program may have important insights into the committee member selection process. Obtaining as much information as possible about your committee members may help avoid surprises down the road. The graduate school requires students to complete and submit a Doctoral Committee Appointment form. This form can be found online at https://gradschool.utk.edu/forms-central/phd-committee-form/.

Scholarly Writing, Writing, and More Writing

As you are working on various projects during your studies, you will have opportunities to write manuscripts for publication as well as reports for clients. Collaboration with your fellow students and the ESM faculty on manuscripts and reports is encouraged as it facilitates the writing process.

In order to be successful in your writing endeavors, you should write continuously. Writing something every day, every week will help you to both get more manuscripts and reports completed and feel less stressed about writing for publication. Helpful resources for writing for publication are the following books:

Belcher, W.L. (2019). *Writing Your Journal Article in 12 Weeks* (2nd ed.). Sage Publications.

Galvan, J.L. (2009). *Writing Literature Reviews.* Pyrczak Publishing.

Additional writing resources can be found on the ESM student Google Drive.

Professional Development and Applied Professional Experiences

The University of Tennessee offers a variety of free workshops and trainings through the Office of Information Technology, UT Libraries, and Office of Research,

Innovation, and Economic Development, and the Graduate School. These trainings include software applications, such as the Microsoft Office Suite, Nvivo, SPSS, SAS, R, QDA Miner, and Qualtrics. In addition, trainings cover finding literature, applying for postdocs/jobs, grant writing skills, and teaching skills.

In addition to trainings offered by the university, you will encounter other professional development workshops offered by the American Evaluation Association (www.eval.org) and other professional organizations. Generally, these are not free of charge; however, they present excellent learning opportunities and are immensely valuable for your studies in the ESM program.

Reflections and Self-Assessment

Although many opportunities are offered by the ESM program faculty, it is your responsibility to take ownership of your education. Thus, you should continuously engage in the reflective process and work on self-assessment. Some coursework will require you to engage in reflective practice; however, it is beneficial to reflect on your experiences beyond the required reflections, as this will assist you in seeking out educational opportunities beneficial for you. ***It is highly recommended that you finalize your self-reflections on your course/project experiences at the end of each semester.***

Comprehensive Examinations

Writing for your comprehensive exam is time and labor intensive, so it is beneficial to plan additional time for this endeavor. Keep this in mind when developing the plan of study. Writing for the exam takes place in the second semester of your third year or when you have completed all required program courses (besides dissertation credits). The oral defense is generally scheduled at the end of the semester or when you have submitted your final comprehensive exam. Students must turn in the completed comprehensive exam to their doctoral committee two weeks prior to the scheduled defense.

The comprehensive examination will be defended orally prior to beginning any major work on the dissertation. For the defense, the student formally presents their work using visuals (e.g., PowerPoint). Next, doctoral committee members will ask the student questions regarding their comprehensive exam or other related scholarly issues. Refer to the section on Comprehensive Exams for more information and allowable defense dates.

Developing and Defending Your Dissertation Proposal

You have two options when considering the format of your dissertation: (1) a traditional form with five chapters, or (2) a three manuscript form. For more information about planning your dissertation, please refer to the UT Graduate School Guide to the Preparation of Theses and Dissertations and speak with your advisor.

For your proposal defense, you will again create a 15-20-minute-long PowerPoint presentation for your doctoral committee. Next, your committee will ask questions regarding your proposed study. Your committee may suggest changes to your proposed study, and these changes should be made prior to the data collection process. Students must submit their study and gain approval from the IRB (and their committee) prior to starting any data collection.

Completing your Dissertation

The dissertation process will at least span the final year of your doctoral studies. The final dissertation will be submitted to your committee 2 weeks prior to your scheduled dissertation defense date. Doctoral students will defend their dissertation orally in front of their doctoral committee. Again, students will conduct a presentation, after which the doctoral committee members have the chance to ask questions regarding the dissertation research.

Planning for the Future

During the final year of your doctoral studies, you will search and apply for jobs in your fields of interest. While you will do this during the final year, you will plan for this during your entire doctoral studies. Your advisor will play a central role in assisting you with your job searches and applications. Also, your advisor (as well as other ESM faculty and assistantship supervisors) will serve as a reference for your job applications. Consider setting up a meeting with your advisor during the final year of your studies in order to discuss how to apply for the types of jobs you are seeking because your advisor may have helpful tips and examples of cover letters and application materials for you. As you will be busy with your dissertation when you are applying for jobs, make sure to update your Curriculum Vita at the end of every semester. This process will save you time when you are ready to apply for jobs. Also, you can be sure that you have included every relevant experience you have obtained during your studies.

Prior to beginning your job search, you will need to prepare cover letters, research interest statements, and teaching philosophies in addition to an updated resume and CV. The ESM seminar is a great time to solicit feedback on these documents.

Maintaining a Healthy Balance

Working towards a PhD is a time intensive endeavor that, at times, can present you with challenging situations. There will be times when you will be frustrated, stressed, or overwhelmed by the process. It will be very important to manage your time well. Especially if you are working full-time, have a family, or have other important responsibilities that require your time. Maintaining ongoing communication with your ESM faculty and utilizing time management practices will help make the process go much smoother.

It is also very important to engage in activities that support your psychological and physiological well-being. Find an interesting distraction to free your mind by taking "me time" to accommodate for the rough times. You can easily forget about your well-being along the way, which can have a profound effect on achieving your goal. Lastly, utilizing all the available resources the program has to offer will put you on a path to success.

Student Outcomes Annual Review (SOAR)

ESM Student Outcomes Annual Review (SOAR)

To promote formative assessment of student progress, the faculty have established an ESM Student Outcomes Annual Review (SOAR). The process provides guidance and feedback for ESM PhD students on the following: a) program planning, b) implementation, c) self-assessment of performance, and d) faculty assessment of student progress. **This process will remain in effect until a student achieves Ph.D. candidacy.** The process elements and expectations are as follows:

A. Annual Student Program Planning

Early in the fall of each year after a student's first-year in the program, students will be asked to complete an academic year program plan, including targeted objectives and associated scheduled activities to implement the objectives in each of the following areas:

Academic course schedule (aligned with plan of study)

Possible ESM internship sites/opportunities

Applied professional experience (including dispositions & collaboration)

Conference and client presentations

Scholarly writing activities

Employment related strategies

Student program plans (i.e., objectives and activities) will be shared with all ESM faculty members in a one-on-one setting, early in the semester for required faculty approval.

B. Student Program Plan Implementation

2nd, 3rd & 4th+ year students will implement their approved program in the Spring and Fall; First year students will implement their approved program in the Spring when they join the seminar. Students will need to document implementation activities for reporting and assessment purposes.

C. Student Self-Assessment of Annual Progress

End of Fall. 2nd, 3rd & 4th+ year students will prepare an end of semester self-assessment on progress made toward their objectives and activities. This will be shared with all ESM faculty. Any request for changes in the student's annual program plan will need to accompany the self-assessment. If approved by faculty, students must submit revised annual program plan.

End of Spring. During this semester, students will be asked to self-assess their progress on the implementation of their annual academic plan (first-year students will just address progress they made in the Spring semester). This will entail reporting on each objective and each implementation activity. In addition, students will prepare a narrative regarding: 1) successful performance related to objectives, 2) objectives in which progress was less than anticipated, and 3) improvement opportunities. This self-assessment will be forwarded to faculty in preparation for the biennial annual faculty meeting with each student.

