

# TECHNOLOGY STUDIES

## GRADUATE PROGRAMS

### Master of Sciences Degree with a Major in Career and Technical Education

#### Emphases: Family and Consumer Sciences College Teaching Technology Education Technical Teacher Education

The Departments of Technology Studies and Family and Consumer Sciences offer an interdisciplinary Master of Sciences degree with a Major in Career and Technical Education that provides emphases in *Family and Consumer Sciences*, *College Teaching*, *Technology Education*, and *Technical Teacher Education*. The program provides a core of research, philosophy, and teacher preparation courses, and specialization courses in emphasis areas applicable to their specific career goals—teaching in public schools, colleges, business and industry, supervision, curriculum and instruction and/or research. Description of each emphasis area follows.

**Family and Consumer Sciences Emphasis** is for graduates with a degree in Family and Consumer Sciences Teacher Education that want to complete a graduate degree. For Option I (Thesis), candidates complete 14-15 credit hours of core courses; 6 hours of thesis; and select 9-10 credit hours of advanced course work in the discipline for a total of 30 credit hours. Students pursuing Option III (Course Work), complete 14-15 credit hours of core courses; 6 hours of Option III courses; and select 9-12 credit hours of courses to total at least 32 credit hours.

**College Teaching Emphasis** is designed to prepare individuals interested in teaching career and technical courses (e.g., interior design, graphics, automotive, construction, etc.) at the community college or four-year university. However, it does not certify someone to teach these subjects as part of a non-vocational program at the secondary level, because it does not require teacher education certification as a condition of entrance. This emphasis requires a minimum total of 32 hours in graduate core courses; teacher preparation courses and practicum experiences in college teaching; and additional career and technical courses selected in consultation with the candidate's advisor. Only Option III may be pursued.

**Technology Education Emphasis** Candidates for this degree must have a Bachelor of Sciences degree with an undergraduate major in Technology Education, Industrial Arts or Industrial Education from an accredited institution. This emphasis provides the candidate with maximum flexibility in pursuing career goals related to Technology Education, such as certification, research, curriculum and instruction, administration, and technical specialization leading to vocational certification. For Option I (Thesis), candidates complete 14-15 credit hours of core courses; 6 hours of thesis; and select 9-10 credit hours of advanced course work in the discipline for a minimum total of 30 credit hours. Students pursuing Option III (Course Work) complete 14-15 credit hours of core courses; 6 hours of Option III courses; and select 9-12 credit hours of courses applicable to their specific career goals to total a minimum of 32 credit hours.

Students desiring to teach Technology Education in the public schools may choose to develop a program leading to Technology Education (General) certification and licensing to teach in middle schools and high schools (grades 6-12). This program may require additional education, psychology, and technical foundation courses, depending on undergraduate preparation.

**Technical Teacher Education Emphasis.** The graduate program is for candidates that have already completed Technical Teacher Education certification. It also provides certification opportunity for persons interested in qualifying for teaching in health occupations, business, family and consumer Sciences, and other career and technical fields in vocationally approved high school and post-secondary programs—technical colleges, community colleges, universities, business and industry. Persons who hold the baccalaureate degree in allied health, agriculture, business, data processing, engineering, nursing, technology or related professional and technical areas may meet teacher certification and degree requirements by completing the degree. Candidates seeking certification are required to have completed two years of work experience in their profession, and may be required to take foundation courses that may exceed the minimum 32 credit hours associated with Option III.

This emphasis also provides a high degree of flexibility for certified vocational teachers pursuing goals related to Technical Teacher Education, such as: research, curriculum and instruction, as well as opportunities to gain additional technical expertise in a specialized area or broadening one's scope of technical knowledge. For Option I (Thesis), candidates complete 14-15 credit hours of core courses; 6 hours of thesis; and select 9-10 credit hours of advanced course work in the discipline for a minimum total of 30 credit hours. Students pursuing Option III (Course Work), complete 14-15 credit hours of core courses; 6 hours of Option III courses; and select 9-12 credit hours of courses to total at least 32 credit hours.

