

MASTER OF SCIENCE IN TECHNOLOGY

Major Code: 599*

Concentrations: Appropriate Technology (Code: 599B)
Building Science (Code: 599D)
Graphic Arts and Imaging Technology (Code: 599E)
Renewable Energy Engineering (Code: 599F)
Building Energy Engineering (Code: 599C)

This is a non-teaching degree program in which students must choose an approved concentration. Thesis is optional.

Prerequisites:

Baccalaureate degree from an accredited college or university.

Students selecting the Renewable Energy Engineering or Building Energy Engineering concentrations must hold bachelor's degrees in engineering, science, or related fields and have completed a college-level calculus sequence, differential equations, and a two-semester calculus-based physics sequence.

Basic Criteria for Consideration

(Undergraduate GPA x 400) + GREV + GREQ = >2000

3 letters of recommendation

Personal statement of goals

Deadline

1 July for Fall/ 1 November for Spring

Hours: 36 semester hours

Required Courses:

TEC 5139 Technology and Culture	3
TEC 5670 Seminar	0
SUBTOTAL HOURS	3

Appropriate Technology, Building Science, and Graphic Arts and Imaging Technology Concentrations:

Research core:	6-9
TEC 5000 Research in Technology	3
AND	
TEC 5809 Research and Development in Technical Areas	3
OR	
TEC 5999 Thesis	6
Select 9 semester hours from the following graduate core:	9
TEC 5119 Industrial Leadership, Organization, and Communication	3
TEC 5129 Project Management	3
TEC 5149 Entrepreneurship in Technology and Science.....	3
TEC 5900 Internship	3
Approved graduate-level, discipline-related advanced computer modeling course	3
Select 12 semester hours approved concentration courses	12
Select 3-6 semester hours graduate electives	3-6
SUBTOTAL HOURS	33
TOTAL HOURS	36

Building Energy Engineering Concentration:

Select 9 semester hours approved Physics or Statistics courses:	9
PHY 5330 Digital Electronics	3
PHY 5020 Computational Methods in Physics and Engineering	3
PHY 5735 Microcontrollers	3
STT 5820 Design and Analysis of Experiments	3
Building Energy Engineering core:	12
TEC 5210 Theory and Practice of Engineering Thermodynamics	3
TEC 5220 Theory and Practice of Thermal Fluid Systems	3
TEC 5380 Advanced Building Science	3
TEC 5390 Building Thermal Systems Engineering	3
Select 6 semester hours of approved Building Science courses	6
Select 6 semester hours approved electives	6
SUBTOTAL HOURS	33
TOTAL HOURS	36

Renewable Energy Engineering Concentration:

Select 9 semester hours approved Physics or Statistics courses:	9
PHY 5330 Digital Electronics	3
PHY 5020 Computational Methods in Physics and Engineering	3
PHY 5735 Microcontrollers	3
STT 5820 Design and Analysis of Experiments	3
Renewable Energy Engineering core:	12
TEC 5210 Theory and Practice of Engineering Thermodynamics	3
TEC 5220 Theory and Practice of Thermal Fluid Systems	3
TEC 5270 Advanced Computer Modeling of Renewable Energy	3
TEC 5260 Renewable Energy Engineering	3
Select 6 semester hours of approved Appropriate Technology courses:	6
Select 6 semester hours approved electives	6
SUBTOTAL HOURS	33
TOTAL HOURS	36

Thesis: Optional

Language Proficiency: None required

Comprehensive:

Written Exam and Oral Presentation for Technical Competencies:

Students selecting the non-thesis option will have both written and oral exams covering coursework included on their program of study. The written exam is typically completed during the third semester of graduate study. During the last one-third of the program and no later than the last regular class meeting day of the semester there will be an oral presentation of technical competencies to the program committee.

Product of Learning: None required