

DOCTORAL PROGRAM REQUIREMENTS AND CURRICULUM DISPLAY

Ph.D. in Curriculum and Instruction Curriculum Specialty: Instructional Technology

NORTH CAROLINA STATE UNIVERSITY
Department of Curriculum and Instruction
Graduate School Minimum of 72 Hours¹

GOALS AND OBJECTIVES OF THE PH.D.

The Department offers a research focused Ph.D. program in Curriculum and Instruction. Within the C&I doctoral program an individual can choose to focus on a number of different areas - one of which is instructional technology. The goal of the Ph.D. program is to prepare scholars who have the advanced knowledge and abilities to be educational leaders and researchers. They assume professional roles in education agencies at the district and state levels, colleges and universities, and private industry. Students work closely with faculty to obtain experience in research and scholarship, professional writing, university-level teaching, educational associations, and educational consultation.

The specific goals for the Ph.D. program in the curricular specialty area of Instructional Technology are to provide students with knowledge of: (1) curriculum and instruction, including philosophical, social and cultural perspectives; (2) the nature of the learner; (3) Instructional Technology including its history, theories of content and pedagogy, and related research; and (4) research designs and methodologies in order to conduct investigative studies. The curricular specialty in instructional technology typically is comprised of course work from: Curriculum and Instruction; Educational Psychology; Math, Science and Technology Education; Adult and Community College Education, and Psychology. Other areas may be included based on the scholarship and research interests of the student.

Graduates of the Ph.D. program may enter positions in public schools, service agencies, higher education institutions, or industry. The doctoral program is individually designed, under the supervision of a graduate committee, taking into account each student's background, interests, and professional goals. One academic year of full-time resident study is required for the doctoral degree.

CURRICULUM AND INSTRUCTION CORE - (33 Hour Minimum)

Students must take a minimum of three hours in each of the following areas that address curricular, philosophical, social, cultural and psychological aspects of education. Courses with an asterisk are required.

Studies in curriculum theory, pedagogy, and teacher development

- * ECI 700 Curriculum Theory and Development
 - ECI 705 Instructional Supervision of Teachers
 - ECI 716 Design and Evaluation of Instructional Materials
 - ECI 801 Seminar in Curriculum and Instruction
 - ECI 806 Seminar on teacher as learner
 - ECI 841 Practicum in Mentoring of Teachers
 - ECI 851 Internship in Mentoring
 - ECI 711 Computer Applications and Curriculum Integration (*or Equivalent*)
 - Other courses as approved by your doctoral committee.*
- *Required.

Studies in philosophical, social, and cultural issues

- * ECI 500 Theory and Practice in Teaching Diverse Populations
- OR
- * ELP 515 Education and Social Diversity
- ECI 701 Foundations of Curriculum
- ELP 724 Contemporary Educational Thought

¹ Refer to the NCSU Graduate Catalog for requirements governing doctoral study at the University.

ECI 807 Advanced Seminar in Multicultural Education
PSY 506 Psychology of Gender
PSY 558 Psychology and the African Experience
SOC 736 Social Stratification
SOC 739 Social Psychology of Inequality

* (Either ECI 500 or ELP 515 are required unless students have had an equivalent course in their master's program. Students may take other advanced courses in anthropology, sociology and public affairs, if approved by their advisory committees.)

Studies in the nature of the learner

ECI 570 Learning Disabilities
EDP 504 Advanced Educational Psychology
EDP/PSY 582 Psychology of Adolescent Development
PSY 508 Cognitive Processes
PSY 584 Advanced Developmental Psychology
PSY 786 Cognitive Development
PSY 787 Social Development
PSY 826 Advanced Problems in Cognition

Studies In Curricular Specialty and Preparation For Professional Roles: Instructional Technology

With the guidance of an advisory committee, students select from courses within the Department of Curriculum and Instruction as well as other departments on campus that are designed to provide specialization in instructional technology. Course credit can be earned for internships, independent study, directed research related to the development of professional roles, or supervised teaching of a course for credit (ECI 855 Doctoral Supervised Teaching).

The curricular specialty in instructional technology typically is comprised of course work from: Curriculum and Instruction; Educational Psychology; Math, Science and Technology Education; Adult and Community College Education, and Psychology. Other areas may be included based on the scholarship and research interests of the student. Suggested courses for the instructional technology specialty are:

ECI 511/711 Computer Applications and Curriculum Integration in K12 Instruction
ECI 514/714 Multimedia Design & Applications in K-12 Instruction
ECI 515/715 Internet Applications & Web Page Design in K-12 Instruction
ECI 516/716 Design & Evaluation of Instructional Materials
ECI 517/717 Advanced Multimedia Design and Applications in K12 Instruction
ECI 518/718 Program and Staff Development in Instructional Technology
ECI 516/716 Design & Evaluation of Instructional Materials
ECI 522 Teachers as Researchers
ECI 546/ 746 Literacy Instruction, Technology and Media
ECI 551/751 Teaching and Learning Approaches for Emerging Adolescents
ECI 642/842 Practicum in Instructional Technology
ECI 652/852 Internship in Instructional Technology
ECI 806 Seminar on Teacher as Learner: Developmental Theory, Research and Practice
ECI 855 Doctoral Supervised Teaching
EDP (PSY) 582 Adolescent Development
EDP 504 Advanced Educational Psychology
EAC 580 Designing Instructional Systems in Training and Development
EAC 759 The Adult Learner

