Science Education Doctoral Program

	itleLabel

Major: 36 cr (minimum)

Group I: Specialization

A. Science Education
   Topical Seminars
   Q5612: Topical Seminar in Science Education (At least two sections) 6cr
   Science Methods (Choose two of the courses below) 6cr
   E548: Advanced Study in the Teaching of Elementary School Science
   S518: Advanced Study in the Teaching of Secondary School Science
   Q535: Demonstration and Field Strategies in Science
   Q540: Teaching Environmental Education 12cr

B. Science Education Support Area
   A cohesive set of courses to support the student's research interests and professional agenda. These courses may be chosen from science content departments, philosophy of science, educational psychology, ISET, or another area determined by the student's committee.

Group II: Departmental Seminars

Q610: Science Education Curriculum
Q611: Research Issues in Science Education

Group III: Inquiry Requirements

J105: Inquiry in Curriculum and Instruction 6cr
Q690: Advanced Research in Science Education

Minor: 12cr

Courses in one science discipline.

Inquiry Core: 15 cr

1. Introductory Course
   Y529: Strategies for Educational Inquiry 3cr
   Y502: Intermediate Statistics Applied to Education 3cr

2. Statistical Techniques (minimum 3 credits)
   Y503: Statistical Design in Educational Research
   Y604: Multivariate Analysis in Educational Research
   E606: Research Methods in Cultural Anthropology
   S659: Qualitative Methods in Sociology
   Y611: Naturalistic Inquiry
   3-9cr

3. Qualitative Inquiry Approaches (minimum 3 credits)

4. Measurement, Evaluation, and Design
   P527: Educational Measurement
   P617: Psychometric Theory
   J669: Evaluation of School Programs
   Y535: Evaluation Models and Techniques
   Y635: Methodology of Educational Evaluation
   Y735: Pracicum in Educational Evaluation
   8-3cr

Electives: 12cr
Dissertation: 15cr
J795: Dissertation Proposal Preparation
J799: Dissertation

Total Credit Hours: 90