# Technology Education (TED)

**TED 530 Foundations for Teaching Technology** (3 credit hours)
Three topics related to teaching technology at the secondary and post-secondary levels: philosophical and historical foundations; methodology and curriculum development; and current trends and issues. Emphasis is on developing critical thinking skills, research, technology skill development, and writing procedures.

Prerequisite: Graduate standing
*Typically offered in Fall only*

**TED 532 Current Trends in Technical Graphics Education** (3 credit hours)
Current trends in the technology, techniques, and theories relating to technical graphics education. Discussion will center on assigned readings and student-researched presentations on topical subjects. Readings will be drawn from journals and texts, on-line databases and articles, and current news media sources.

Prerequisite: Graduate standing
*Typically offered in Fall only*

**TED 534 Instructional Design in Technical and Technology Education** (3 credit hours)
Create instructional activities for technical and technology education. Examine learning theories appropriate for technical and technology education. Explore and apply models for instructional design. Examine issues relative to electronic applications in technical and technology education classrooms.

Prerequisite: Graduate standing
*Typically offered in Spring only*

**TED 536 Scientific and Technical Visualization: Theory and Practice** (3 credit hours)
Theory and practice of scientific and technical visualization as a means of displaying scientific data and concepts using graphical methods. Both practitioner and theory driven models of communication are considered. How computer and print graphics can be used to assist individuals in the exploration of scientific and technical concepts. Particular focus on how to integrate scientific/technical graphics into the instructional settings.

**TED 551 Technology Education: A Discipline** (3 credit hours)
Defines essential attributes of technology and examines the relationship between technology education and related disciplines. Analyzes the theory, models, and literature that constitute the foundation of technology education. Synthesizes relevant research and identifies areas of needed research.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall only*
*This course is offered alternate odd years*

**TED 552 Curricula for Emerging Technologies** (3 credit hours)
Analyze advanced technologies and develop instructional programs for technology education curricula in secondary schools. Topics include technologies in production, transportation and communication.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall only*
*This course is offered alternate even years*

**TED 555 Developing and Implementing Technology Education** (3 credit hours)
Technology Education curriculum trends, standards, design, implementation and management. Students will analyze current curricular trends and develop strategies for implementing and managing technology education programs.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring only*
*This course is offered alternate odd years*

**TED 556 Laboratory Management and Safety in TED** (3 credit hours)
Laboratory management, planning, and safety considerations for technology education. Analysis of recent research, environmental factors, development of a safety system, safety education, and legal implications. Use of student leaders in management of a safe learning environment. Offered by Distance Education Only.

Prerequisite: Graduate standing
*Typically offered in Spring only*

**TED 558 Teaching Creative Problem Solving** (3 credit hours)
Provides teachers with the opportunity to study the research associated with creativity and apply these theories to implement a creative problem solving program.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring only*
*This course is offered alternate even years*

**TED 595 Special Topics in Technology Education** (1-6 credit hours)
The study of special problems and selected topics of current interest in technology education.

Prerequisite: Graduate Standing
*Typically offered in Fall, Spring, and Summer*

**TED 601 Practicum in Technology Education** (1-6 credit hours)
Faculty supervised experience in educational, industrial or governmental setting where a student analyzes activities associated with planning, implementing and evaluating instructional and/or services in technology education. This plan is developed by students and approved by supervisor.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall and Spring*

**TED 602 Practicum in TED** (1-3 credit hours)
*Typically offered in Summer only*

**TED 610 Special Topics in Technology Education** (1-6 credit hours)
Individual or group of special topics in professional education. The faculty member determines the topic and mode of study after discussion with students.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall, Spring, and Summer*

**TED 621 Special Problems in Technology Education** (1-6 credit hours)
Guided independent or group or current problems in technology education.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall, Spring, and Summer*

**TED 641 Internship in Technology Education** (3 credit hours)
Classroom teachers will document products of learning to include: content pedagogy, student development, multiple instructional strategies, motivation and management, professional growth and community involvement.

Prerequisite: Graduate standing or PBS status
*Typically offered in Summer only*

**TED 646 Field-based Research in Technology Education** (3 credit hours)
Employ methods of field-based research to examine and improve instructional effectiveness and student achievement.

Prerequisite: Graduate standing or PBS status
*Typically offered in Summer only*

**TED 655 Internship in Graphic Communications Education** (3 credit hours)
Mentoring during a higher education level teaching experience in the field of technical graphics with emphasis on providing help in teaching visualization, graphical sciences, and technical graphics standards. *Course is offered as needed to 2-3 students at a time (independent Study).