D. Faculty Assessment of Student Progress

Faculty will provide an annual formative evaluation of student's progress across all categories of objectives (e.g., coursework, internships, applied professional

experiences/dispositions), faculty observations, and student self-assessments. This formative assessment will result in a letter to students regarding strengths, weaknesses, and areas to consider for improvement in the next annual academic plan.

SOAR Yearly Goals Requirements

1. **Yearly Goals Development & Approval**
   Fall

   First-year Students. No action required.

   2nd & 3rd year students. 2nd and 3rd year students will prepare/submit proposed goals each year per the syllabus schedule. ***ESM faculty review/approve.***

   Spring

   First year students. First year students prepare/submit goals for the semester per the ESM 660 syllabus. ***ESM faculty review/approve***.

   2nd & 3rd year students. 2nd & 3rd year students may seek to revise approved goals per the ESM 660 syllabus. ***ESM faculty review/approve any revisions.***

2. **Implementation**
   Fall

   2nd & 3rd year students. 2nd & 3rd year students implement goals.

   Spring

   First year students – First-year students implement approved goals.

   2nd & 3rd year students. 2nd & 3rd year students implement goals.

3. **End-of-Fall Student Self-evaluation of SOAR Progress**
   2nd & 3rd year students submit summary of progress on each goals (they also may propose changes for Spring).

4. **End-of-School Year Faculty Evaluation of SOAR Progress.**

Students submit an end-of-year status report on their Yearly Goals, including a written self-assessment of progress. Faculty will evaluate student's progress at the end of the academic year based on:

a) **Collective faculty judgment on student progress**

b) **Collective faculty judgment on professionalism** (e.g., student performance in terms of core values, timeliness, quality, effective collaboration, respect for others)

This process will end with an annual letter of progress for each student and made part of their overall academic record.

Topics for Yearly Goals Document

1. ***Practical Experience/Fieldwork.*** Identify goals for any practical experience or fieldwork that you will be engaging in during the academic year.
2. ***Scholarship.*** Identify goals for scholarship and active engagement in research. This can include conference or professional presentations, manuscript development, evaluation/assessment report writing, or client presentations.
3. ***Career Development.*** Identify career development strategies planned for the academic year.
4. ***Service (if applicable).*** Identify any professional service that you intend to engage (i.e., service to UT, professional associations, community). This is not a required element, but many students do provide "free" assessment and evaluation support for organizations that can be listed here as service to the community.
5. ***Internships (if applicable).*** Identify proposed internships and competencies/skills you hope to enhance during this internship experience.
6. ***Student Teaching (if applicable).*** Identify GTA intentions during the academic year, if any.

Additional SOAR Materials to Be Submitted

Templates for all of these can be found on the shared Google drive.

1. Plan of Study
2. ESM Course Matrix
3. Curriculum Vita (CV)

ESM Core Values and Dispositions

It is expected that each ESM student will:

1. Show commitment to the profession

2. Show academic integrity and honesty in your work
3. Maintain ongoing rapport with your advisor
4. Be a reflective practitioner
5. Be open to diverse ideas, approaches, abilities, and learning needs
6. Be responsive to others in a timely fashion
7. Accept the challenge to learn
8. Treat oneself and others with respect
9. Be a productive member of our ESM community
10. Show integrity, honesty, and inclusivity in collaborative work

Template for Yearly Goals

Student Name:

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1. ***Practical Experience/Fieldwork***
    -
2. ***Scholarship***
    a. ***Research Projects***
    -
    b. ***Manuscript Development/Submission***
    -
    c. ***Scholarly or Client Presentations***
    -
    d. ***Evaluation or Assessment Reports***
    -
3. ***Career Development***
    -
4. ***Service (if applicable)***
    -
5. ***Internships (if applicable)***
    -
6. ***Student Teaching (if applicable)***
    -

End of Semester & Year Reporting

Reporting on each objective and each implementation activity. Students will prepare a narrative regarding: 1) successful performance related to goals, 2) goals in which progress was less than anticipated, and 3) improvement opportunities. This self-assessment will be forwarded to faculty in preparation for the biennial annual faculty meeting with each student.

ESM Program Curriculum

The PhD degree cannot be earned simply by attending class, completing required assignments, and passing the exams. The PhD program in ESM is a mentoring process which includes academic coursework, participating with faculty in research, designing your own research, presenting at conferences, and writing manuscripts for publication as well as reports for clients.

Curriculum Overview

ESM Core (15 hours):

ESM 533 Program Evaluation I
ESM 534 Program Evaluation II
ESM 577 Statistics in Applied Fields I
ESM 677 Statistics in Applied Fields II
ESM 581 Educational Assessment

Advanced ESM Core (12 hours):

ESM 651 Advanced Seminar in Evaluation
ESM 678 Statistics in Applied Fields III
ESM 680 Advanced Edu. Measurement
ESM 667 Advanced Topics in ESM

Research Core (15 hours):

ESM 583 Survey Research
ESM 559 Intro to Qualitative Research
ESM 659 Advanced Qualitative Research
ESM 682 Educational Research Methods
3 hours of approved research electives

Applied Professional Experience (15 hours):

ESM 660 ESM Seminar (9 hours)
ESM 670 Internship in ESM (6 hours)

Electives (9 hours)

Dissertation (24 hours)

The 90-credit hour ESM program curriculum is composed of six sections of courses. First, students take 15 credit hours (5 courses) from the ESM Core section. These courses provide students an introduction in the fields of evaluation, statistics, and methodology. The ESM Core includes Program Evaluation I and II (ESM 533 & 534), Statistics in Applied Fields I and II (ESM 577 & 677), and Educational Assessment (ESM 581).

ESM Core (15 hours):

ESM 533 Program Evaluation I
ESM 534 Program Evaluation II
ESM 577 Statistics in Applied Fields I
ESM 677 Statistics in Applied Fields II
ESM 581 Educational Assessment

In addition to courses from the ESM Core, students must also take 12 credit hours (4 courses) from the Advanced ESM Core. These courses build on the knowledge, skills, and

competencies gained in the courses from the ESM Core. Students are required to take the ESM Core and Advanced Core courses and substitutions are not permitted. Advanced Topics in ESM (ESM 667) may be repeated as course topics change[1].

Advanced ESM Core (12 hours):

ESM 651 Advanced Seminar in Evaluation

ESM 678 Statistics in Applied Fields III

ESM 680 Advanced Educational Measurement

ESM 667 Advanced Topics in Evaluation, Statistics, and Methodology

The ESM program also requires students take 15 credit hours (5 courses) of Research credits. Four of the courses -- Survey Research (ESM 583), Introduction to Qualitative Research (ESM 559), Advanced Qualitative Research (ESM 659), and Educational Research Methods (ESM 682) -- are required and do not allow for substitutions. The student's advisor must approve the additional Research course.

Research Core (15 hours):

ESM 583 Survey Research

ESM 559 Introduction to Qualitative Research

ESM 659 Advanced Qualitative Research

ESM 682 Educational Research Methods

3 hours of approved research electives (see list of approved courses below)

The ESM program also requires 15 credit hours of Applied Professional Experience. This includes 6 semesters (9credit hours) of practical experience in the ESM Seminar (ESM 660) and 6 credit hours of internship experience (ESM 660).

