### TECHNOLOGY EDUCATION (TED)

## TED 100 INTRODUCTION TO TECHNOLOGY EDUCATION

3, 3/0

Prerequisite: Major status. An introduction to technology education for students considering a career as a public school technology teacher; provides information relating to core issues such as New York State Learning Standards, contemporary ideas and practices in the technology classroom; introduces and prepares students for the field service requirement. Offered Every Semester.

### TED 101 RAPID VISUALIZATION

3.2/3

Basic conceptual and technical skills in technical drawing and illustration; basic drawing techniques from sketching and rapid visualization to rendering and 3-D computer modeling; lectures, demonstration, and practice; intended as a technology foundation course and as a pre-mechanical drawing and pre-CAD course. Offered fall only.

## TED 123 PRINCIPLES OF MANUFACTURING 3, 2/3

Operative principles common to the majority of manufacturing industries; research and development, manufacturing, organization and management; industrial relations; engineering; production; labor; financial control; marketing; quality control. Presentations by leading industrialists. Offered spring only.

## TED 253 FUNDAMENTALS OF BOAT BUILDING 3, 0/6

Prerequisite: DES 105. Fundamentals of boat design, lofting, and construction through lectures, demonstrations, and the construction of a small boat. Offered occasionally.

### Equivalent Course: TEC 253

### TED 300 CONSTRUCTION SYSTEMS

3, 2/3

Exploration of habitable structures through hands-on laboratory experiences. For technology education majors and those who wish to meet certification requirements of New York for teaching technology education in the state's public schools. Offered fall only.

# TED 320 HISTORY AND THEORY OF WATERCRAFT DESIGN

3, 3/0

Prerequisite: DES 215 or permission of instructor. A survey of the history and theory of naval architecture and watercraft design with special attention to the development of design solutions within specific cultural contexts; special emphasis on American small craft and local traditional designs. Offered occasionally.

## TED 349 COMMUNICATIONS SYSTEMS 3, 2/3

Review of communication techniques throughout history; current techniques and modern communications programs and materials; broad spectrum of experiences with conversion and transfer of information from one form to another. Offered fall

## TED 360 TECHNOLOGY EDUCATION METHODS AND EVALUATION

3, 3/0

Prerequisites: OEC 301, OEC 302, and EDF 303. Basic principles and methods of teaching technology education subjects; strategies utilized in planning for instruction; strategies utilized in evaluating students, course content, and overall program; teaching and evaluating students with special needs; preparation of instructional materials. Offered Every Semester.

## TED 361 TRANSPORTATION SYSTEMS 3, 2/3

Energy/transportation systems focusing on the moving of people, materials, and products; types of transportation vehicles, energy and power, controls, careers; the effects of transportation systems on the environment and society. Course meets guidelines of the national and state professional associations regarding the systems approach to the technology education discipline. Offered spring only.

# TED 450 STUDENT TEACHING IN TECHNOLOGY EDUCATION

6, 0/0; IN23, RE23

Prerequisites: CWP 102, BME/CTE 301, BME/CTE 302, EDF 303,, TED 360, EXE 372, EDU 416, minimum cumulative GPA of 2.5. Students must have completed 105 credit hours, including all 33 credit hours of approved technology core courses. Full-time assignment in a junior and/or senior high school as a student-teaching intern working with a supervising teacher and a college supervisor; seminars on campus and in public schools to study teaching techniques, organization, management, oral communication delivery and other aspects of teaching technology education; guided full-time teaching experience including the use of electronic recording to analyze teaching; participation in school and professional activities. Offered Every Semester.

#### TED 451 STUDENT TEACHING IN TECHNOLOGY **EDUCATION II**

6, 0/0; IN23, RE23

Prerequisites: EDF 303, BME 301 or CTE 301, BME 302 or CTE 302, and TED 360, EXE 372, EDU 416; minimum GPA of 2.5 in major coursework. Full-time assignment in a senior high school as a student-teaching intern working with a supervising teacher and a college supervisor; seminars on campus and in public schools to study teaching techniques, organization, management, and other aspects of teaching; fulltime teaching experience including the use of videotape to analyze instructional performance; participation in schools and professional activities. Students must have completed a minimum of 105 credit hours, including all 33 credit hours of required technology core courses. Students must be prepared to accept assignment at any facility and may not enroll in any other college courses. Offered Every Semester.

#### TED 453 WOOD/EPOXY BOATBUILDING 3.2/0

Prerequisite: DES 251. Theory and application of wood/ epoxy boatbuilding materials and techniques through the construction of a wood/epoxy skiff. Offered occasionally.

