Important general notes:

- The final Program of Study is a product of an ongoing consultation between students and their Major Professors and entire doctoral committees, and may differ greatly between students based on their prior background, future career goals, and substantive and/or methodological considerations related to their tentatively planned dissertation studies. A higher number of courses, in one or more categories, than the minima listed here will often be deemed appropriate for many students by their committees, including master’s-level courses for those not already holding a previous master’s degree.

- *Indicates categories of coursework in which it is expected that many students may, with the approval of their doctoral committee members, substitute one or more graduate-level courses included in a previous graduate degree, very possibly at the master’s level and/or at another institution, for specific UGA prefixes/courses listed. Other requirements are specific and not subject to substitution.

- Please see the back/second page of this document for many clarifying comments and details.

- Please see the Doctoral Student Handbook for a full explanation of the additional requirements, beyond coursework, for Admission to Candidacy for doctoral degrees in Science Education, which include a Dissertation Prospectus and Publishable Paper as well as the written and oral Comprehensive Examinations required by the Graduate School.

Science Content Courses*
Evidence of in-depth knowledge of the core science teaching field (Biology, Chemistry, Physics, and Earth/Space Sciences) most relevant to the student’s interest and experience is required. It is expected that graduate-level courses in one or more science content fields will be part of the program of study unless the student holds a master’s degree in a science field.

Science Education Courses
At least six of the eight three-hour courses regularly offered in Science Education:
ESCI 8200 Science Supervision, Mentoring, and Induction
ESCI/EFND 8210 Multicultural Education Research
ESCI 9020 History and Theory of Science Education
ESCI 9080 Science Curriculum Theory and Practice
ESCI/EMAT 9600 [temporary number] Learning and Knowing in Mathematics and Science
ESCI 9630 Critique of the Literature in Science Education
ESCI 9730 Science Teacher Education Theory and Practice
ESCI 9740 Science Studies and Science Education

Social Foundations of Education Courses*
At least two courses from among: graduate-level EFND (or related fields) or ESCI 8100, 8210, 8310, or 9740

Educational Psychology Courses*
At least two graduate-level courses in EPSY

Research Methodology Courses*
Educational Measurement, Assessment, and Evaluation – ERSH 6600, 7250, 7600, 7610 or equivalent
Three-course series in one methodology – typically QUAL 8400, 8410, 8420 or ERSH 6300, 8310, 8320
One course in another methodology – typically QUAL 8400 or ERSH 6300

Seminars and Internships
ESCI 8990 (four enrollments of one hour each) Research Seminar in Science Education
ESCI 9600 (two enrollments of three hours each for PhD, one for EdD) Research Internship in Science Education
ESCI 9700 Teaching Internship in Science Education

Dissertation
ESCI 9300 (typically a minimum of ten hours) Doctoral Dissertation
Clarifying comments and specific details:

- Normally all coursework in the Science Content area will be taken at the graduate level, although undergraduate courses may sometimes be deemed appropriate by a student’s committee (although any such courses should not be included on the formal Program of Study). While it is normally expected that these courses will build advanced-level knowledge and skills within one science field, students are also encouraged to include more basic coursework to increase their familiarity with science fields in which their background is relatively weak. The ideal is to complete coursework equivalent to that included in a typical master's degree program (minus a thesis) in a single science field (and thus students already holding a master’s degree in a science content field will normally be considered to have already fulfilled this requirement). As a practical matter, the faculty are aware that it is unfortunately extremely difficult at UGA for part-time students to schedule substantively graduate-level coursework in many science fields, due to the dearth of such courses offered in Summer Semester or in evening time slots or online during the academic year, and Major Professors and doctoral committees are urged to take this constraint into consideration.

- All three-hour Science Education doctoral courses are offered, two per academic year semester, on a regular rotating schedule with a period of two years. Specific topics of the one-hour ESCI 8990 seminars are also planned on a two-year rotation.

- In the event (extremely rare in the past, and expected to remain so in the future) that a scheduled three-hour Science Education doctoral course is cancelled due to insufficient enrollment, Major Professors and doctoral committees are expected to take into account the fact that this is a circumstance beyond the control of students.

- Three-hour Science Education doctoral courses (e.g., ESCI 8100 and 8310) given in the recent past but not included in the eight courses listed here may be used to fulfill the minimum requirement of six.

- ESCI doctoral courses taken by permission of the instructor while a master’s, specialist, or non-degree student at UGA may be counted towards the minimum requirement of six.

- Science Education courses used to fulfill the minimum requirement of six may not be “double counted” as Social Foundations courses.

- Besides EFND courses within the College of Education, selected courses in History, Philosophy, Sociology, Anthropology, Psychology, Women’s Studies, African American Studies, and potentially other areas may be highly relevant to the interests of some students and may be approved by their committees as Social Foundations courses.

- The Educational Psychology category is one in which Major Professors and committees are urged to pay particularly critical attention to the specific substance and level of such courses (whether at UGA or elsewhere, and whether taken during the doctoral program or earlier). For instance, many of our faculty consider the UGA courses leading to the Gifted Education endorsement (EPSY 7110, 7060, 7230, and 7250) and intended primarily for master’s or non-degree students not to fit the intent of this requirement, and courses in fast-developing fields such as cognitive psychology and neuroscience-related psychology may be of questionable current value if taken long ago.

- Depending on details of the specific methodology most likely to be used in the dissertation study, most students will take one or more additional, more advanced courses, beyond the required three, in their primary area (ERSH or QUAL). Many students in our program earn the Certificate in Interdisciplinary Qualitative Studies, which requires five courses. Details may be found at https://coe.uga.edu/academics/non-degree/certificates/qualitative-research.

- Doctoral students who have had no previous exposure to educational research and its methods in a previous graduate degree program may be advised to take ESCI 6990, Introduction to Research in Science Education, or ERSH 6200, Methods of Research in Education, before beginning either of the standard three-course methodology sequences.

- Another Research Methods sequence highly recommended by some of the faculty is EDHI 8910/L, 8920/L and 8930. Committees may choose to allow substitution of this sequence when deemed appropriate.

- It is very strongly recommended that ESCI 8990 be taken in each of the first four academic year semesters of the program. This is because, beyond the substance of those courses, an important goal of that seminar series is to bring together all first-and second-year students, whether full-time or part-time, as a loose but mutually supportive cohort.

- For details about expectations for the nature of the ESCI 9600 and 9700 internship experiences, please see the Doctoral Student Handbook.

- Supervised research work directly related to a planned dissertation that is undertaken before admission to candidacy (“all but dissertation” status) should normally be pursued as an ESCI 9000 (Doctoral Research) enrollment, rather than 9300. Prime examples are preparing all or part of a dissertation prospectus, or completing a “pilot study” using tentatively planned procedures for data gathering and analysis on a smaller scale or in a different context. These two processes may well be simultaneous and/or interrelated.

- Every doctoral candidate must enroll for a minimum of three semester hours of ESCI 9300. Because the Graduate School requires a minimum of ten total hours of enrollment after admission to candidacy, in practice nearly all doctoral students enroll for at least ten hours, and usually significantly more, of this credit.