Prerequisite: TED 530 or EOE 751 with Consent of Instructor
*Typically offered in Fall and Spring*

**TED 685 Master's Supervised Teaching** (1-3 credit hours)
Teaching experience under the mentorship of faculty who assist the student in planning for the teaching assignment, observe and provide feedback to the student during the teaching assignment, and evaluate the student upon completion of the assignment.

Prerequisite: Master's student
*Typically offered in Fall and Spring*

**TED 690 Master's Examination** (1-9 credit hours)
For students in non thesis master's programs who have completed all other requirements of the degree except preparing for and taking the final master's exam.

Prerequisite: Master's student
*Typically offered in Summer only*

**TED 692 Research Project in Technology Education** (1-6 credit hours)
A project or problem in research in education for graduate students, supervised by members of graduate faculty. The research chosen on the basis of individual students' interests and not to be part of thesis or dissertation research.

Prerequisite: ELP 732
*Typically offered in Spring only*

**TED 693 Master's Supervised Research** (1-9 credit hours)
Instruction in research and research under the mentorship of a member of the Graduate Faculty.

Prerequisite: Master's student
*Typically offered in Fall and Spring*

**TED 695 Master's Thesis Research** (1-9 credit hours)
Thesis research.

*Typically offered in Fall, Spring, and Summer*

**TED 696 Summer Thesis Res** (1 credit hours)

**TED 709 Seminar in Technology Education** (1-3 credit hours)
Seminar type course with topics selected for each class with attention given to broad concepts of and issues facing technology education at each level of delivery and implementation.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall and Spring*

**TED 751 Technology Education: A Discipline** (3 credit hours)
Defines essential attributes of technology and examines the relationship between technology education and related disciplines. Analyzes the theory, models, and literature that constitute the foundation of technology education. Synthesizes relevant research and identifies areas of needed research.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall only*
*This course is offered alternate odd years*

**TED 752 Curricula for Emerging Technologies** (3 credit hours)
Analyze advanced technologies and develop instructional programs for technology education curricula in secondary schools. Topics include technologies in production, transportation and communication.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall only*
*This course is offered alternate even years*

**TED 755 Developing and Implementing Technology Education** (3 credit hours)
Technology Education curriculum trends, standards, design, implementation and management. Students will analyze current curricular trends and develop strategies for implementing and managing technology education programs.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring only*
*This course is offered alternate odd years*

**TED 756 Planning of Change in TED** (3 credit hours)
Theories, research, strategies and practices needed to function as a technology education change agent; demonstrate a working knowledge of planned change in technology education; observe, assess, design and competently plan intervention strategies and aptly use behavioral tools to achieve success.

*Typically offered in Summer only*
*This course is offered alternate odd years*

**TED 757 Leadership Development in TED** (3 credit hours)
Research, development and practice of individual and organizational leadership in technology education. Content builds leadership knowledge, skill and practice with emphasis on student assessment and development.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring only*
*This course is offered alternate odd years*

**TED 758 Teaching Creative Problem Solving** (3 credit hours)
Provides teachers with the opportunity to study the research associated with creativity and apply these theories to implement a creative problem solving program.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring only*
*This course is offered alternate even years*

**TED 801 Practicum in Technology Education** (1-6 credit hours)
Faculty supervised experience in educational, industrial or governmental setting where a student analyzes activities associated with planning, implementing and evaluating instructional and/or services in technology education. This plan is developed by student and approved by supervisor.

Prerequisite: Graduate standing or PBS status
*Typically offered in Spring and Summer*

**TED 810 Special Topics in Technology Education** (1-6 credit hours)
Individual or group of special topics in professional education. The faculty member determines the topic and mode of study after discussion with students.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall, Spring, and Summer*

**TED 821 Special Problems in Technology Education** (1-6 credit hours)
Guided independent or group or current problems in technology education.

Prerequisite: Graduate standing or PBS status
*Typically offered in Fall and Spring*

**TED 895 Doctoral Dissertation Research** (1-9 credit hours)
Dissertation research.

Prerequisite: Master's student
*Typically offered in Fall, Spring, and Summer*

**TED 896 Summer Dissert Res** (1 credit hours)

**TED 899 Doctoral Dissertation Preparation** (1-9 credit hours)
For students who have completed all credit hours, full-time enrollment, preliminary examination, and residency requirements for the doctoral degree, and are writing and defending their dissertations.

Prerequisite: Doctoral student
*Typically offered in Fall, Spring, and Summer*