Applied Professional Experience (15 hours):

ESM 660 ESM Seminar (6 semesters, 9 hours)

ESM 670 Internship in Evaluation, Statistics, and Methodology (6 hours)

The curriculum also includes the flexibility of 9 credit hours of electives, to be approved by the student's advisor, where students can further their evaluation, statistics, or methodology experience with classes from other departments as well as our program. These courses can be taken within or outside of the Department of Educational Leadership and Policy Studies. For example, Electives can be additional ESM courses, teaching

[1] If students complete more than one ESM 667 course these additional courses would either count as electives or research core courses depending on the topic of the course.

practicums, research courses, or courses that give a broader introduction to the field of educational psychology. Electives should be additional courses you simply want to take and are designed to expand your knowledge. In the past, some ESM students have asked their advisor to create a special course (directed readings) for them that focuses on writing for publication, a specific advanced statistical technique, gaining teaching experience, or a specific type of program evaluation. Your advisor may be willing to do this for you; however, keep in mind that teaching a course specifically for you requires an additional time commitment from your advisor. For this reason, some semesters may be better suited for this undertaking than others.

Electives (9 hours): Any 3 courses with prior approval

For Electives and Research courses, students are free to select courses from the list of courses below (**note: this list is not all inclusive; check the timetable and consult with your advisor regarding suitable research courses**). Many students choose courses to fulfill certificate/dual degree requirements for these courses. Students may also choose other courses to fill the Research requirement. However, these should be discussed with both the student's advisor and the ESM program coordinator prior to enrollment.

Dissertation (24 hours)

Finally, ESM students will take 24 credit hours of Dissertation Credits after they have successfully defended their comprehensive examination. Once students start taking dissertation credits, they must continuously enroll in dissertation credits until they graduate. This is a university requirement to ensure that you do not take too long to complete your dissertation. Students begin taking dissertation credits once they actively work on their dissertations. There are no lectures to attend, however your advisor may require specific deliverables (e.g., chapter drafts) at designated timepoints during the semester. The focus for these credits is you working with your advisor to complete your dissertation research.

BZAN 522 - Business Cases in Data Mining	MEDU 622 – Research Trends in Mathematics Teacher Education
BZAN 533 - Quantitative Methods for Business Analytics	NURS 501 – Advanced Nursing Research

BZAN 535 – Statistical Methods for Business	NURS 511 – Statistics for Evidence-based Practice in Nursing
BZAN 552 - Multivariate/Data Mining Techniques	NURS 603 – Nursing Inquiry and Research Design
BZAN 553 - Design of Experiments	NURS 607 – Qualitative Nursing Research
BZAN 540 – Applied Regression Analysis/Business	NURS 608 – Quantitative Nursing Research
BZAN 542 – Data Mining/ Business Application	NURS 622 – Evidence Based Practice and Translational Research
BZAN 546 – Simulation Modeling	NUTR 543 – Research Methods I
BZAN 583 - Sp Topics in Business Analytics	NUTR 545 - Research Methods II
BZAN 615 – Statistical Inference	POLS 511 – Research Design
BZAN 645 – Advanced Topics in Data Mining	POLS 512 – Quantitative Political Analysis
BZAN 646 – Modern Multivariate Techniques	POLS 513 – Quantitative Political Analysis
BZAN 648 – Advanced Topics in Design of Experiments and Linear Models	POLS 514 – Research Design and Methodology in Public Administration
CFS 512 – Survey/Research Early Childhood Education	POLS 518 – Bayesian Model/Political Science
CFS 551 Assessment/Early Childhood Education	POLS 519 – Non-Statistical Approach/Research
CFS 555 Cross-Cultural Research in Early Care and Education	PUBH 530 - Biostatistics
CFS 569 Practice Based Research/Early Childhood Education	PUBH 536 – Research Methods in Health
CFS 570 – Research Methods in Child and Family Studies	PUBH 537 - Fundamentals of Program Evaluation
CFS 580 – Special Topics in Child and Family Studies	PUBH 540 - Principles of Epidemiology
CFS 650 – Advanced Observation Research Design and Methods	PUBH 552 – Community Health Assessment
CFS 660 Advanced Observation Research Design and Methods	PUBH 580 - Advanced Biostatistics
CFS 661 - Advanced Longitudinal Research Methods	PUBH 636 – Advanced Research Methods
CCI 611 - Statistical Design/Analysis/CCI Research	PUBH 637 – Applications in Program Evaluation
CCI 631 Quantitative C & I Research Methods I	PUBH 640 – Advanced Epidemiologic Methods
CCI 635 Qualitative C & I Research Methods I	PSYC 445 – Measurement & Testing
CCI 640 Advanced C & I Research Methods	PSYC 474 – Theories and Research in Child Development
CCI 643 Qualitative C & I Research Methods II	PSYC 521 - Analysis of Variance for Social Sciences

CCI 644 Quantitative C & I Research Methods II	PSYC 522 - Multiple Regression for Social Sciences
COUN 525 - Formal Measurement in Education and Counseling	PSYC 554 - Laboratory in Psychometrics
EDAM 560 - Grant Writing and Project Management	PSYC 580 - Research Design
EDAM 562 Accountability and Evaluation of School Personnel, Programs, and School Climate	PSYC 607 - Seminar in Applied Psychometrics
EDAM 629 – Seminar: Policy Issues/Education	PSYC 622 – Structural Equation Modeling/Social Science
EDDE 602 – Reading Research/Diverse Learners: Group and Correlational Approaches	RSM 508 – Research Methods
EDDE 603 – Reading Research/Diverse Learners: Single Subject Approaches	SCHP 541 – Psycho-educational Assessment
EDDE 604 – Reading Research/Diverse Learners: Meta-Analytic Methodology	SOCI 431 – Applied Sociological Research
EDDE 605 – Reading Research/Diverse Learners: Secondary Data Analyses	SOCI 531 - Research Methods in Sociology
EDAM 562 Accountability and Evaluation of School Personnel, Programs, and School Climate	SOCI 631 - Advanced Quantitative Methods
ESM 505 - Quasi-Experimental Design and Observation Methods	SOCI 633 - Survey Design and Analysis
	SOCI 636 - Field Research
ESM 507 – Survey of Educational Psychology	SOCI 640 – Discourse Analysis
ESM 517 Direct Assessment and Interventions for Academic Skills Deficits	SOWK 519 – Foundation Research
ESM 520 Survey of Adult Education	SOWK 563 - Systematic Planning and Evaluation for Interpersonal Practice
ESM 530 - Methods of Action Research	SWOK 601 – Research/Social Work Practice I
	SWOK 602 – Research/Social Work Practice II
ESM 631 - Discourse Analysis of Educational Environments	SWOK 603 – Research III: Funded Research/Grant Writing
ESM 655 – Research in Psychoeducational Studies	SWOK 605 - Analysis of Social Work Data I
ESM 659 - Advanced Qualitative Research in Education	SWOK 606 - Analysis of Social Work Data II
ELPS 595 Special Topics: Assessment & Evaluation	SWOK 620 – Clinical Research and Applied Statistics
ELPS 615 – Research Design	SWOK 622 – Translational Research

