

# EDUCATIONAL TECHNOLOGY (ETEC)

## ETEC 39525 EDUCATIONAL TECHNOLOGY 3 Credit Hours

Develops knowledge and skills in designing, implementing, and assessing learning experiences, using various digital tools and resources to support teaching, learning and research.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 40093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL TECHNOLOGY 1-4 Credit Hours

(Repeatable for credit) (Slashed with ETEC 50093) Variable topic workshop designed to respond to emerging or specialized needs in educational technology.

**Prerequisite:** None.

**Schedule Type:** Workshop

**Contact Hours:** 1-4 other

**Grade Mode:** Satisfactory/Unsatisfactory

## ETEC 47400 TRENDS IN EDUCATIONAL TECHNOLOGY 3 Credit Hours

(Slashed with ETEC 57400) Overview of current technologies as they are used in education. Teaches principles and techniques for selecting and using technology for instruction. Focuses on digital technologies that can be used to increase the effectiveness of education.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 47403 INSTRUCTIONAL DESIGN 3 Credit Hours

(Slashed with ETEC 57403) Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 47427 TECHNOLOGY AND LEARNING 3 Credit Hours

(Slashed with ETEC 57427) The effective use of technology for teaching and learning depends on understanding how researchers have created, integrated, and adapted technology integration and adoption models. This course presents an overview of key theories and concepts that have transformed our understanding of educational technology. It relies on a knowledge of the psychological principles of learning. Students without such knowledge should consider taking EPSY 29525 Educational Psychology first.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 47495 SPECIAL TOPICS: EDUCATIONAL TECHNOLOGY 1-4 Credit Hours

(Repeatable for credit) Specialized offering in response to emerging or selected program needs in educational technology.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-4 lecture

**Grade Mode:** Standard Letter

## ETEC 47496 INDIVIDUAL INVESTIGATION IN EDUCATIONAL TECHNOLOGY 1-3 Credit Hours

(Repeatable for credit) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a faculty member.

**Prerequisite:** Special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

## ETEC 50093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL TECHNOLOGY 1-4 Credit Hours

(Repeatable for credit) (Slashed with ETEC 40093) Variable topic workshop designed to respond to emerging or specialized needs in educational technology.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-4 other

**Grade Mode:** Satisfactory/Unsatisfactory

## ETEC 57400 TRENDS IN EDUCATIONAL TECHNOLOGY 3 Credit Hours

(Slashed with ETEC 47400) Overview of current technologies as they are used in education. Teaches principles and techniques for selecting and using technology for instruction. Focuses on digital technologies that can be used to increase the effectiveness of education.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 57403 INSTRUCTIONAL DESIGN 3 Credit Hours

(Slashed with ETEC 47403) Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ETEC 57427 TECHNOLOGY AND LEARNING 3 Credit Hours

(Slashed with ETEC 47427) The effective use of technology for teaching and learning depends on understanding how researchers have created, integrated, and adapted technology integration and adoption models. This course presents an overview of key theories and concepts that have historically transformed our understanding of educational technology. It relies on a knowledge of the psychological principles of learning. Students without such knowledge should consider taking EPSY 65524 Learning Theories, first.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 60199 THESIS I 2-6 Credit Hours**

(Repeatable for credit) Students electing to complete a thesis to fulfill the requirements for the Master of Education degree must register for at least one semester of Thesis I.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 6-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 60299 THESIS II 2 Credit Hours**

(Repeatable for credit) When 6 credits of Thesis I have been complete, students electing to complete a thesis to fulfill the requirements for the Master of Education degree must continue to register each semester for Thesis II until all degree requirements have been completed.

**Prerequisite:** Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 67402 MANAGING SCHOOL TECHNOLOGY CENTERS AND PROGRAMS 3 Credit Hours**

(Slashed with ETEC 77402) Provides skills in planning, organizing, administering and evaluating school-based technology and media centers.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67410 SIMULATIONS AND GAMES IN EDUCATION 3 Credit Hours**

(Slashed with ETEC 77410) Introduction to digital simulations and games as educational tools. Students develop proficiency in applying these tools to learning. Surveys research and design principles and introduces game editors for developing simulations and games.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67411 DESIGNING VISUALS FOR EDUCATION 3 Credit Hours**

(Slashed with ETEC 77411) Investigates research in perception and cognition and its influence on principles and best practices in educational visual design. Focuses on the design of educational visuals and media in print, video, and computer-based technology.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67420 RESEARCH ISSUES IN EDUCATIONAL TECHNOLOGY 3 Credit Hours**

