**TE - Technology Education**

**TE 207  Materials and Processes: 4 Credits (2 Lec, 2 Lab)**
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)**
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 (1-4 Lec)**
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. Repeatable up to 12 credits.

**TE 294  Seminar: 1 Credits (1 Other)**
Topics offered at the lower division level which are not covered in regular courses. Repeatable up to 4 credits.

**TE 330  Alternative Power/ Energy Tech: 3 Credits (2 Lec, 1 Lab)**
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 332  Remote and Autonomous Aircraft Systems: 3 Credits (2 Lec, 1 Lab)**
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 Credits (2 Lab)**
Provides additional experiences in planning, teaching and evaluating lessons in Technology Education.

**TE 406  Curriculum & Facilities Plan: 3 Credits (3 Lec)**
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 410  Computer Aided and Industrial Machining and Manufacturing: 4 Credits (2 Lec, 2 Lab)**
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)**
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 Other)**
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. Repeatable up to 12 credits.

**TE 491  Special Topics: 1-4 Credits (1-4 Lec)**
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. Repeatable up to 12 credits.

**TE 492  Independent Study: 1-3 Credits (1-3 Other)**
PREREQUISITE: Junior standing, consent of instructor, and approval of department head. Directed research and study on an individual basis. Repeatable up to 6 credits.

**TE 494  Seminar: 1 Credits (1 Other)**
Topics offered at the upper division level not covered in regular courses. Students participate in preparing and presenting discussion material. Repeatable up to 4 credits.

**TE 498  Internship: 2-12 Credits (2-12 Other)**
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. Repeatable up to 12 credits.

**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, 4 Lab)**
PREREQUISITE: Graduate standing. This courses is designed to provide the learner with experiences that build on previous AutoCAD use and focuses primarily on the creations of 3D solid models.