

MASTER OF ARTS IN EDUCATION: CONCENTRATION IN INSTRUCTIONAL TECHNOLOGIES

Graduate Advisor: Dr. Zahira Merchant

The Department of Equity, Leadership Studies, and Instructional Technologies (ELSIT) offers the Master of Arts in Education with a Concentration in Instructional Technologies, and an 18-unit Certificate in Training Systems Development. The program prepares professionals in online and e-learning instructional design, design of technology-based instruction for K-20 educators or trainers in a variety of business and industry environments, and design for problem-based learning solutions. The program also offers a California supplementary authorization in computer science for K-12 teachers who complete 12 units of coursework in the four required areas.

The ITEC program offers all courses online and many in blended learning environments with simultaneous in-class and online attendance using a web conference system. The program accommodates distance learners and can be completed in an average of 3-5 semesters. Additional courses are offered in special Winter or Summer Sessions.

The program prepares participants for careers in the prestigious, fast-moving instructional design field. Students gain skills with traditional and emerging learning technologies, choosing courses in mobile applications, Web design, gamification, augmented/virtual reality, social networking and assistive/adaptive technologies. Students are introduced to a variety of pedagogies for learning from established to current learning strategies. Students create instruction for various learners, designing learning for mobile, e-learning, and face-to-face instruction using a number of software, hardware, and physical technologies. Graduates become instructional designers for corporations, industry, public service organizations, and classrooms. Alumni can be found around Bay Area companies and school districts as well as across the state. The program prepares students in traditional Instructional Systems Design methods as well as rapid prototyping, agile and design-based methodologies.

ITEC caters to the working adult with all courses offered in late afternoons or evening. Students develop a career pathway and a portfolio during their studies. For further information, contact Dr. Zahira Merchant (zahiram@sfsu.edu).

Admission to the Program

Admission to the program is a two-step process that should be completed simultaneously:

1. Apply to the University: Complete the on-line CSU Mentor application. Follow all other requirements for admission to the University by accessing <http://grad.sfsu.edu/>.
2. Meet Department requirements as noted:

Applicants should schedule an interview with the program coordinator to go over the applicant's interest and preparation in the field. In addition, two letters of recommendation and a two-page (500-1,000 word) Statement of Purpose are required. Letters of recommendation should come from professionals who can attest to the applicant's promise as a graduate student and professional educator. The statement of purpose

should clearly explain the applicant's educational and career goals and how the M.A. degree will help achieve those goals. The statement of purpose should represent the quality of an applicant's English-language writing ability. Applicants must have basic computer literacies.

Written English Proficiency Requirement

Level One

Applicants must submit a writing sample in the form of a two-page (500-1,000 word) statement of purpose that will be evaluated by the department admissions committee. Students who receive an unsatisfactory evaluation of their written application materials may be admitted conditionally and required to earn a B or better in an English skills development course within the first two semesters. The course will be selected in consultation with an advisor.

Level Two

Level Two is satisfied by the successful completion of the culminating experience (ITEC 894 or ITEC 895).

For more information, please contact the ELSIT Department: (415) 338-1653 or visit us at BH 239. Our website is <https://elsit.sfsu.edu>.

Program Learning Outcomes

1. Apply principles of human learning, performance improvement, and cognitive psychology to solve challenges associated with a lack of knowledge in specific education or professional contexts.
2. Determine the need for education or training interventions in a given organizational situation involving knowledge and performance gaps.
3. Given an education or training solution applied in an organization, assess the quality, depth, and value of the solution at individual and organizational knowledge and performance levels.
4. Design and develop effective instructional media using industry-standard technologies and practices for multiple modes of delivery, including in-person and online environments.

Core Requirements

Core requirements consist of 15 units of study. During the first year of study, students are advised to take ITEC 800 and ITEC 801. Students are also encouraged, though not required, to enroll in ITEC 700 for an overview of the instructional design field and career options. Based on their interests, students must also take one of the following courses before completing the program:

- ITEC 830 for their third core requirement, or
- ITEC 850 for their third core requirement, or
- ITEC 816 for their third core requirement.
- Students must receive a grade of B or higher in each of the required core courses to advance to candidacy.
- Completion of core requirements includes taking ISED 797 and ITEC 894 or ITEC 895.

