

Educational Technology

In the College of Education

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Accredited by the California Commission on Teacher Credentialing.

Faculty

Emeritus: Anthony, Harrison, McAllister

Chair: Bober

Professors: Allen, Dodge, Ritchie, Rossett, Saba

Associate Professors: Bober, Hoffman

Assistant Professor: Wang

Offered by the Department

Doctor of Education degree in educational technology.

Master of Arts degree in education.

Concentration in educational technology.

Specialization in educational computing.

Specialization in workforce education and lifelong learning.

Minor in educational technology.

Certificate in distance education
(refer to the *Graduate Bulletin*).

Certificate in instructional software design
(refer to the *Graduate Bulletin*).

Certificate in instructional technology.

Educational Technology Minor

The minor in educational technology consists of a minimum of 15 units in Educational Technology. At least 12 of which must be upper division selected from Educational Technology 540, 541, 544, 550, 561, 570, 572, and 596 (when applicable).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable or as prerequisites for the master's degree in educational technology. A minimum of six upper division units must be completed in residence at San Diego State University.

Instructional Technology Certificate

To receive a certificate in instructional technology, candidates must meet departmental admission requirements which include relevant work experience or academic preparation, letters of recommendation, and must complete the following 15 units of coursework: Educational Technology 540, 541, 544, and six units selected from Educational Technology 550, 561, 570, 572, or 596.

With the approval of the department, a student may apply no more than three units of coursework from the certificate program toward a minor.

Courses (EDTEC)

Refer to *Courses and Curricula and University Policies* sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

EDTEC 220. Learning, Technology, and Society (3)

Problem-solving at the intersection of three fundamentally human enterprises: learning, technology, and social institutions. Identifying needs, generating possible solutions in the following domains: elearning, edutainment, formal and informal learning. Projections and visions of future developments to enhance learning.

EDTEC 270A. Technologies for Teaching I (Blended) (1)

One and one-half hours of lecture and three hours of activity per week for five weeks.

Prerequisite: Admission to liberal studies program.

Application of technology to teaching. Meets part of computer literacy requirement for Level I teaching credential. Required for multiple subjects credential students who do not pass the entrance test for Educational Technology 470.

EDTEC 296. Experimental Topics (1-3) I, II

Selected topics. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

EDTEC 470. Technologies for Teaching (1-3) I, II, S

One unit: One-half hour of lecture and one hour of activity.

Two units: One hour of lecture and two hours of activity.

Three units: One and one-half hours of lecture and three hours of activity.

Application of computer and video technologies to practice of teaching. Meets computer literacy requirement for Level I teaching credential.

EDTEC 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

EDTEC 499. Special Study (1-3) I, II

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

Distance education courses are offered through the College of Extended Studies.

EDTEC 532. Production of Instructional Materials (3) I

Six hours of activity.

Instructional media production for professionals in organizational settings such as hospitals, law offices, accounting firms, publishing companies. Use of web pages, video, presentation software, and data analysis tools for training. Not open to students in educational technology degree and certificate programs or to students with credit in Educational Technology 541.

EDTEC 540. Educational Technology (3) I, II, S

(Selected sections offered as distance education.)

Six hours of activity.

Rationale, foundations, theories, careers, trends, and issues in educational technology. Implications of educational technology for instruction and information in schools, government, and corporations.

Educational Technology

EDTEC 541. Web-Based Multimedia Development (3) I, II, S

(Selected sections offered as distance education.)

One lecture and six hours of laboratory.

Prerequisite: Basic computer literacy.

Systems, aesthetic, and learning theories applied to design of web-based educational multimedia. Planning and prototyping digital media. Not open to students with credit in Educational Technology 532.

EDTEC 544. Instructional Design (3) I, II

(Selected sections offered as distance education.)

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541. Meet department Writing Skills Requirement or complete Rhetoric and Writing Studies 503W with a grade of B+ or better.

Systematic design of products for education and training. Use of cognitive task analysis to determine instructional content. Development of instructional goals and product specifications. Rapid prototyping of instructional products.

EDTEC 550. Introduction to Distance Education (3) II

(Selected sections offered as distance education.)

Two lectures and three hours of laboratory.

Prerequisites: Educational Technology 540, 541, 544, or equivalent experience in the field.

Terminology, concepts, instructional strategies, and technologies of distance education. Designing, facilitating, and managing courses at a distance. Overview of social issues, historical perspectives, and current trends. Analyzing distant learner profiles, needs, and skills. Telecommunicating, instructing, interacting, and providing feedback.

EDTEC 561. Advanced Web-Based Multimedia Development (3) I, II, S

(Selected sections offered as distance education.)

Six hours of activity.

Prerequisites: Educational Technology 540 and 541.

Two- and three-dimensional graphics, visualization, animation, digital video, sound, and virtual reality techniques. Research-based guidelines, design languages applied to development of interactive web-based learning systems.

EDTEC 570. Advanced Teaching with Technologies (3) S

(Selected sections offered as distance education.)

Prerequisite: Educational Technology 470 or equivalent work experience.

Design of constructivist lessons and units using Internet resources. Use of visual organizing tools and databases for instruction and assessment. Tools for professional knowledge base organization and electronic portfolios.

EDTEC 572. Technology for Course Delivery (3) I, II, S

(Selected sections offered as distance education.)

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541.

Use of technology to support planning, presenting and managing instructor-led courses.

EDTEC 596. Topics in Educational Technology (1-3) I

(Selected sections offered as distance education.)

Selected problems in educational technology. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES
Refer to the *Graduate Bulletin*.