ELPS 616 – Mixed Methods Research	SWOK 628 Critical Review of Research Literature
ELPS 617 – Case Study Methods in Educational Research	SWOK 665 - Advanced Quantitative Research Methods
ELPS 618 – Advanced Qualitative Research Educational Leadership	STAT 474 – Data Mining and Business Analytics
ELPS 695 – Special Topics: Academic Writing	STAT 505 – Quantitative Methods
ELPS 695 – Special Topics: Mixed Method Research	STAT 531 - Survey of Statistical Methods I
ELPS 695 – Special Topics Policy Analysis	STAT 532 - Survey of Statistical Methods II
ETEC 586 – Classroom Application: Using Web 2.0 Tools	STAT 537 - Statistics for Research I
ETEC 587 – Integrating Emerging Technologies into Teaching and Learning	STAT 538 - Statistics for Research II
HEAM 517 – Assessment in Student Affairs	STAT 563 - Probability and Mathematical Statistics
HEAM 518 – Research Design in Student Affairs	STAT 564 - Probability and Mathematical Statistics II
HEAM 620- Uses of Large Data Sets in Educational Research	STAT 567 – Survival Analysis
INSC 504 – Research Methods in Information Science	STAT 573 - Design of Experiments
INSC 559 – Grant Development/Information Professional	STAT 575 - Applied Time Series
INSC – 592 Big Data Analytics	STAT 576 - Multivariate and Data Mining Techniques
MGT 627 - Structural Equation Models in Organizational Research	STAT 577 – Data Mining Methods and Applications
MARK 612 – Quantitative Research Methods	STAT 578 - Categorical Data Analysis
MARK 613 – Qualitative Research Methods	STAT 579 - Applied Multivariate Methods
MARK 614 – Survey of Marketing Strategy Research	STAT 583 - Special Topics in Applied Statistics
MARK 615 – Survey of Consumer Behavior Research	STAT 625 – Bayesian Modeling & Computations
MARK 618 – Current topics in Marketing Strategy Research	STAT 645 – Advanced Topics in Data Mining
MARK 619 – Current Topics in Consumer Behavior Research	STAT 648 – Advanced Topics in Design of Experiments and Linear Models
MARK 621 – Survey of Marketing Models Research	STAT 673 – Advanced Topics in Design of Experiments and Linear Models

MEDU 550 – Mathematics Assessment	TPTE 517 – Trends and Issues in Education
	TPTE 695 – Special Topics: Grant Writing

Graduate Certificates

Students enrolled in the ESM program have the option of completing a variety of graduate certificates. Because certificates and their corresponding requirements change frequently, it is important for students to discuss intentions with their graduate advisor in addition to consulting the Graduate Student Catalog mentioned previously. Students are free to seek out earning any of the approved Graduate Certificates (see Graduate Catalog for complete list) by using these courses to fulfill elective or research courses. Below are some of the certificate programs housed in the College of Education Health and Human Development (ESM Ph.D. students are not eligible to earn the ESM certificate).

Graduate Certificate in Qualitative Research Methods in Education

The 12-hour graduate certificate in qualitative research methods in education is an interdepartmental program of study that is administered by faculty within the Department of Educational Leadership and Policy Studies. The certificate is intended for currently admitted University of Tennessee doctoral students (or individuals who have already earned a doctoral degree) wishing to develop their skills in conducting qualitative research studies. Certificate candidates must currently be admitted to a doctoral program at the university or hold a terminal research degree.

Requirements

- ESM 559 and ESM 659
- And at least one of the following: ESM 668 or ESM 669
- At least one upper-level qualitative courses such as: ANTH 531, CCI 643, CFS 650, CSE 526, CSE 660, EDPY 631, ELPS 618, ESM 668, ESM 669, GEOG 516, NURS 607, SOCI 640.
- Attainment of a minimum 3.50 graduate grade point average in the certificate coursework.

- Other courses may, where appropriate, be substituted for the courses listed above with the written permission of the certificate coordinator.
- Individuals must submit an appropriate work sample (e.g., completed qualitative research report, completed qualitative research paper) that showcases their skills in qualitative research methods in education. This work sample will be reviewed by the ESM faculty.
- Individuals must be currently enrolled in a doctoral program at the University of Tennessee or have earned a doctoral degree from UT or another university.
- Individuals must complete all 12 credit hours of the graduate courses listed above.
- All courses must be completed within five years of applying for a certificate.
- Refer to the Graduate Catalog for course descriptions.

Contact the ESM Qualitative Research Certificate Coordinator, Dr. Leia Cain (LeiaCain@utk.edu) for questions.

Graduate Certificate in Grief, Loss and Trauma

The graduate certificate in grief, loss, and trauma is intended for currently admitted graduate students wishing to acquire knowledge and develop clinical skills to work with individuals who have experienced or are experiencing grief, loss, or trauma. Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal degree and be admitted to the graduate school. Course work for the certificate must be completed at the University of Tennessee within a five-year period. A minimum 3.5 GPA must be earned in all certificate courses. An important part of the program is COUN 560 for graduate students who participate as grief facilitators in the Grief Outreach Initiative.

Requirements

- COUN 560
- COUN 480 or COUN 555 or COUN 655
- At least two of the following: COUN 551, COUN 554, COUN 562, COUN 662, COUN 665, CFS 511, CFS 562, COUN 566 (students may request substitution for one of the required courses listed in this bullet; requires approval from the certificate coordinator).

Contact Laura Wheat for more information.

Graduate Certificate in Online Teaching and Learning

The 15-credit hour graduate certificate in online teaching and learning is intended for currently admitted graduate students seeking to develop skills necessary for designing, developing, and teaching online courses in various contexts such as higher education, corporate, K-12 education, and military settings. All courses in this graduate certificate program are delivered online through Distance Education. Students currently enrolled in many of the graduate programs on our campus are seeking to gain experience designing, developing, and teaching online courses. A certificate in online teaching and learning will offer students a way to group the courses they are already taking so that they can present their skills to future employers in a way that is easily recognized. This certificate will also further prepare students to be able to apply their skills and practical experiences they gain from our courses in future development of online courses. Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal degree and be admitted to the graduate school. All 15 credit hours of coursework must be completed at the University of Tennessee within five years of applying for a certificate. A 3.5 GPA must be earned across all certificate courses. All required courses are listed below.

Requirements

- IT 570 Instructional Systems Design
- IT 573 Introduction to Multimedia Instruction
- IT 532 Online Learning Environments
- IT 566 Understanding Online Interactions
- IT 577 Practicum in Online Learning Environments

Inter-Collegiate Graduate Statistics and Data Science Program (IGSDSP)

The Intercollegiate Graduate Statistics and Data Science Program (IGSP) is a formal University of Tennessee academic program established to enable students to earn either a minor or an M.S. in Statistics simultaneously with a master's or doctoral degree in another department. Approved coursework taken to meet doctoral requirements in the student's home department may also be credited toward the M.S. in Statistics. Similarly, approved coursework in statistics taken to meet the requirements for a master's or doctoral degree in another department may also count toward the minor in Statistics. The program is open

to graduate students in all departments which have an approved minor and/or M.S. joint major curriculum offered through the program. The program is administered by an Executive Committee, consisting of college representatives from all colleges with approved programs, with advisory input from the program faculty.