RESEARCH AND MEASUREMENT - (15 hour minimum)

* EDP 560 Educational Testing and Measurement
* ST 507 Statistics for the Behavioral Sciences I
* ST 508 Statistics for the Behavioral Sciences II
* ECI 710 Research Applications in Curriculum and Instruction
* ELP 736 Qualitative Research in Education and Policy Analysis
ECI 603 Advanced Seminar in Literacy Research
ECI 526 Theory and Research on Teaching and Learning Social Studies
ECI 892 Research Projects in Curriculum and Instruction
EDP 760 *Quantitative Analysis in Education*

ECD 737 Cognitive Developmental Theory, Research and Practice
ELP 742 Applied Research Methods in Education
ELP 780 Evaluation Theory and Practice in Education
ENG 511 Theory and Research in Composition
PSY 762 Quasi-Experimental Evaluation Design
SOC 707 Quantitative Sociological Analysis
SOC 708 Advanced Sociological Analysis
SOC 711 Research Methods in Sociology I
SOC 712 Advanced Survey Research Methods
SOC 713 Applied Research
SOC 715 Qualitative Sociological Methods and Analyses
ST 505 Applied Nonparametric Statistics

** (Required. Either ST 507 and ST 508, or alternative courses in statistics determined by the faculty to be appropriate)*

DISSERTATION RESEARCH (12 Hours)

* ECI 895 Doctoral Dissertation Research (12 Hours)

** (Required).*

TOTAL HOURS: 60 HOUR MINIMUM.

In order to meet the Graduate School required minimum of 72 hours beyond the bachelor's degree for the Ph.D., at the discretion of the committee and in accordance with Graduate School policy, some hours can be counted from the student's master's program in the Graduate Plan of Work. C&I allows a maximum of 12 hours completed at NC State in a master's program, and up to a possible 6 hours of thesis credit to be applied to a student's doctoral program, at the discretion of the doctoral committee.

Other Requirements for Completion of the Degree

Additional Course Work. Depending upon the course work taken in the master's degree program, students may be required by their advisory committee to take additional course work as prerequisites for the doctoral program. ECI 695, Master's Thesis Research, in alignment with Graduate School requirements, is required for students who have not demonstrated master's level competence in the design and implementation of an empirically based research project (e.g., quantitative or qualitative). This course should be completed before preliminary exams (see Graduate Administrative Handbook²).

Plan of Graduate Work (POW). Doctoral students are required to complete a POW in consultation with their advisors. The POW should include both a list of the course work to be undertaken (in all programs) and the dissertation topic; be developed by the student and his/her advisory committee; be approved by the committee and the DGP or Department Head prior to submission to the Graduate School for final approval; be submitted prior to completion of 12 hours of a doctoral program. (see NCSU Graduate Catalog³)

Residency. All students must meet the residence requirement as described in the NCSU Graduate Catalog³ and the Graduate Administrative Handbook²

Comprehensive Preliminary Written Examination. The written examination will address information from the curriculum and instruction core and from research design and methodologies. The examination will be scheduled in accordance with Graduate School policy *not earlier than the end of the second year of graduate study and not later than one semester (four months) before the final oral examination*³.

Comprehensive Preliminary Oral Examination. Following successful completion of the preliminary written examination an oral examination will be conducted by the advisory committee and monitored by a Graduate School representative. The oral examination may also include discussion of the theoretical rationale and research design for the dissertation.

CANDIDACY. A doctoral student is admitted to candidacy by the Graduate School upon passing the preliminary examinations without conditions or after fulfilling any conditions specified by the advisory committee.

² Graduate Administrative Handbook, http://www.fis.ncsu.edu/grad_publicns/handbook/

³ Graduate Catalog, http://www.fis.ncsu.edu/grad_catalog/catalog.htm

Dissertation Proposal Presentation. The dissertation proposal presentation is conducted by the advisory committee. A successful presentation of the proposal indicates that the advisory committee approves the topic, the theoretical rationale, and the research methodology of the proposed study.

Final Oral Examination and Defense of the Dissertation. The dissertation presentation is conducted by the advisory committee and a Graduate School representative. The purpose of the dissertation is for the doctoral student to demonstrate ability to conduct original research that is theoretically oriented and that will make a significant scholarly contribution to the field of education.

Time Limitation. In accordance with Graduate School policy, graduate students are allowed a maximum of six years from the date of admission to attain candidacy and a maximum of ten calendar years to complete all degree requirements.