(Slashed with ETEC 77420) Reviews the foundations of the field of Educational Technology as well as the basic theories that underlie its practice. Teaches masters students to read and make use of research in the field and doctoral students to critique research and develop meaningful research questions in the field.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67425 MANAGING TECHNOLOGICAL CHANGE 3 Credit Hours**

(Slashed with ETEC 77425) Analyzing organizations and situations to determine the needs for and obstacles to technological change. Development of strategies for technological change. Identifying goals for change projects and basic project management techniques for implementing them.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67426 MANAGING SCHOOL TECHNOLOGIES 3 Credit Hours**

(Slashed with ETEC 77426) Specifically for students interested in working in school settings managing computer labs and school servers and networks. Covers managing aspects of computer hardware, software and updates, and networks.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67432 DESIGNING MULTIMEDIA FOR EDUCATION 3 Credit Hours**

(Slashed with ETEC 77432) Application of evidence-based instructional methods to the design, development, and evaluation of multimedia learning materials. Research-based guidelines for multimedia learning that influence learning outcomes. Uses various tools to design and develop multimedia projects.

**Prerequisite:** ETEC 57403; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67434 EMERGING TECHNOLOGIES FOR EDUCATION 3 Credit Hours**

(Slashed with ETEC 77434) Focuses on the theoretical foundations, design, and development of educational delivery systems employing leading-edge and emergent technologies. Includes presentations and activities that employ the technologies.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67435 VIRTUAL AND AUGMENTED REALITY 3 Credit Hours**

(Slashed with ETEC 77435) Virtual augmented reality can help provide engaging educational experiences. This course enables students to understand best practices and core guidelines in these technologies. Design principles and software for developing environments are included.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67442 DESIGNING ONLINE AND BLENDED COURSES 3 Credit Hours**

(Slashed with ETEC 77442) Online and blended courses present new challenges in designing instructional experiences for students. Students will analyze course goals and contexts, design and develop effective online educational materials, interactions and discourses, and plan the evaluation of online courses.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67444 TEACHING ONLINE AND BLENDED COURSES 3 Credit Hours**

(Slashed with ETEC 77444) Course explores using pedagogical approaches appropriate to online learning, including facilitating synchronous and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community and incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67445 DESIGNING INSTRUCTIONAL AND PERFORMANCE SOLUTIONS 3 Credit Hours**

(Slashed with ETEC 77445) Develop knowledge of the systematic approach to instructional design, the contexts of application of this approach, and the roles of professionals in this field in adapting and applying the process in a flexible and innovative manner, especially to large-scale projects.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67449 RESEARCH IN ONLINE AND BLENDED LEARNING 3 Credit Hours**

(Slashed with ETEC 77449) Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply, and critique current research. Students participate in a constructive online learning environment.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 67491 SEMINAR: EDUCATIONAL TECHNOLOGY 1-4 Credit Hours**

(Repeatable for credit) (Slashed with ETEC 77491) Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-4 other

**Grade Mode:** Standard Letter

**ETEC 67492 PRACTICUM AND PORTFOLIO 3 Credit Hours**

Apply knowledge and skills related to the design, development, implementation, management, and evaluation of educational technologies through practical field experience in a school setting or an environment where educational technology services and programs are being used. Create a standards-based online portfolio to demonstrate professional competence and growth.

**Prerequisite:** Graduate standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 10 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 67495 SPECIAL TOPICS IN EDUCATIONAL TECHNOLOGY 1-4 Credit Hours**

(Repeatable for credit) Specialized offering in response to emerging or selected program needs in educational technology.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-4 lecture

**Grade Mode:** Standard Letter

**ETEC 67496 INDIVIDUAL INVESTIGATION IN EDUCATIONAL TECHNOLOGY 1-3 Credit Hours**

(Repeatable for credit) (Slashed with ETEC 77496) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 67498 INDEPENDENT RESEARCH IN EDUCATIONAL TECHNOLOGY 1-5 Credit Hours**

(Repeatable for credit) (Slashed with ETEC 77498) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor.

