

This course allows graduate students to develop the theory of experiential education from oneself to the direct learning of others. This is an experiential course and will involve direct applications of experiential methodology.

**634 (1-6) Practicum**

Practical experience in experiencing education.

**635 (3) Internship**

Field based experience in Experiential Education.

**644 (3) Seminar: Philosophy of Experiential Education**

Examines the theory of Experiential Education. Historical and contemporary writers will be read.

**644 (3) Seminar: Topics**

**677 (1-3) Individual Study**

Individual study of an area of leadership theory, research, inquiry. Admission by prior application only.

**694 (1-2) Alternate Plan Paper**

The Alternate Plan Paper includes a research requirement less extensive in nature than a thesis, but significantly greater in quality and quantity than the standard graduate term paper.

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## EDUCATIONAL TECHNOLOGY MS

*College of Education*

*Educational Studies: K-12 and secondary programs*

313 Armstrong Hall 507-389-1965

Chair: Debra Anderson, Ed.D.

Graduate Coordinator: Don E. Descy, Ph.D.

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Education Technology is an interdisciplinary program designed to increase knowledge about and ability to work with computers and other forms of technology as a means of instruction. The Educational Technology program offers a Certificate in Educational Technology, an Advanced Certificate in Educational Technology and a Master of Science degree in Educational Technology. Upon completion of the program, graduates will be able to integrate cutting edge technologies in the teaching and learning process, administer technology programs, and design and develop digital media presentations.

**Admission.** Applicants should have a 2.75/4.0 for the last two undergraduate years of the baccalaureate degree. Applicants should have complete files a minimum of one month before the term of anticipated entry. Applications are accepted for any term or summer session. International applicants should complete their files three months before the term of session of anticipated admit-

tance. Students wishing to be enrolled in the Master of Science in Educational Technology program must be admitted to the College of Graduate Studies and to the program. Official admission must be obtained through a departmental admission committee before 16 credits are accumulated. Previous teaching licensure is not required for this degree.

### CERTIFICATE IN EDUCATIONAL TECHNOLOGY

The Certificate in Educational Technology is designed for the individual who is interested in improving learning by increasing their knowledge of educational technology and educational technology integration techniques. The certificate is designed to increase the participant's knowledge of leading edge technologies and proper techniques and educational theories to appropriately integrate technology and technology standards into the curriculum.

**Required Educational Technology (10 cr)**

LME	522	Design and Production of Educational Media (2)
LME	610	Introduction to Technology in Education (3)
LME	629	Electronic Communications (2)
LME	650	Technology Tour (1)
LME	677	Trends in Educational Technology (2)

### ADVANCED CERTIFICATE IN EDUCATIONAL TECHNOLOGY

The Advanced Certificate in Educational Technology is designed for the individual who is interested in improving learning by increasing their knowledge of educational computer technology, computer networking and educational computer technology integration techniques above the introductory certification level. It is an 8 credit extension of the Certificate in Educational Technology (above). The advanced certificate is designed to increase the participant's knowledge of leading edge computer technologies, networking and proper techniques and educational theories to appropriately intergrate advanced educational computing technology and technology standards into the curriculum.

**Required Educational Technology (12 cr)**

LME	522	Design and Production of Educational Media (2)
LME	610	Introduction to Technology in Education (3)
LME	629	Electronic Communications (2)
LME	650	Technology Tour (1)
LME	661	Networking (2)
LME	677	Trends in Educational Technology (2)

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**Required Computer Science (6 cr)**

COMS	591	Computers in the Classroom (3)
COMS	592	Computer-based Instructional Systems I (3)

**EDUCATIONAL TECHNOLOGY MS**  
(Alternate Plan Paper - 32 cr minimum)

The Master of Science degree in Education Technology is designed to prepare teachers, administrators, educational trainers and other interested individuals (1) to utilize microcomputers, digital video, the Internet, multi-media and other forms of media technology as resources for and delivery of instruction or training; (2) to serve as managers or coordinators of the uses of microcomputers, telecommunication, computer laboratories and related technology in educational and/or training settings and/or (3) to be developers of instructional materials including digital video and multi-media for the new technologies.

**Required Educational Technology (15-20 cr)**

LME	522	Design and Production of Educational Media (2)
LME	610	Introduction to Technology in Education (3)
LME	643	Instructional Systems Design (2)
LME	650	Technology Tour (1)
LME	661	Networking (2)
LME	677	Trends in Educational Technology (2)
LME	698	Internship (1-2)

Elective Courses

LME	624	Digital Production (2)
LME	628	Interactive Distance Learning (2)
LME	629	Electronic Communications (2)
LME	635	Media Services (4)
LME	691	Advanced Internet (2)

**Required Computer Science (6-9 cr)**

COMS	591	Computers in the Classroom (3)
COMS	592	Computer-based Instructional Systems I (3)

Elective Courses

COMS	593	Computer-based Instructional Systems II (3)
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**Required Research (3-4 cr)**

LME	692	Research Methods (2)
LME	694	Alternate Plan Paper (1)

Elective Courses

LME	607	Library Strategies for Graduate Students (1)
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**Required Education (7-10 cr)**

EDAD	681	Planning and Facilities Management (3)
EDFD	579	Grant Writing and Program Funding (4)

Elective Courses

CI	665	Curriculum Leadership (2)
CI	666	Interdisciplinary Curriculum (2)

**\*Required Subject Specialty (1-10 cr)**

May be taken in any discipline

Fifty percent of credits must be taken at the 600 level. While correct at press time, please contact the program director for current program requirements.

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**ENGINEERING MS**

*College of Science, Engineering & Technology*

*Electrical Engineering Department*  
S135 Trafton, 507-389-5747

Chair: Thomas Hendrickson, Ph.D.  
Graduate Coordinator: Han-Way Huang, Ph.D.

Carl Guber, Ph.D., Thomas Hendrickson, Ph.D., Han-Way Huang, Ph.D., Rajiv Kapadia, Ph.D., Muhammad Khaliq, Ph.D., Paul Lindfors, Ph.D., Julio C. Mandojana, Ph.D., Ramakrishna Nair, Ph.D., George O'Clock, Ph.D., Claude Seigler, Ph.D.

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*Mechanical Engineering Department*  
E205 Trafton, 507-389-6383

Chair: Saeed Moaveni, Ph.D.  
Graduate Coordinator: Jerzy Fiszdon, Ph.D.

Vance Brown, Ph.D., Mike Hennessy, Ph.D., Charles W. Johnson, Ph.D., Kirstie Plantenburg, Ph.D.

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The Electrical Engineering Program and the Mechanical Engineering Program offer a (joined) Master of Science in Engineering degree program. Students in this program may choose to specialize in Electrical Engineering, Mechanical Engineering or a combination of the two called Mechatronics. The program is designed to serve the following: those engineers in business and industry who want to continue their formal engineering education at the postgraduate level; new engineering graduates who want to increase their depth of knowledge and develop an area of specialization; those graduates from other related science and engineering disciplines who want to broaden their backgrounds by pursuing Engineering studies at the graduate level.

**Admission.** Applicants must meet the general admission requirements of the College of Graduate Studies. A B.S. in Engineering or a closely related field from an accredited program with a minimum GPA of 3.0/4.0 is