TE - Technology Education

TE 207. Materials and Processes. 4 Credits. (2 Lec, 2 Lab) F
Exploration of technical competencies engineering, applications, processes, tools and equipment as they are employed by industry in the application of materials including but not limited to wood, metal, and composite materials.

TE 250CS. Technology and Society. 3 Credits. (1 Lec, 2 Lab) F,S,Su
Closely linked to the various sciences, technology has developed out of human need to solve real problems of society and to advance science. An exploration and examination of major technological periods, inventions, and innovations that have altered the course of humanity and their impact on the civilization process will lead to a perspective on technological literacy. This course will introduce students to the study of technology, not so much as a method for “doing technology,” but as an impetus for social and cultural change related to technology.

TE 291. Special Topics. 1-4 Credits. (1 Lec; 12 cr max) F
S Max 12 cr. PREREQUISITE: None required but some may be determined necessary by each offering department. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

TE 294. Seminar. 1 Credit. (1 Sem; 4 cr max) F,S
Max 4 cr. Topics offered at the lower division level which are not covered in regular courses.

TE 300. Alternative Power/Energy Tech. 3 Credits. (2 Lec, 1 Lab) S
PREREQUISITE: TE 207 or consent of instructor. Through a variety of research and applied learning activities, students will develop an understanding of various power/energy sources while at the same time gaining new perspectives on the feasibility and appropriateness of adopting and implementing a variety of power/energy systems to meet current societal needs.

TE 330. Electronic Communication Technology. 4 Credits. (2 Lec, 2 Lab) S
Students explore the technical and technological concepts of communication systems and sub-systems including audio/video production and web-based applications.

TE 332. Remote and Autonomous Aircraft Systems. 3 Credits. (2 Lec, 1 Lab) S
This course provides an introduction to Unmanned Aircraft Systems (UAVs). A history of UAS, typical applications and an overview of regulations, airframe, and power-plant systems, sensors, ground control stations, airspace, weather, and other foundational skills needed to build, repair, and safely operate UAS in the U.S. airspace systems will be covered.

TE 353. Teaching Practices. 1 Credit. (1 Lab) F
COREQUISITE: EDU 497 (Methods: Ag and Tech Ed). Provides additional experiences in planning, teaching and evaluating lessons in Technology Education.

TE 360. Curriculum & Facilities Plan. 3 Credits. (3 Lec) F
PREREQUISITE: Acceptance in Teacher Education program; junior standing. COREQUISITE: EDU 497 (Methods: Ag and Tech Ed), or consent of instructor. Determining appropriate development of Technology Education and Agricultural Education programs based on an analysis of student and community needs. Organizing subject matter materials and laboratory resources to promote the development of standard based curricula.

TE 406. Computer Aided and Industrial Machining and Manufacturing. 4 Credits. (2 Lec, 2 Lab) S
PREREQUISITE: DDSN 114. Understanding of computer aided machining and manufacturing. Includes instruction in the use and operation of a complete CAM system including applications on a CNC milling machine. Course content includes machine tool technology practice related to traditional machining techniques.

TE 417. Manufacturing Technology. 3 Credits. (1 Lec, 2 Lab) F
PREREQUISITE: TE 207 and sophomore standing. Capstone course. Study and application of manufacturing concepts common to industry, including the stages of initial planning, prototype construction through the use of modern manufacturing techniques, market research, and analysis.

TE 490R. Undergraduate Research. 1-6 Credits. (1 Ind; 12 cr max) F,S,Su
Max 12 cr. Directed undergraduate research which may culminate in a research paper, journal article, or undergraduate thesis. Course will address responsible conduct of research. May be repeated.

TE 491. Special Topics. 1-4 Credits. (1 Lec; 12 cr max) On Demand
Max 12 cr. PREREQUISITE: Course prerequisites as determined for each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

TE 492. Independent Study. 1-3 Credits. (1 Ind; 6 cr max) On Demand
Max 6 cr. PREREQUISITE: Junior standing, consent of instructor, and approval of department head. Directed research and study on an individual basis.

TE 494. Seminar. 1 Credit. (1 Sem; 4 cr max) On Demand
Max 4 cr. PREREQUISITE: Junior standing and as determined for each offering. Topics offered at the upper division level not covered in regular courses. Students participate in preparing and presenting discussion material.

TE 498. Internship. 2-12 Credits. (1 Lab; 12 cr max) F,S,Su
Max 12 cr. PREREQUISITE: Junior standing, consent of instructor, and approval of department head. An individualized assignment arranged with an agency, business or other organization to provide guided experience in a technology field.

TE 501. History and Philosophy of Technology Education. 3 Credits. (3 Lec)
PREREQUISITES: Graduate standing. A review of national trends and issues in Technology Education and their implications for program development at the local, state and national level.

TE 530. 3D Modeling & Animation. 3 Credits. (1 Lec, 2 Lab) On Demand
PREREQUISITE: Graduate standing. This course is designed to provide the learner with experiences that build on previous AutoCAD use and focuses primarily on the creations of 3D solid models.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.