# 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) This course explores current trends in educational technology and its transformative impact on teaching, learning, and human performance improvement. Students will examine how digital and networked technologies can enhance instructional practices and foster meaningful learning experiences. Through readings, critical analyses of emerging learning tools and interactive projects, students will gain practical experience with current educational technologies.

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 researchand 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) This course provides an overview of major theoretical perspectives and frameworks that have influenced the research and practice of learning and teaching with technology. **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) This course explores current trends in educational technology and its transformative impact on teaching, learning and human performance improvement. Students will examine how digital and networked technologies can enhance instructional practices and foster meaningful learning experiences. Through readings, critical analyses of emerging learning tools and interactive projects, students will gain practical experience with current educational technologies.

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 researchand 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) This course provides an overview of major theoretical perspectives and frameworks that have influenced the research and practice of learning and teaching with technology. **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) Educational Technology is a broad field that intersects many disciplines and provides numerous opportunities for individuals with varied interests. Having knowledge of the important issues in educational technology research enables students to evaluate both rigor and usefulness of empirical studies in the field of educational technology. This course is designed to explore significant issues in educational technology, including the latest research into how technology can most effectively facilitate learning.

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) This course examines how to implement technological change within organizations, with a particular focus on those involved in education, training and performance improvement. As new hardware and software technologies are continually developed and promoted as revolutionary tools for teaching and learning and as innovative instructional strategies emerge that effectively leverage these technologies, organizations face critical decisions. This course addresses key questions, including how to identify the technologies best suited for teaching and learning, how to pinpoint sources of resistance and obstacles to change, and how to design projects that ensure successful technological implementation.

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: 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) This course focuses on applying instructional design principles to the development of an online/blended course.

Students will follow a structured instructional design process to analyze, design, develop and evaluate an online/blended course relevant to their professional contexts. Students will also use a learning management system (e.g., Canvas, Blackboard, Google Classroom) for delivering their 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) This course explores pedagogical approaches tailored for online and blended learning, including strategies for facilitating synchronous and asynchronous discussions, embedding assessments, enhancing interactivity, fostering student motivation, supporting peer assessment and feedback, encouraging collaboration and community building and integrating self-directed learning. Students will plan, create, implement and evaluate instructional and motivational activities for online and blended environments.

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) Online and blended learning offers democratized education and endless opportunities in the fields of education and training because of its accessibility and flexibility. This course serves as an introduction to research and theory in online and blended learning. We will examine major concepts in online and blended learning, theoretical underpinnings of the field, historical foundations and trends, as well as important research paradigms in online and blended learning research.

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

#### ETEC 77411 DESIGNING VISUALS FOR EDUCATION 3 Credit Hours

(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

### ETEC 77420 RESEARCH ISSUES IN EDUCATIONAL TECHNOLOGY 3 Credit Hours

(Slashed with ETEC 67420) Educational technology is a broad field that intersects many disciplines and provides numerous opportunities for individuals with varied interests. Having knowledge of the important issues in educational technology research enables students to evaluate both rigor and usefulness of empirical studies in the field of educational technology. This course is designed to explore significant issues in educational technology, including the latest research into how technology can most effectively facilitate learning.

Prerequisite: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

**ETEC 77425 MANAGING TECHNOLOGICAL CHANGE 3 Credit Hours** (Slashed with ETEC 67425) This course examines how to implement technological change within organizations, with a particular focus on those involved in education, training and performance improvement. As new hardware and software technologies are continually developed and promoted as revolutionary tools for teaching and learning and as innovative instructional strategies emerge that effectively leverage these technologies, organizations face critical decisions. This course addresses key questions, including how to identify the technologies best suited for teaching and learning, how to pinpoint sources of resistance and obstacles to change, and how to design projects that ensure successful technological implementation.

Prerequisite: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

### ETEC 77426 MANAGING SCHOOL TECHNOLOGIES 3 Credit Hours

(Slashed with ETEC 67426) 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: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

### ETEC 77432 DESIGNING MULTIMEDIA FOR EDUCATION 3 Credit Hours

(Slashed with ETEC 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: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

### ETEC 77434 EMERGING TECHNOLOGIES FOR EDUCATION 3 Credit Hours

(Slashed with ETEC 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

**ETEC 77435 VIRTUAL AND AUGMENTED REALITY 3 Credit Hours** (Slashed with ETEC 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

## ETEC 77442 DESIGNING ONLINE AND BLENDED COURSES 3 Credit Hours

(Slashed with ETEC 67442) This course focuses on applying instructional design principles to the development of an online/blended course. Students will follow a structured instructional design process to analyze, design, develop and evaluate an online/blended course relevant to their professional contexts. Students will also use a learning management system (e.g., Canvas, Blackboard, Google Classroom) for delivering their courses.

Prerequisite: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

## ETEC 77444 TEACHING ONLINE AND BLENDED COURSES 3 Credit Hours

(Slashed with ETEC 67444) This course explores pedagogical approaches tailored for online and blended learning, including strategies for facilitating synchronous and asynchronous discussions, embedding assessments, enhancing interactivity, fostering student motivation, supporting peer assessment and feedback, encouraging collaboration and community building, and integrating self-directed learning. Students will plan, create, implement and evaluate instructional and motivational activities for online and blended environments.

Prerequisite: Doctoral standing.

Schedule Type: Lecture Contact Hours: 3 lecture

Grade Mode: Standard Letter

### ETEC 77445 DESIGNING INSTRUCTIONAL AND PERFORMANCE SOLUTIONS 3 Credit Hours

(Slashed with ETEC 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

Grade Mode: Standard Letter

#### ETEC 77449 RESEARCH IN ONLINE AND BLENDED LEARNING 3 Credit Hours

(Slashed with ETEC 67449) Online and blended learning offers democratized education and endless opportunities in the fields of education and training because of its accessibility and flexibility. This course serves as an introduction to research and theory in online and blended learning. We will examine major concepts in online and blended learning, theoretical underpinnings of the field, historical foundations and trends, as well as important research paradigms in online and blended learning research.

Prerequisite: Doctoral standing. Schedule Type: Lecture Contact Hours: 3 lecture Grade Mode: Standard Letter

### ETEC 77491 SEMINAR: EDUCATIONAL TECHNOLOGY 1-4 Credit Hours

(Repeatable for credit) (Slashed with ETEC 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