

# M.Ed. - Educational Technology

<http://edtech.utb.edu>

The major in Educational Technology is designed to prepare teachers and other educators to:

- use instructional technology (computers, telecommunications and related technology) as resources for and deliverers of instruction,
- serve as facilitators or directors of instructional technology in educational settings, and/or
- be developers of instructional programs and materials for the new technologies.

The program will focus on the theory, research and applications related to the field of educational technology.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Educational Technology are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

### Testimonial:

The Educational Technology program at UT-Brownsville provided me with the knowledge, experience and leadership skills to earn my current position in a 5A school district.

- Marie Evans, Director of Technology, Donna ISD, Texas

## 36-Hour Thesis/Non-Thesis Program

### Required Courses: 24 hours

- EDCI 6300 Introduction to Research
  - EDCI 6304 Learning and Cognition
  - EDTC 6320 Instructional Technology
  - EDTC 6321 Instructional Design
  - EDTC 6323 Multimedia/Hypermedia
  - EDTC 6325 Educational Telecommunications
  - EDTC 6329 Selected Topics in Educational Technology
  - EDTC 6332 Practicum in Educational Technology
- Electives: 12 hours

Students will select 12 hours of electives based upon their professional needs and academic interests. These electives should come from either education courses, specific content area courses (such as mathematics, reading, etc), or technology-related courses. Other courses will be considered as appropriate electives.

Submit an ePortfolio project for the first review at completion

Students selecting the thesis option will take EDCI 7300 and EDCI 7301 in lieu of six hours of coursework (electives) and substitute EDCI 6390 for EDTC 6332 with approval of the graduate advisor.

Students not taking the thesis option will develop and submit an electronic portfolio at completion of all coursework requirements.

## Careers



- Master Teacher of Technology (MTT)
- Instructional Developer/Designer in IHE or private sector
- District or Campus Technology Coordinator



## Advisors

- Dr. Janice Butler • EDBC 1.310 • 882-6713 • [janice.butler@utb.edu](mailto:janice.butler@utb.edu)
- Dr. Rene Corbeil • EDBC 1.318 • 882-7540 • [rene.corbeil@utb.edu](mailto:rene.corbeil@utb.edu)
- Dr. Cheng-Chang (Sam) Pan • EDBC 1.320 • 882-7805 • [sam.pan@utb.edu](mailto:sam.pan@utb.edu)
- Dr. Michael Sullivan • EDBC 1.316 • 882-7668 • [mike.sullivan@utb.edu](mailto:mike.sullivan@utb.edu)

## Course Descriptions

### EDTC 6105 Technology Applications for Student-Centered Learning

This shows classroom teachers how to use technology to move from a teacher-driven instructional model to a student-centered instructional model. Emphasis will be given to developing student learning activities that integrate technology across the curriculum to improve student learning. Lec. 1, Cr. 1

### EDTC 6311 Multimedia Development for Instruction in the Classroom

This course introduces classroom teachers to the design and development of instructional multimedia. Emphasis will be given to developing student learning activities that integrate multimedia across the curriculum to improve student learning. Lec. 3, Cr. 3

### EDTC 6312 Web Development for Instruction in the Classroom

This course introduces classroom teachers to the design and development of Web-Based Instruction. Emphasis will be given to developing student learning activities that integrate Web-based instruction across the curriculum to improve student learning. Lec. 3, Cr. 3

### EDTC 6313 Video Development for Instruction in the Classroom

This course introduces classroom teachers to the design and development of instructional video. Emphasis will be given to developing student learning activities that integrate instructional video across the curriculum to improve student learning. Lec. 3, Cr. 3

### EDTC 6320 Instructional Technology

This course requires an examination of instructional applications of microcomputers and telecommunications in classroom settings. Emphasis will be given to the design and development of student learning activities that integrate technology across the curriculum to improve student learning. Lec 3, Cr 3

### EDTC 6321 Instructional Design

The design of instructional and management systems is examined through field experience and research reports. Focus is on the components, design, and utilization of local/area distributed networks in the school setting. Lec 3, Cr 3

### EDTC 6323 Multimedia/Hypermedia

This course includes the study of the use of hypermedia, hypertext, and multimedia in education. Basic study of topics on hardware and software capabilities, selection and implementation. It also includes customizing and creating information, integrating text, graphics, video, music, voice, and animation. Lec 3, Cr 3  
Prerequisite: EDTC 6321