All graduate students pursuing the Masters of Sciences with a Major in Career and Technical Education are required to take a comprehensive examination over the major departmental course work of study. The Masters of Sciences with a Major in Career and Technical Education program consists of the following course work:

#### Program Guide

<b>Required Core Courses</b> .....	<b>14-15</b>
TTED 891 Methods of Research or SSLS 891 Methods of Research (or approved research course) .....	3
TTED 887 Data Analysis and Interpretation in Technology or SSLS 824 Educational Statistics I (or approved statistics course) .....	3
TTED 894 History and Philosophy of Vocational Education or TE 850 Contemporary Developments in Technology Education <sup>3,4</sup> .....	3
TTED 779 Instructional Methods in Technical Education or TE 882 Instructional Strategies for Technology Education .....	3
TE 807 Problem Solving and Creative Thinking in Technology <sup>3</sup> or TE 806 Studies in Technology Education ( [high interest current topic] ) .....	3
TE 695 Using Technology as an Instructional Tool, 2 <sup>1</sup> or TE 756 Communication Systems Technology <sup>1,3</sup> (or TE 864) .....	3
<b>Program Options</b> .....	<b>6</b>
Option I (Thesis) Thesis .....	6
Option III (Course Work) TE 807 Problem Solving and Creative Thinking in Technology or TE 806 Studies in Technology Education ( [high interest current topic] ) .....	3
Elective approved by advisor .....	3

**Program Emphases**

Select one of the following four emphases areas:

**Emphasis A. Family and Consumer Sciences ..... 9-12**

- TE 851 Integrated Technology in Teaching.....3
- FCS 740 Special Topics in Family and Consumer Sciences .....3
- Select **3-6** credit hours from the following:
- FCS 771 Directed Readings in Family and Consumer Sciences ..... 1-3
- FCS 780 Family Violence and Child Abuse .....3
- FCS 792 Advanced Explorations of Issues in Youth and Adolescence .....3
- FCS 730 Independent Study ..... 1-3
- TTED 893 Student Assessment Development in Career & Technical Ed...3

**Emphasis B. College Teaching\* ..... 11-12**

- TE 881 Orientation to College Teaching .....3
- SSLS 882 College Teaching Internship .....3
- Select 5-6 credit hours from the following:
- Education-related or FCS courses as approved by FACS advisor, **OR**
- Education or technical courses as approved by TE or TTED advisor..... 5-6

**Emphasis C. Technology Education # ..... 9-12**

- Select 9 credit hours from the following:
- TE 750 Technology and Society .....3
- TE 753 Special Topics in Technology Education ..... 1-3
- TE 806 Studies in Technology Education..... 1-3
- TE 840 Production Technology: Construction (\_\_\_\_).....3
- TE 841 Production Technology: Manufacturing (\_\_\_\_).....3
- TE 851 Integrated Technology in Teaching.....3
- TE 862 Topics in Power/Energy/Transportation Systems Tech (\_\_\_\_).....3
- TE 863 Topics in Materials and Processes (\_\_\_\_).....3
- TE 893 Seminar in Technology Education ..... 1-3
- Select 2-3 hours of electives as approved by TE advisor for Opt. III .. 2-3

**Emphasis D. Technical Teacher Education # ..... 9-12** **14-15**

- Select 9-10 credit hours from the following:
- TTED 698 School Improvement Processes in Career and Technical Ed ...2
- TTED 780 Classroom Management in Vocational Education .....3
- TTED 805 Special Problems ..... 1-6
- TTED 808 Cooperative Education .....3
- TTED 810 Seminar ..... 1-6
- TTED 845 Instructional System Design and Curriculum Development .....3
- TTED 893 Student Assessment Development in Career & Technical Ed ...3
- TTED 897 Teaching Special Vocational Students.....3
- Select 2-3 hours of electives as approved by TE advisor for Opt. III .. 2-3

**Option I Total Minimum Required Hours ..... 30**  
**Option III Total Minimum Required Hours ..... 32**

Option I Total Required

\* - Option I is NOT available for Emphasis B. College Teaching; only Option III available.

# - **Note:** Candidates seeking certification for teaching Technology Education in the public schools (Emphasis C) or Vocational Certification (Emphasis D) will be required to take additional foundation courses in education, psychology, and/or technical courses beyond the 32 hours required for the MS in C&TE degree. Candidates' undergrad preparation varies; therefore an advisor should be consulted to determine additional requirements.