**TED 488 INTERNSHIP** 

1-12, 0/0

**TED 488** 

**TED 495 SPECIAL PROJECT** 

1-3, 0/0

**TED 497 WORKSHOP** 

3, 3/2

Offered occasionally.

**TED 499 INDEPENDENT STUDY** 

3-12, 0/0

#### TED 501 TECHNOLOGY EDUCATION IN THE **ELEMENTARY SCHOOL**

Planning, organizing, and constructing activities for the elementary school; use of a variety of materials; technology education in the elementary school; changing technological processes and their effect on society. For technology education and non-technology education majors.

#### TED 507 TECHNOLOGY EDUCATION FACILITY PLANNING AND MANAGEMENT

Problems involved in planning new technology education facilities or remodeling of existing laboratories; concepts in relationship of objectives to facilities; space allocation, area development, and organization; service requirement; criteria for selection and placement of equipment; analyzing available equipment and writing specifications; critique of an existing technology education laboratory.

### TED 521 OCCUPATIONAL AND PRACTICAL ARTS EDUCATION FOR STUDENTS WITH SPECIAL NEEDS

Prerequisite: Technology education, career and technical education, or exceptional education program major or instructor permission. Nature and needs of individuals with disabilities and the disadvantaged enrolled in occupational and practical arts education; curriculum development; evaluating work potential; identifying instructional resources and teaching methods and techniques; interpreting research; identifying the function of available vocational rehabilitation and occupational and practical arts education programs.

#### TED 531 ELEMENTS OF MANUFACTURING **TECHNOLOGY**

Manufacturing technology systems; management; personnel; and production.

#### TED 540 CAREER AWARENESS IN TECHNOLOGY FOR THE ELEMENTARY SCHOOL

3, 3/0

Current developments in career education; role of the elementary school in career education; curriculum development and correlation techniques.

TED 590 INDEPENDENT STUDY

1-3.3/0

TED 594 WORKSHOP

1-6, 1/0

**TED 594** 

#### TED 600 FOUNDATIONS IN TECHNOLOGY **EDUCATION**

3.0/3

European and American antecedents of technology education; social and technological factors that make the technology education a major condition of culture; psychological and philosophical basis for teaching technology education. Required for technology education majors.

#### **TED 615 POWER TECHNOLOGY**

3.0/3

**TED 615** 

**TED 617 ELECTRONICS** 

3, 3/0

**TED 617** 

**TED 618 ELECTRONICS** 

3, 3/0

**TED 618** 

TED 629 DRAFTING--PROBLEMS AND TECHNIQUES 3.3/0

TED 629

**TED 630 GRAPHIC ARTS** 

3, 3/0

**TED 630** 

#### TED 690 MASTER'S PROJECT

Prerequisites: TED 600, BUS 601, BUS 602, and BUS 604. A study undertaken by one or more individuals on a problem of special interest submitted in acceptable form according to directions given by the Technology Department.

#### TED 695 MASTER'S THESIS

1-6.0/0

Prerequisites: TED 600, BUS 601, BUS 602, and BUS 604. Individual investigation of an original problem submitted in acceptable form according to directions given by the Graduate School. Problem and procedure must be approved by the student's graduate advisor, the graduate advisory committee, and the department chair before the investigation is begun.

### TED 701 SEMINAR IN TECHNOLOGY EDUCATION: WRITING AND PUBLISHING

3.3/0

Mechanics of writing and publishing, for those with a genuine desire and ability to express ideas in written form.

# TED 702 SEMINAR IN THE PHILOSOPHY OF TECHNOLOGY EDUCATION

3, 3/0

Critical examination of technology from a historical perspective: study of prevalent views and issues relative to technology; its meaning, characteristics, and interdisciplinary scope; its relation to science and its place in education.

# TED 703 SEMINAR IN THE DEVELOPMENT OF INSTRUCTIONAL MATERIALS

3, 3/0

An opportunity to maximize the effectiveness of the instructional program and its resultant benefits, for those with a genuine desire to develop and organize teaching materials.

# TED 705 CAREER EXPLORATION IN TECHNOLOGY FOR THE MIDDLE SCHOOL

3,0/0

Student-teacher planning in career education for the middle school: curriculum development articulation methodology; developing instructional units of study for computer-based resource units.

# TED 706 CAREER EXPLORATION IN TECHNOLOGY FOR THE SECONDARY SCHOOL

3, 3/0

The evolution and potentiality of career education for adolescents; opportunities for participants to develop occupational cluster information banks, including instructional objectives, content, media, learning activities, and evaluation devices.

TED 721 THESIS/PROJECT CONTINUATION 0. 0/0

TED 722 THESIS/PROJECT EXTENDED 0, 0/0