Electives

Students choose 15 units of electives within the department or in related disciplines. Electives cross several lines of specialization that include the following:

1. E-Learning,
2. Multimedia Design and Development,
3. Training Design and Development,

4. Technology Integration for Teachers, and
5. Instructional Product Design.

Students should select electives in consultation with an advisor.

Education (M.A.): Concentration in Instructional Technologies – 30 Units

Core Requirements (6 Units)

Code	Title	Units
ITEC 800	Theoretical Foundations of Instructional Technologies	3
ITEC 801	Introduction to Learning Design, Design Thinking, and Innovation	3

Research Requirements (6 Units)

Code	Title	Units
ISED 797	Seminar in Educational Research	3
Select 3 units from the following seminars:		3
ITEC 816	Designing Digital Learning Spaces of the Future	
ITEC 830	Design of Learning Environments with Emerging Technologies	
ITEC 850	Design and Management of Training Projects	

Electives (15 Units)

See below

Culminating Experience Requirement (3 Units)

(See below for portfolio submission)

Code	Title	Units
ITEC 894	Creative Work Project	3
ITEC 895	Field Study Project	3

The minimal requirement for graduation is 30 units. Based on individual student needs, background, and interests, the department may require some students to complete more than 30 units to attain the degree.

Electives

Elective Group One: E-Learning and Multimedia Design and Development

Code	Title	Units
ITEC 715	Foundations of Instructional Multimedia	3
ITEC 740	Computer Design of Instructional Graphics I	3
ITEC 745	Instructional Web Authoring I	3
ITEC 770	Instructional Videography I (may be repeated twice for credit)	3
ITEC 823	Augmented and Virtual Reality Based Multimedia Development	3
ITEC 830	Design of Learning Environments with Emerging Technologies	3
ITEC 835	Instructional Multimedia Tools: FLASH II	3
ITEC 840	Graphics and Web Development	3
ITEC 845	Instructional Internet Authoring II	3
ITEC 860	Distance Education	3

ITEC 865	Fundamentals of Designing Interactive E-Learning Courses	3
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Elective Group Two: Training Design and Development

Code	Title	Units
ITEC 700	(may be required for some students)	3
ITEC 720	Fieldwork in Educational Technology	3-5
ITEC 805	Needs Assessment and Program Evaluation (topic)	3
ITEC 825	Digital Product Usability Testing	3
ITEC 850	Design and Management of Training Projects	3
ITEC 852	Instructional Technologies in Organizations	3

Elective Group Three: Technology Integration for Teachers

Code	Title	Units
ITEC 815	Integration of Instructional Computing	3
ITEC 816	Designing Digital Learning Spaces of the Future	3
ITEC 842	Cognition, Mind, and Learning for Educators	3

Culminating Experience

Portfolio Submission

Before undertaking a culminating experience, students must submit, for departmental review and approval, a portfolio of three instructional projects that demonstrate their technical skill and instructional design competencies.

The culminating experience may be completed by one of two options: ITEC 894 or ITEC 895.

Creative Work Project Requirements

To complete a creative work, students must design, develop, and produce an instructional product. The instructional unit may be in any medium—print, video, multimedia, or web-based. The instructional design process must be documented in writing and include a review of the instructional significance of the product, description of the design and production process, and product usability review. Students must provide a CD-ROM that contains the instructional product and the design documents.

Field-Study Requirements

To complete the field study, students must design, develop, and produce an instructional design project, using the instructional systems process, from needs analysis to formative evaluation. The instructional unit may be in any medium—print, video, multimedia, or web-based. The instructional design process must be described in writing and include a review of the instructional need and significance of the project, research review, description of the design process, formative evaluation, and conclusions. Students must provide a CD-ROM that contains the instructional unit and the design documents.