**Prerequisite:** Graduate standing.

**Schedule Type:** Research

**Contact Hours:** 3-15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 77402 MANAGING SCHOOL TECHNOLOGY CENTERS AND PROGRAMS 3 Credit Hours**

(Slashed with ETEC 67402) Provides skills in planning, organizing, administering and evaluating school-based technology and media centers.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ETEC 77410 SIMULATIONS AND GAMES IN EDUCATION 3 Credit Hours**

Introduction to digital simulations and games as educational tools. Students develop proficiency in applying these tools to learning. Surveys research and design principles and introduces game editors for developing simulations and games.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

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(Slashed with ETEC 67411) Investigates research in perception and cognition and its influence on principles and best practices in educational visual design. Focuses on the design of educational visuals and media in print, video, and computer-based technology.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

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Reviews the foundations of the field of Educational Technology as well as the basic theories that underlie its practice. Teaches masters students to read and make use of research in the field and doctoral students to critique research and develop meaningful research questions in the field.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

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(Slashed with EETC 67425) Analyzing organizations and situations to determine the needs for and obstacles to technological change.

Development of strategies for technological change. Identifying goals for change projects and basic project management techniques for implementing them.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

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**Grade Mode:** Standard Letter

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**Prerequisite:** Doctoral standing.

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**Grade Mode:** Standard Letter

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(Slashed with EETC 67432) Application of evidence-based instructional methods to the design, development, and evaluation of multimedia learning materials. Research-based guidelines for multimedia learning that influence learning outcomes. Uses various tools to design and develop multimedia projects.

**Prerequisite:** EETC 57403; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77434 EMERGING TECHNOLOGIES FOR EDUCATION 3 Credit Hours**

(Slashed with EETC 67434) Focuses on the theoretical foundations, design, and development of educational delivery systems employing leading-edge and emergent technologies. Includes presentations and activities that employ the technologies.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77435 VIRTUAL AND AUGMENTED REALITY 3 Credit Hours**

(Slashed with EETC 67435) Virtual augmented reality can help provide engaging educational experiences. This course enables students to understand best practices and core guidelines in these technologies. Design principles and software for developing environments are included.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77442 DESIGNING ONLINE AND BLENDED COURSES 3 Credit Hours**

(Slashed with EETC 67442) Online and blended courses present new challenges in designing instructional experiences for students. Students will analyze course goals and contexts, design and develop effective online educational materials, interactions and discourses, and plan the evaluation of online courses.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77444 TEACHING ONLINE AND BLENDED COURSES 3 Credit Hours**

(Slashed with EETC 67444) Course explores using pedagogical approaches appropriate to online learning, including facilitating synchronous and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community and incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77445 DESIGNING INSTRUCTIONAL AND PERFORMANCE SOLUTIONS 3 Credit Hours**

(Slashed with EETC 67445) Develop knowledge of the systematic approach to instructional design, the contexts of application of this approach, and the roles of professionals in this field in adapting and applying the process in a flexible and innovative manner, especially to large-scale projects.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

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(Slashed with EETC 67449) Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply, and critique current research. Students participate in a constructive online learning environment.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EETC 77491 SEMINAR: EDUCATIONAL TECHNOLOGY 1-4 Credit Hours**

(Repeatable for credit) (Slashed with EETC 67491) Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-4 other

**Grade Mode:** Standard Letter

**ETEC 77492 ADVANCED PRACTICUM AND INTERNSHIP IN EDUCATIONAL TECHNOLOGY 1-10 Credit Hours**

Supervised program requiring application of theory to practice in the use of instructional technology directed by a graduate faculty member and a practitioner in the field. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which internship will take place.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-33 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 77495 SPECIAL TOPICS IN EDUCATIONAL TECHNOLOGY 1-4 Credit Hours**

(Slashed with ETEC 67495) Specialized offering in response to emerging or selected program needs in educational technology.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-4 lecture

**Grade Mode:** Standard Letter

**ETEC 77496 INDIVIDUAL INVESTIGATION IN EDUCATIONAL TECHNOLOGY 1-3 Credit Hours**

(Repeatable for credit) (Slashed with ETEC 67496) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 77498 INDEPENDENT RESEARCH IN EDUCATIONAL TECHNOLOGY 1-5 Credit Hours**

(Repeatable for credit) (Slashed with ETEC 67498) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Research

**Contact Hours:** 3-15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ETEC 87450 LEARNING WITH EDUCATIONAL TECHNOLOGIES 3 Credit Hours**

Provides an overall introduction to research and practice in educational technology at the doctoral level. Includes examination of principles and examples of the effective application of technology to educational settings as well as approaches to research in the field.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter