

Graduate Certificate in the Learning Sciences

The Certificate in the Learning Sciences provides an advanced understanding of learning in formal and informal environments, integrating perspectives from instructional design and technology, educational psychology, and social foundations. Students who complete the Graduate Certificate in the Learning Sciences will have demonstrated requisite knowledge and skills necessary to conceptualize, design, deliver, and measure effective learning. The Graduate Certificate in the Learning Sciences is appropriate for advanced graduate students considering careers such as higher education faculty, research scientists, educational administrators, funding agency program directors, and policy makers.

Admission Requirements: To complete the Graduate Certificate in the Learning Sciences, students must be enrolled currently and in good standing in any graduate program at Virginia Tech. Students considering the Certificate should consult with faculty in one of the associated programs in the Department of Learning Sciences and Technologies to plan their study to be consistent with prior experience, career goals, and certificate requirements.

Certificate Requirements: Students must take at least twelve credit hours in the options listed below. All students are required to enroll in EDIT 5234, Introduction to the Learning Sciences. Students will then choose one elective, equal to a three-credit-hour course, from *three* of the other *four* categories listed below, Cognition, Design, Social Foundations, and Technology. The order of these courses, including EDIT 5234, make be taken at the discretion of the student after consulting with his or her advisor.

a. Introductory Course (Required for Certificate)

EDIT 5234: Introduction to the Learning Sciences

b. Courses in Cognition

EDEP 5114: Learning and Cognition

EDEP 6114: Cognitive Processes and Educational Practice

EDEP 6224: Constructivism and Education EDEP 6444: Motivation and Cognition

c. Courses in Design

EDIT 5164: Design for Learning*

EDIT 6334: Applied Theories of Learning*

EDIT 5224: Principles for Learning Message Design

d. Courses in Social Foundations

EDEP 5184: Sociocultural Influences on Learning and Instruction

EDCI 5174: Informal Learning for School Age Youth

EDCI 6024: The Analysis of Educational Concepts

EDCI 6044: Classroom Discourse

e. Courses in Technology

EDEP 6334: Multimedia Cognition

EDIT 5594: Topics in Learning Environment Design and Development

EDIT 5614: Digitally Mediated Learning

EDIT 5634: Interactive Learning Media Development

- Prior permission of instructor required for non-degree students outside Department of Learning Sciences and Technologies.

Application Process: When students decide to obtain the certificate, they should complete the Application - Certificate (Graduate Certificate Application). This form starts the process, designating the courses that will be taken for the certificate. Applicants should follow the directions on the form for returning it to the Graduate School. During the semester in which the certificate requirements are to be completed, students should complete and return the Application for Degree or Certificate. Both of these forms are available from the “Forms” section of the Graduate School’s home page (<http://www.graduateschool.vt.edu/forms/index.html>).

Certificate Faculty: The following faculty members are affiliated with the Graduate Certificate in the Learning Sciences:

Dr. Jennifer Brill

Dr. Katherine Cennamo

Dr. Peter Doolittle

Dr. Jim Garrison

Dr. Brett Jones

Dr. Barbara Lockee

Dr. Ken Potter

Dr. Jocelyn Wilson

For general inquires regarding the certificate, please contact the Faculty Chair, Dr. Katherine Cennamo <cennamo@vt.edu>.