

Science Education Doctoral Program

05.09

Major: 36 cr (minimum)

Group I: Specialization	24cr
A. Science Education	12cr
Topical Seminars	6cr
Q612: Topical Seminar in Science Education (<i>At least two sections</i>)	
Science Methods (<i>Choose two of the courses below</i>)	6cr
E548: Advanced Study in the Teaching of Elementary School Science	
S518: Advanced Study in the Teaching of Secondary School Science	
Q528: Demonstration and Field Strategies in Science	
Q540: Teaching Environmental Education	
B. Science Education Support Area	12cr
A cohesive set of courses to support the students research interests and professional agenda. These courses may be chosen from science content departments, philosophy of science, educational psychology, IST, or another area determined by the student's committee.	
Group II: Departmental Seminars	6cr
Q610: Science Education Curriculum	
Q611: Research Issues in Science Education	
Group III: Inquiry Requirements	6cr
J705: Inquiry in Curriculum and Instruction	
Q690: Advanced Research in Science Education	

Minor: 12cr

Courses in one science discipline.

Inquiry Core: 15 cr

1. Introductory Course	3cr
Y520: Strategies for Educational Inquiry	
2. Statistical Techniques (<i>minimum 3 credits</i>)	3-9cr
Y502: Intermediate Statistics Applied to Education	
Y603: Statistical Design in Educational Research	
Y604: Multivariate Analysis in Educational Research	
3. Qualitative Inquiry Approaches (<i>minimum 3 credits</i>)	3-9cr
E606: Research Methods in Cultural Anthropology	
S659: Qualitative Methods in Sociology	
Y611: Naturalistic Inquiry	
4. Measurement, Evaluation, and Design	0-3cr
P527: Educational Measurement	
P617: Psychometric Theory	
J660: Evaluation of School Programs	
Y535: Evaluation Models and Techniques	
Y635: Methodology of Educational Evaluation	
Y735 Practicum in Educational Evaluation	

Electives: 12cr

Dissertation: 15cr

J795: Dissertation Proposal Preparation

J799: Dissertation

3cr

12cr

Total Credit Hours: 90