Course options consist of courses in statistics, offered either by the Department of Business Analytics and Statistics or by other departments, which have been reviewed and approved by the IGSP Executive Committee.

Please refer to https://haslam.utk.edu/business-analytics-statistics/masters/statistics for additional information.

Sample Yearly Course Schedule

Many students in the ESM program are full-time students who also hold a 10 or 20-hour per week assistantship. Full-time students in the ESM program usually take around 10-11 credit hours per semester. Ten credit hours usually include three 3-credit courses and the 1-credit/2-credit hour ESM seminar. At times students chose to take an additional class during one semester; however, most students later report that having an additional class produced a much greater workload than what was possible for them to handle while having an assistantship. Thus, it is often more effective to take a summer course or to rearrange the plan of study than to take too many courses in one semester.

The following ESM courses build upon each other and must be taken in sequence. ESM 533 Program Evaluation I → ESM 534 Program Evaluation II → ESM 651 Advanced Seminar in Evaluation; ESM 577 Statistics in Applied Fields I → ESM 677 Statistics in Applied Fields II → ESM 678 Statistics in Applied Fields III; ESM 559 Introduction to Qualitative Research → ESM 659 Advanced Qualitative Research in Education.

Students may transfer from another institution up to 24 graduate credits (that were not counted towards a degree) with approval from their committee and the graduate school. Course waivers must be approved by the student's committee.

Suggested 4-Year Course Schedule for Full-Time ESM Students[2]

Sample Full-Time ESM Course Schedule (4 years, 90 credits)		
Fall Year 1 (10 credits)	**Spring Year 1 (11 credits)**	**Summer Year 1 (3 or 6 credits)**
ESM 660 (1)	ESM 660 (seminar) (2)	ESM 682 (3)
ESM 533 (3)	ESM 534 (3)	ESM 581 or ESM 670 (3) or ESM 672 (1-3)[3]
Research Course (3)	ESM 577 (3)	
ESM 559 or ESM 583 or Research Course (3)	ESM 583 or ESM 559 or ESM 659 or Research Course (3)	
Fall Year 2 (10 credits)	**Spring Year 2 (11 credits)**	**Summer Year 2 (3 or 6 credits)[3]**
ESM 660 (seminar) (1)	ESM 660 (seminar) (2)	ESM 581 or ESM 670 (3) or Elective
ESM 677 (3)	Research Course	ESM 672 (1-3) or Elective (3)
ESM 651 or ESM 680 (3)	ESM 678 (3)	
ESM 667 or ESM 659 or Research Course (3) or ESM 672 (1-3)	ESM 667 or ESM 659 or Research Course (3) or ESM 672(1-3)	
Fall Year 3 (10 credits)	**Spring Year 3 (11 credits)**	**Summer Year 3 (3 or 6 credits)**
ESM 660 (seminar) (1)	ESM 660 (seminar) (2)	ESM 693 (3) or ESM 602 (3) or Dissertation (3 or 6)
ESM 667 or Research Course (3)	ESM 693[4] or ESM 602[5] or ESM 667 or Elective (3)	

[2]The minimum number of credits needed to earn a degree is 90 credits; however, we encourage students to take more than 90 credits as needed in order to obtain more evaluation and research experience. Most students will take 6 credits in the summer. By doing this they graduate with more than 90 credits. Many students use their summers to do internships and special topics/readings courses.

[3] ESM 672 is Teaching Practicum in ESM. Students assist an ESM faculty member with the teaching of an ESM course that they have successfully completed. Students can earn 1-3 credits when they take this practicum.

[4] ESM 693 is an independent study course. We encourage students to take this course as needed to enhance their understanding/skills for a specific topic in evaluation, statistics or methodology.

[5] ESM 602 is a directed readings course. We encourage students to use this course to explore a specific topic (usually their dissertation topic) more in-depth.

ESM 680 or ESM 651 (3)	ESM 667 or Research Course (3)	
ESM 670 or ESM 667 (3) or ESM 672 (1-3)	Elective (3) or ESM 672 (1-3)	
Fall Year 4 (9 credits)	**Spring Year 4 (9 credits)**	**Summer Year 4 (as needed)**
Dissertation (9)	Dissertation (9)	Dissertation (as needed)

Suggested 5-year and 6-year Course Schedules on the following pages ---------->

Suggested 5-Year Course Schedule for Part-Time ESM Students

Sample Part-Time ESM Course Schedule (5 years, 90 credits)*		
Fall Year 1 (7 credits)	**Spring Year 1 (8 credits)**	**Summer Year 1 (6 credits)[3]**
ESM 660 (1)	ESM 660 (seminar) (2)	ESM 682(3)
ESM 533 (3)	ESM 534 (3)	ESM 581 (3) or Research Course
ESM 559 or ESM 583 (3)	ESM 577 (3)	
Fall Year 2 (7 credits)	**Spring Year 2 (8 credits)**	**Summer Year 2 (6 credits)[3]**
ESM 660 (seminar) (1)	ESM 660 (seminar) (2)	ESM 670 or Research Course (3)
ESM 677 (3)	ESM 559 or ESM 659 or ESM 583 or Research Course (3)	ESM 581 or Research Course (3) or ESM 672 (1-3 credits) or ESM 670 (3)
ESM 651 or ESM 559 or ESM 680 (3)	ESM 678 or Research Course (3)	
Fall Year 3 (7 credits)	**Spring Year 3 (8 credits)**	**Summer Year 3 (6 credits)**
ESM 660 (seminar) (1)	ESM 660 (seminar) (1)	Research Course (3)
ESM 680 or ESM 651 (3)	ESM 678 or Research Course (3)	ESM 670 or Elective (3)
ESM 559 or ESM 667 or Research Course (3)	ESM 670 or Research Course (3)	
Fall Year 4[6] (6 or 9 credits)	**Spring Year 4 (6 credits)**	**Summer Year 4 (6-9 credits)**
Elective or ESM 670 (3)	Elective (3) or Dissertation (6)	Dissertation (6 or 9)
ESM 693[7] or ESM 602[8] or ESM 659 or Elective (3)		
Fall Year 5 (6-9 credits)	**Spring Year 5 (6-9 credits)**	**Summer Year 5 (as needed)**
Dissertation (6 or 9)	Dissertation (6 or 9)	Dissertation (as needed)

[6] Students taking coursework (prior to dissertation) in years 4 or 5 can elect to enroll in additional ESM 660 credits in order to stay immersed in ESM related practical experience. These would count as electives.

[7] ESM 693 is an independent study course. We encourage students to take this course as needed to enhance their understanding/skills for a specific topic in evaluation, statistics or methodology.

[8] ESM 602 is a directed readings course. We encourage students to use this course to explore a specific topic (usually their dissertation topic) more in-depth.