### EDTC 6325 Educational Telecommunications

This course addresses the development of educational telecommunications systems, teleconferencing, digitized video, and compressed video; available computer networks (local, state, national, and international) and their role in the instructional process are emphasized. Lec 3, Cr 3

### EDTC 6329 Selected Topics in Educational Technology

This course addresses the study of significant topics related to utilization of technology in educational settings. With approval by advisor, course may be repeated when topic varies. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

### EDTC 6332 Practicum in Educational Technology

This is the capstone course for the degree in educational technology. Students are expected to apply both skills and conceptual knowledge to diagnose and devise an instructional solution to an identified real life performance problem. Prerequisite: Must be within 6 hours of completion of program. Approval of Graduate Advisor Lec 3, Cr 3

### EDTC 6340 Application of Advanced Technologies In the PK-12 Classroom

Course emphasizes the skills required of the Master Teacher of Technology certification including applications of: multimedia, web-based materials, desktop publishing, streaming media, and media currently used in scientifically based research of instructional technology application in PK-12 classrooms. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

### EDTC 6341 Student-Centered Learning Using Technology

The course provides opportunities to develop a School Technology and Readiness (STAR) chart for a K-12 campus, select a critical instructional problem, and develop a multiple format solution that focuses upon student-centered learning.

Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

### EDTC 6342 Technology Leadership

Techniques, strategies, resources, and tools for designing, developing, implementing and evaluating critical aspects of leadership in instructional technology issues in K-12 schools and classrooms will be addressed. Prerequisite: Completion of EDTC 6340 or EDTC 6341 Lec 3, Cr 3

### EDTC 6343 Master teacher of Technology Practicum

This is the capstone experience for the Master Teacher of Technology certification. Students will combine skills and concepts to generate a comprehensive solution to a campus wide, or district wide instruction issue whose solution centers upon exemplary uses of instructional technologies. Prerequisite: Must be within 6 hours of MTT certification. Lec 3, Cr 3

### EDTC 6350 The Instructional Technology Consultant

This course introduces students to the IT consulting framework, a vital component in the proper practice of Instructional Systems Design. The course will focus specifically on the consulting/interpersonal relations of the ISD process in Educational Technology. Lec. 3, Cr. 3

### EDTC 6351 Web-Based Multimedia in Instruction

This course examines the cognitive domains of learning and the corresponding research in web-based multimedia. It provides a theoretical construct by which distance educators can infuse learner-centered principles and examine the possibilities for streaming media in online education. Lec. 3, Cr. 3

### EDTC 6352 Planning and Designing Interactive Web-Based Instruction

This course provides a framework and tools for designing strategies and tactics to facilitate interactivity in web-based instruction. The framework encompasses five interaction attributes including: (1) interaction with content, (2) collaboration, (3) conversation, (4) intrapersonal interaction, and (5) performance support. Lec. 3, Cr. 3

### EDTC 6353 The Master Electronic Portfolio

This course will guide students in developing an electronic portfolio. The e-portfolio is a purposeful collection of work that exhibits a student's effort, progress, and achievements in digital form. Lec. 3, Cr. 3

### EDTC 6355 Designing Instruction for an Online Course

This course will introduce students to the field of the instructional design with an emphasis upon distance education environments and learner. Lec. 3, Cr. 3

### EDTC 6356 Media Enhancement of the Online Course

This course will show the student how to select and evaluate a media mix to maximize interaction in the distance education (DE) classroom. Lec. 3, Cr. 3 Prerequisite: Completion of EDTC 6355 with a grade of "B" or better

### EDTC 6357 Using Open Source Courseware for Online Development

This course will show the student how to select an appropriate open source solution for delivery of an online course, and acquaint the student with the various issues involved in using open source solutions for course deployment. Lec 3, Cr 3 Prerequisite: Completion of both EDTC 6355 and EDTC 6356 with a grade of "B" or better

### EDCI 6300 Introduction to Research

Introduction to research techniques; identification of problems, research designs and data gathering procedures. The planning and design of research proposals and projects are emphasized. The course must be completed or in progress before the student applies for the oral interview. Lec 3, Cr 3

### EDCI 6304 Learning and Cognition

This critical course focuses on topics, theories, and models of cognitive research and their implications for instructional practice and curriculum restructuring and design. This is a field-based course. Lec 3, Cr 3

### EDCI 7300/7301 Thesis

Pass/Fail Grade. Prerequisite: Approval of graduate advisor Lec 3, Cr 3