

Program Overview

The Graduate Certificate in Educational Technology is open to all ASU degree-seeking and non-degree seeking graduate students. It is designed for individuals interested in (a) gaining proficiency in the design, development and evaluation of instructional systems and (b) learning how to utilize various educational technology applications to support learning.

The Graduate Certificate in Educational Technology can be completed easily within a two-year period as a complement to another degree or as a stand-alone certificate. It is appropriate for working professionals and ASU students, many of whom will be entering the educational workforce after obtaining their degree. It also provides opportunities for in-service K-12 teachers interested in learning how to leverage technology in their classrooms to create more productive learning environments.

Among other goals, the certificate program is intended to increase enrollment in the Educational Technology MEd program. Three of the five courses required for the certificates may be applied towards a master's degree. With that in mind, the courses associated with each certificate were selected based on their suitability for the MEd as well. Students that earn an Educational Technology certificate and elect to pursue the MEd degree may be allowed to apply three of the required core courses (EDT501, EDT502, and EDT503) towards their MEd degree program with prior approval from the Educational Technology MEd program, provided the student applies for the MEd program by his or her third course in the Certificate program.

How to Apply

Admissions Criteria

The Graduate Certificate in Educational Technology is available to all ASU graduate students irrespective of their major and to non-degree graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must (a) hold a bachelor's degree or equivalent from a regionally accredited institution, and (b) have a cumulative junior/senior undergraduate GPA of 3.00 or higher. Students interested in earning this certificate must formally apply to the certificate program via the online graduate admissions application.

Admissions Requirements

In order to be considered for admission to the Graduate Certificate in Educational Technology, applicants must complete a Graduate Admissions Application available online at:

www.asu.edu/gradapp

When completing the application online, applicants will need an electronic copy of their curriculum vita or résumé, which they will be asked to upload during the application process. The document must be in MS Word (.doc), Rich Text (.RTF), or Text (.txt) file format to upload properly. During the application process, the applicant must also select that he/she is seeking admission to the Educational Technology Certificate Program, one of two certificate programs in the Educational Technology area.

Applicants must also arrange for one set of official transcripts from every college and university (excluding ASU) that they attended while earning their Bachelors (and any other higher degree) to be sent to:

Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
PO Box 871003
Tempe, AZ 85287-1003

It is the applicant's responsibility to ensure that all materials arrive, and incomplete applications will not be considered.

The Executive Committee will review applications and make admission decisions on a monthly basis. Through written communication, the Dean of the Graduate College will notify applicants about admissions decisions.

Program Requirements

The Graduate Certificate in Educational Technology requires a minimum of 15 credit hours. Students are permitted to apply a maximum of 9 hours taken in the certificate program towards the Educational Technology MEd program with the prior approval from the Educational Technology MEd program. See Appendix A for an example program of study.

Required Courses

Core Courses (<i>Prefix & Number</i>)	Credit Hours
3 core courses (9 credit hours)	
EDT501 – Foundations and Issues in Educational Technology	3
EDT502 – Design and Development of Instruction	3
EDT503 – Instructional Media Design	3

Elective Courses (<i>Prefix & Number</i>)	Credit Hours
Select one course (3 credit hours)	
EDT505 – Multimedia presentation technologies	3
EDT511 – Technology application in education	3
EDT523 – Distance education theory and practice	3
EDT591 – Games, simulations & virtual environments	3
EDT591 – Teaching and Training with Technology	3
Culminating Experience (<i>if applicable</i>)	Credit Hours
EDT504 – Development of Computer Based Instruction	3
Total required credit hours	15

The culminating experience is enrollment in the EDT504 course and completion of its Final Project. For the final project, the student selects an instructional problem appropriate to solving via computer-aided instruction (CAI) and creates a computer-based self-instructional tutorial program to address this problem. The goal of this project is to ensure that the student is capable of making a unique contribution to the field of interactive computer-based instruction. The project must result in an effective, interesting and useful CAI program. Most projects consist of about one hour of instruction. The student is expected to incorporate multimedia components into the program, including digitized graphics, audio, photographs, and video. The four components of the final project are described below.