Suggested 6-Year Course Schedule for Part-Time ESM Students*

Sample Part-Time ESM Course Schedule (6 years, 90 credits)**		
Fall Year 1 (4 credits)	**Spring Year 1 (5 credits)**	**Summer Year 1 (3-6 credits)[3]**
ESM 660 (1)	ESM 660 (seminar) (2)	ESM 682 (3)
ESM 533 (3)	ESM 534 (3)	ESM 670 or ESM 581 (3)
Fall Year 2 (4 credits)	**Spring Year 2 (5 credits)**	**Summer Year 2 (3-6 credits)[3]**
ESM 660 (seminar) (1)	ESM 660 (seminar) (2)	ESM 670 (3)
ESM 577 or ESM 559 (3)	ESM 577 or ESM 677(3)	ESM 682 or Research Course (3) or ESM 672 (1-3 credits)
Fall Year 3 (4 credits)	**Spring Year 3 (5 credits)**	**Summer Year 3 (3-6 credits)**
ESM 660 (seminar) (1)	ESM 660 (seminar) (1)	ESM 670 (3) or Research Course
ESM 651 (3) or ESM 677 (3) or Research Course (3)	ESM 678 (3)	Research Course or Elective (3) or ESM 672 (1-3 credits)
Fall Year 4[9] (6 credits)	**Spring Year 4 (6 credits)**	**Summer Year 4 (3-6 credits)**
ESM 583 (3)	Research Course (3)	Research Course (3)
ESM 651 (3) or ESM 680 or Research Course (3)	Research Course or Elective or ESM 670 (3)	ESM 670 or Elective (3) or ESM 672 (1-3 credits)
Fall Year 5[10] (6 credits)	**Spring Year 5 (6 credits)**	**Summer Year 5 (3-6 credits)**
Elective (3)	Elective (3)	Elective (3) or Dissertation (3-6)
Research Course (3)	ESM 693[11] or ESM 602[12] or Elective (3)	
Fall Year 6 (6-9 credits)	**Spring Year 6 (6-9 credits)**	**Summer Year 6 (6-9 credits)**
Dissertation (6-9)	Dissertation (6-9)	Dissertation (6-9)

[9] Students taking coursework (prior to dissertation) in years 4 or 5 can elect to enroll in additional ESM 660 credits in order to stay immersed in ESM related practical experience. These would count as electives.
[10] Students taking coursework (prior to dissertation) in years 4 or 5 can elect to enroll in additional ESM 660 credits in order to stay immersed in ESM related practical experience. These would count as electives.
[11] ESM 693 is an independent study course. We encourage students to take this course as needed to enhance their understanding/skills for a specific topic in evaluation, statistics or methodology.
[12] ESM 602 is a directed readings course. We encourage students to use this course to explore a specific topic (usually their dissertation topic) more in-depth.

ESM Plan of Study

During your first year in the ESM Program, you will outline a plan of study. The plan of study will help you develop your educational goals and place them into the context of your intended graduation date. The plan of study simply lists the courses you have taken, the courses you are currently enrolled in and the courses you plan to take. It also notes how each proposed course fits the requirements of the ESM program. The plan of study provides course titles as well as your grades.

In addition to serving as a planning guide to you, the plan of study will be turned in to the Graduate School when you are submitting your admission to doctoral candidacy form. The plan of study is a working document that will change during the graduate studies. Use the ESM course requirements discussed above and the Plan of Study Template to guide the development of your own plan of study. In addition, it may be beneficial to search previous course offerings of previous semesters to help you anticipate during which semesters certain courses will be offered in the future. **Students will be required to submit drafts of their plan of study each spring.** Below is an example of how one semester can be represented in a plan of study. Refer to the shared Google drive for the Plan of Study Template and examples.

Fall 20XX

Course Number	Course Title	Credits	Grade
ESM 559	Intro. to Qualitative Methods[RC]	3	
ESM 577	Statistics in Applied Fields I[EC]	3	
ESM 533	Program Evaluation I[EC]	3	
ESM 660	ESM Seminar[AP]	1	

Semester 10 hours
Cumulative 10 hours

ESM Research Seminar

The ESM seminar, ESM 660, is designed to introduce students to the fields of Evaluation, Statistics, and Methodology. As these fields are diverse, students work on a broad variety of tasks during their time enrolled in the ESM seminar. The seminar is taken over the course of six consecutive semesters (ESM seminars are always held on Mondays from 4:00-5:00pm). Students begin to enroll in the ESM seminar starting in their first semester.

The purpose of the seminar is to provide students with three essential elements of their doctoral program: 1) interaction with ESM faculty and students; 2) manuscript and dissertation development under the guidance of ESM faculty members and upper-level ESM students; and, 3) targeted hands-on evaluation experiences. Moreover, there are generally three cohorts of students (Year 1, Year 2, and Year 3 doctoral students), but other ESM students will be encouraged to participate. While one faculty formally coordinates the seminar as the instructor of record, all ESM faculty participate in all aspects of the seminar.

Students' progress (SOAR) will be evaluated each year as part of the seminar. Students also participate in manuscript editing and writing activities within the seminar. Students are encouraged to continue their writing projects after the seminar is finished. In addition, students gain practical experience in evaluation by assisting with projects approved by the ESM 660 instructor. Students are also strongly advised to participate in conferences. As part of the course requirement, students submit proposals of their research to be presented at national or regional conferences. Oftentimes students collaborate on conference submissions. Collaborative conference submissions of ESM students have had an excellent record of acceptance at the American Evaluation Association (AEA) conference and other professional conferences in are field.

All ESM students receive training in a variety of areas to enhance their knowledge of evaluation, statistics, and methodology. Trainings are conducted by experts in the fields or by advanced graduate students, and focus on topics such as creating a Curriculum Vita, Preparing Your Comprehensive Exam Materials, and advanced methodology training as well as other training opportunities that are of interest to graduate students of the program.

By the fourth year, students will have completed all required semester hours of the ESM 660 course. Part-time students (on the 5 or 6 year plan) can elect to enroll in additional 660 credits or attend the ESM seminar as needed in order to remain engaged in ESM related practical experience. Fourth year students are encouraged to attend ESM seminar meetings, but are not required to. Generally in the fourth year of a suggested 4-Year plan, students are working towards completing their dissertation, finalizing scholarly writing projects, and updating their CV and job application materials and applying for jobs.

Overall, students are engaged in a variety of activities during the seminar. In addition to the above-described tasks and experiences, the seminar also serves as an informal gathering opportunity for the ESM students. In the past, ESM students have enjoyed to get to know each other better and to catch up before and after the weekly seminars. Thus, the seminar allows students to gain a variety of essential skills and competencies while serving as an opportunity for collaboration among students.

ESM Internships

The ESM program requires students to complete six credit hours of internship credit. Students typically complete 3 credits hours in one semester and 3 credit hours in another semester, occasionally students will choose to do fewer credits (1-2) across many semesters. Many students choose to complete additional internships. For each 100 hours of site work, students receive 3 credit hours (33 hours for 1 credit, 66 hours for 2 credits). Students may register for 1 to 6 credit hours depending on the number of hours the student is planning on working that semester. For instance, if a student plans to work 33 hours during the semester, he or she should register for 1 credit hour. If a student plans to work 200 hours, he or she should register for 6 credit hours. Students may choose to do their internships for an educational or a community setting that is local or outside of the Knoxville area. **Since students are earning credits for their internship students should not be getting paid for their hours.**

When negotiating possible internships with their supervisors, students should have a clear idea of the experiences they want to gain in the internship process. Being able to clearly articulate skills sought will ensure a better internship experience for students. In

the past, students, who failed to discuss exactly what they expect to learn during their internships, have ended up doing tasks from which they did not benefit. Thus, this discussion prevents frustration and hassles later on during the internship. In order to facilitate this process, students are required to negotiate a contract with their site supervisor and submit this contract to the ESM internship lead faculty. The contract represents an agreement between the student and site supervisor focused on the goals, tasks, and outcomes of the internship. The site supervisor will also provide an evaluation of the student's performance to the ESM faculty.

In addition to providing learning experiences and practical experiences, internships offer a great opportunity for students to work closely with other individuals. Moreover, internship supervisors have served on students' doctoral committees and served as references for students' job applications later on. In the past, students have successfully completed internships for the following sites.

University of Tennessee, Knoxville

- Office of the Provost
- Office of Institutional Research and Assessment
- Center for Transportation Research
- TN Teaching and Learning Center
- Division of Student Affairs
- Student Success Center
- Office of Service Learning
- Faculty support on various internal projects
- UTIA (UT Institute for Agriculture)

Non-UT Knoxville Sites

- Centers for Disease Control
- Tennessee Board of Regents
- University of Tennessee-Chattanooga
- Oak Ridge Institute for Science Education
- Tennessee College of Applied Technology
- US Department of State-Foreign Service Institute
- Pellissippi State Community College

- Penn State Office of Planning and Assessment
- Knox County Department of Research and Evaluation
- Knoxville Family Justice Center
- Tennessee Governor's Academy
- Blount County Drug Court
- Middle Tennessee State University, Office of Institutional Effectiveness, Planning, and Research
- Y-12 National Security Complex, Maintenance Programs
- Ferrum College, Criminal Justice Department
- BioQUEST Curriculum Consortium

Comprehensive Examination

The purpose of the comprehensive examination is to evaluate the student's knowledge of the field of specialization, to assess familiarity with the published literature, and to determine whether the student possesses the skills necessary to be advanced to doctoral candidacy and to succeed in an ESM related career.

In the Evaluation, Statistics, and Methodology program, the written product that constitutes the basis for the qualifying exam is comprised of **two required products**:

Comprehensive Portfolio

Students will prepare a binder/electronic portfolio containing documents that show they have gained the requisite knowledge and skills to be a competent, successful professional in evaluation, applied statistics, and methodology. These documents include detailed self-reflections as well as exemplars of their scholarly work in the ESM field. Detailed guidelines for this part of the comprehensive exam can be found on the ESM shared google drive.

Scholarly Writing Sample

For this requirement students have two options: a) a publishable journal article (student as first-author) or b) a completed Chapter 1 and 2 of your dissertation. Students who choose to submit a publishable journal article must follow the specific journal guidelines and requirements for the intended journal that they will be submitting their article to. Students who choose to submit their

completed Chapter 1 and 2 of their dissertation must include all required elements and follow all UT dissertation guidelines for formatting. Detailed guidelines for this part of the comprehensive exam can be found on the ESM shared google drive.

Students must submit their completed portfolio 60 days (75 days if part-time student) after the last day of classes in the semester where they finish their coursework (not including dissertation credits). Students will submit all materials online (Canvas e-portfolio) and printed copies of their self-reflections from their portfolio and their scholarly writing sample. Students are also required to create a brief presentation (20-25 minutes) that summarizes their portfolio/scholarly writing sample.

Scheduling of Comprehensive Exam Defense

Oral defenses for the comprehensive exam will be scheduled by your committee chair in the semester AFTER you have completed all required coursework (not including dissertation credits). **Oral defenses may be scheduled during the following times: 1. August 15-September 15 (for students completing coursework in the previous spring), 2. November 15-December 15 (for students completing coursework in the previous summer), and 3. March 15-April 15 (for students completing coursework in the previous fall).**

Evaluation of Comprehensive Exam

The student's Doctoral Committee will evaluate the comprehensive exam. The qualifying examination itself will consist of the written component (portfolio and scholarly writing sample) plus an oral examination on the written component. At the end of the qualifying examination meeting, the committee will vote on the performance of the candidate. The possible options are: (1) pass, which means that the student is advanced to doctoral candidacy and allowed to prepare a dissertation proposal; (2) conditional pass, which means that the student must undertake some specific additional work before a pass can be recommended; (3) failure, either with the option of reexamination, or without (in the latter case, the student will be terminated from the program). Failure to pass the qualifying examination after two tries will result in termination from the program.

Once the comprehensive examination has been successfully defended, the student must submit the Admission to Candidacy form to the Graduate School. This form can be

found online at (http://gradschool.utk.edu/forms-central/admission-to-candidacy-doctoral-degree/).

Dissertation Preparation

The dissertation represents the culmination of a major research project completed by the student. The organization, method of presentation, and subject matter of the dissertation are important in demonstrating the results of such research. A student should be registered for the number of dissertation hours according to the candidate's program. Students must submit their dissertation to the Graduate School (electronically) by the specified due date for the semester they intend to graduate. Each dissertation must be accompanied by one approval sheet, signed by all members of the doctoral committee. The approval sheet reflects the final format for submission. The approval sheet certifies to The Graduate School that the committee members have examined the final copy and found that its form and content demonstrate scholarly excellence. The Doctoral Dissertation Agreement Form, Survey of Earned Doctorates, and Abstract form are also submitted at this time. Bound copies of the dissertation can be ordered at this time as well. Students should consult with their advisor regarding the number of bound copies to order.

The University of Tennessee has specific guidelines for the preparation of dissertations. This guide and dissertation templates can be found online at http://web.utk.edu/~thesis/Guide.shtml. Please keep in mind that guidelines are updated periodically, thus, it is beneficial to obtain the latest version prior to any dissertation work. Students are encouraged to use style manuals such as the Publication Manual of the American Psychological Association, A Manual for Writers of Term Papers, Theses, and Dissertations, or The Chicago Manual of Style as resources for basic style and grammar. **Students should never use previously accepted theses and dissertations as the final guide for formatting.** The existence of a particular style or usage in a previously accepted thesis or dissertation does not establish precedent for its continuation. Students are responsible for obtaining and following up-to-date guidelines. Please review the dissertation guidelines due to the university's specific expectations regarding dissertation. The graduate school offers graduation and dissertation workshops every semester. These workshops are announced via email and are beneficial for most students.

Graduate Assistantships

Most full-time students in the ESM program hold an assistantship to fund their studies. The departments do not have sufficient assistantships for every doctoral student and are competitive. During your first year of your doctoral studies, the department of Educational Leadership and Policy Studies offers you a 10-hour/week assistantship. You will be assigned to a faculty member within the department. Duties for your assistantship may include assisting with evaluation and research projects, assisting with writing for publication or assisting faculty with their teaching preparations.

For the following years of your graduate studies, you will be responsible for securing successive assistantships. Early on in the spring semester you will hear about available assistantships. **It is your responsibility to find and apply for assistantships**. Program faculty also send emails to students using the listserv as they become aware of assistantship openings. An assistantship offers financial payment to a graduate student for part-time work in teaching, administration, or research. Appointments are normally on a one-fourth or one-half time basis, and the annual stipend is payable in either nine or 12 monthly installments. Fee waivers apply only to maintenance and tuition fees in addition to appointments that are one-fourth time or more. For those with a nine-month appointment, payment over 12 months will ensure summer eligibility for fee waivers. In addition to the stipend, graduate assistants are entitled to a waiver of most fees for the period of appointment in accordance with university policy. You will still be responsible for the programs and services fee, the technology fee, the facilities fee, and the transportation fee.