- **Brief Proposal** – The student is required to write a short proposal for the program. In the proposal, the student must include a description of the instructional problem, background, description of why his/her CAI program is the appropriate solution to the instructional problem, and descriptions of the target audience and intended instructional setting. The student is also required to include one to

three objectives and a sample test item for each, description of treatment, brief content outline, outline of instructional flow of program and proposed timeline and budget.

- Design Specifications / Planning Documents – The student must write a set of design specifications for a short computer-based instructional program that can be used to teach someone specific objectives. The design specifications must include an instructional design document, as well as production specifications, specifically a flowchart, and either sample storyboards and/or small prototype of the program.
- Working Program - The choices for this working program are: (a) Develop an advanced short interactive computer-based self-instructional tutorial program to solve an instructional problem (the student's prerogative) in an organization in an appropriate and innovative way; or (b) Develop an interactive computer-based instructional tutorial program that may form the basis of your experimental materials for a research study.
- Usability Test - For either option above, the student is expected to also conduct at least a brief tryout of his/her program, with five to ten learners, and write an usability report.

Academic Advisor

The students will be appointed a certificate faculty advisor who will be responsible for monitoring students' progress toward completion of certification requirements.

Sustained Progress

The Certificate Executive Committee and the Division of Advanced Studies in Learning, Technology and Psychology in Education will monitor the progress of the students on a semester-by-semester basis. The students will also be appointed a certificate faculty advisor that will be responsible for monitoring students' progress toward completion of certification requirements.

Satisfactory student academic progress will include: (a) a minimum B (3.0) cumulative GPA required, and (b) successful completion of culminating experience. The maximum time limit is three years or by executive committee approval.

Graduate Faculty in Educational Technology

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Nelson, Brian

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Klein, James D.

Professor
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Email: James.Klein@asu.edu

Affiliated Graduate Faculty in Educational Technology

Winslow Burleson

Assistant Professor (PhD, Massachusetts Institute of Technology, 2006)
Ira A. Fulton School of Engineering
Human computer interaction; smart product design creativity; and innovation research

Michelle Chi

Professor (PhD, Carnegie-Mellon University, 1975)
Division of Advanced Studies in Learning, Technology and Psychology in Education
Unified theory of misconceptions and conceptual change; understanding effective ways of learning from self-explaining, collaborating, tutoring, and observing learning dialogues

James Gee

Mary Lou Fulton Presidential Chair in Literacy Studies (PhD, Stanford University, 1975)
Division of Advanced Studies in Learning, Technology and Psychology in Education
“New Literacies Studies,” encompassing the study of language, learning, and literacy in an integrated way in the full range of their cognitive, social and cultural contexts

Elisabeth Hayes

Professor (EdD, Rutgers University, 1987)
Division of Advanced Studies in Learning, Technology and Psychology in Education
Gender, literacy and technology-based learning; how children and adults learn language and develop IT skills outside of school through new technologies (e.g., games)

James A. Middleton

Professor (PhD, University of Wisconsin at Madison, 1992)
Division of Advanced Studies in Learning, Technology and Psychology in Education
Mathematics methods for teachers; children's mathematical thinking; technological innovation in mathematics education; motivational processes

Kurt Van Lehn

Professor (PhD, Massachusetts Institute of Technology, 1983)
Computer Science
Applications of artificial intelligence to education and cognitive modeling

Contact Us

Division of Advanced Studies in Learning, Technology and Psychology in Education
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Appendix A – Sample Program of Study

Educational technology Certificate (15 hours)

Core Courses (9 hours)

EDT 501 Foundations and Issues in Educational technology (3)

EDT 502 Design and Development of Instruction (3)

EDT 503 Instructional Media Design (3)

Sample Elective (3 hours)

EDT 591 Games, Simulations, and Virtual Environments (3)

Required capstone course (3 hours)

EDT 504 Development of Computer Based Instruction (3)