An assistantship of one-fourth time or higher also includes health insurance. To maintain health insurance through the summer months, a student must be enrolled in course hours or the use-of-facilities course for at least three hours of credit. Your assistantship, if paid over 12 months, will cover maintenance and tuition for summer registration, but you will be responsible for all other fees. Please see the Graduate Assistant Handbook (http://gradschool.utk.edu/graduate-student-life/costs-funding/graduate-assistantships/) for more information regarding assistantships.

Curriculum Vita

During the first year of your graduate studies, you will develop and format your curriculum vitae. Then, throughout the remainder of your graduate studies, you will continuously update your curriculum vitae, which will be collected every semester during the ESM research seminar and upon graduation. While it can be very time consuming to update the Vitae throughout the semester, this will be of immense value when applying for jobs during the final year of studies.

When drafting your CV, ensure to use the same formatting consistently throughout the entire document. Possible information listed on your CV includes: Academic preparation, professional development, internships, work/assistantship experiences, research experiences, publications, scholarly presentations, certifications, teaching experiences, honors and prizes, funding awards, computer and language skills, service, and references. The following sites provide more information regarding the development of a CV. However, you will also receive feedback from the seminar course instructor on further developing what you have.

CV Resources:

AMS: http://www.ams.org/profession/employment-services/eims/eims-charlwood-cv-oct06.pdf

APA: http://www.apa.org/careers/resources/academic/vitae-tips.aspx

The Balance: https://www.thebalance.com/curriculum-vitae-format-2060351

Live Career: https://www.livecareer.com/quintessential/curriculum-vitae

Duke: https://studentaffairs.duke.edu/career/online-tools-resources/career-center-skills-guides/curriculum-vitae

Penn: http://www.vpul.upenn.edu/careerservices/gradstud/CVguide.php

Purdue: https://owl.english.purdue.edu/owl/resource/641/1/

RACC: http://www.racc.ac.uk/files/pdfs/HowToWriteACV.pdf

UCLA: https://grad.ucla.edu/asis/agep/advcv.pdf

UK: https://www.kent.ac.uk/careers/cv.htm

U W: http://uwm.edu/cdc/wp-content/uploads/sites/73/2014/10/CV-handout.pdf

Wake Forest University: http://career.opcd.wfu.edu/curriculum-vitae-cv/

Job Application Process

Cover Letters

During the first year as well as throughout your graduate studies, you will develop cover letters for current and post-graduate job applications. Every job application requires different aspects of your skills and experiences, so you will need to work on creating several cover letters throughout your graduate studies. Some of these will be collected every semester during the ESM research seminar. Although it can be a tedious creating several cover letters rather than just a uniform copy, this process will greatly assist you during your third and final year of studies when you will be applying for many different full time positions.

There are several important aspects to consider when creating a cover letter. First, simply reread the job advertisement. You will need to tailor your letter to fit the job description and anything else highlighted on the ad for the position. You will need to learn about the department or company to which you are applying and relate them to your skills and experience accordingly. Next, do not overemphasize yourself by adding to many "I" statements. Remember to include that you worked with others in the past as well as implementing plans and ideas for future co-workers. In general, do not use platitudes or clichés instead, demonstrate any would-be statements through your experience. Make sure your writing is clear, concise, and easy to understand.

Phone/Virtual Interviews

Telephone and virtual interviews are commonly used to screen applicants before the onsite face-to-face interview. One way to increase your chances for a second interview is by preparing for the obvious questions. A simple google search will reveal some commonly used introductory questions in the first interview. Make sure you are in a quiet place where there will be no interruptions and distractions. Have a check list of several key points that you would like to express during the call, while also noting the names of the interviewers along with any key information they tell you. Be clear and concise while also using the names and titles of the interviewers. Ask questions in addition to being positive and upbeat.

Face-to-Face Interviews

Face-to-face interviews include many of the facets needed to succeed in a phone or skype interviews. However, some additional points to remember are to dress appropriately and arrive 15-30 minutes ahead of time. Next, and this applies to phone and virtual interviews as well, it is important to know and understand "job talk" or the colloquium for the position you are interviewing. While demonstrating your knowledge of the appropriate

vernacular remember to concisely summarize your accomplishments, experience, and skills, in addition to giving a five-year plan for your long term career trajectory. Next, conduct some research on what possible questions to expect from the interviewers, most notably as they pertain to the position, department, and trends of the overall market or profession. Furthermore, prepare to ask questions and repeat them to each interviewer if they are from different departments. Similarly, to phone and virtual interviews take notes including characteristics of people you met or other questions you need answering. Lastly, if appropriate and much later in the interview process, negotiate your offer depending on your position such as workload, starting date, and salary.

Appendix A

Professional Organizations

List of Professional Organizations

1. Academy of Human Resource Development: www.ahrd.org
2. Action Research Network of the Americas: www.arnaconnect.org
3. American Association for Adult and Continuing Education: www.aaace.org
4. American Association for Public Opinion Research: https://www.aapor.org/
5. American Assoc. for the Assessment of Learning in Higher Education: www.aalhe.org
6. American Association of University Women: www.aauw.org
7. American Educational Research Association: www.aera.net
8. American Evaluation Association: www.eval.org
9. American Higher Education Alliance: www.ahea.org
10. American Mathematical Association of Two Year Colleges: www.amatyc.org
11. American Psychological Association: www.apa.org
12. American Society for Public Administration: www.aspanet.org
13. American Statistical Association: www.amstat.org
14. American Technical Education Association: www.ateaonline.org
15. Association for Educational Assessment: https://www.aea-europe.net/
16. Association for Institutional Research: https://www.airweb.org/pages/default.aspx
17. Association for the Study of Higher Education: https://www.ashe.ws/
18. Association of Academic Survey Research Organizations: https://www.aasro.org/
19. Atlanta Area Evaluation Association: https://atl-eval.wildapricot.org/
20. Canadian Society for Evaluation: https://evaluationcanada.ca
21. Chicagoland Evaluation Association: https://www.evalchicago.org/
22. Consortium for the Advancement of Undergraduate Statistics Education: https://www.causeweb.org/cause/
23. East Tennessee Commission on Children and Youth: www.tn.gov/tccy
24. European Survey Research Association: https://www.europeansurveyresearch.org/
25. International Society for Self-directed Learning: www.sdlglobal.com
26. International Society for Technology in Education: www.iste.org
27. Mid-South Education Association: http://www.msera.org
28. NASPA: www.naspa.org
29. NASW: www.naswdc.org
30. National Alliance for Broader Impacts: https://broaderimpacts.net

31. National Council of Teachers of Mathematics: www.nctm.org
32. National Educators Association: www.nea.org
33. Project Management Institute: www.pmi.org
34. Psychometric Society: https://www.psychometricsociety.org/
35. Society of Multivariate Experimental Psychology: https://www.smep.org/
36. Society of Industrial Organizational Psychologists: www.siop.org
37. Southern Association of Colleges and Schools Commission on Colleges: http://www.sacscoc.org/
38. Southern Sociological Society: www.southernsociologicalsociety.org
39. Tennessee Association for Student Success and Retention: http://tassr.org/index.html
40. Tennessee Educators Association: www.teateachers.org
41. Tennessee Mathematics Teachers Association: tmta.wildapricot.org
42. Washington Evaluators: http://washingtonevaluators.org/