

# Engineering and Technology Education Major, Technology Education Emphasis Plan

The Technology Education emphasis is designed to prepare students for teaching in junior and senior high schools. Students should follow the suggested semester schedule presented below, completing all courses listed. Consult with an advisor when choosing elective courses. All students in this program must maintain a cumulative GPA of 2.75 and gain admission to teacher education, in order to student teach and to receive secondary education licensure (Emma Eccles Jones College of Education and Human Services).

The Department of Engineering and Technology Education is partnered with Project Lead the Way (PLTW) and provides pre-service training for students to become qualified to teach selected PLTW courses. PLTW is a national program that has developed a curriculum introducing students to the scope, rigor, and discipline of engineering prior to entering college. Students opting to become qualified to teach selected PLTW courses must include MATH 1100 in their program of study, as well as an additional science course with a laboratory experience.

The suggested semester schedule is as follows:

## Freshman Year (32 credits)

### Fall Semester (15 credits)

ETE 1000 Orientation to Engineering and Technology Education.....	1
ETE 1030 Material Processing Systems .....	3
ETE 1200 Computer-Aided Drafting and Design.....	3
BIOL 1610 Biology I (4 cr) or	
CHEM 1210 Principles of Chemistry I (4 cr).....	4
MATH 1210 (QL) Calculus I .....	4

### Spring Semester (17 credits)

ETE 1020 Energy, Power, Transportation Systems Control Technology.....	3
ETE 1040 Construction and Estimating.....	3
MATH 1220 (QL) Calculus II .....	4
PHYS 2210 (QI) General Physics—Science and Engineering I.....	4
Or	
PHYS 2200 Elements of Mechanics (2 cr) and Elective course (2 cr).....	4
University Studies Breadth Creative Arts (BCA) course.....	3

## Sophomore Year (31 credits)

### Fall Semester (15 credits)

ETE 2030 Wood-Based Manufacturing Systems .....	3
ENGL 1010 (CL1) Introduction to Writing: Academic Prose .....	3
ENGR 2010 Engineering Mechanics Statics .....	2
PHYS 2220 (BPS/QI) <sup>4</sup> General Physics— Science and Engineering II .....	4
University Studies Breadth Humanities (BHU) course .....	3

### Spring Semester (16 credits)

ETE 2020 Computer-Integrated Manufacturing Systems.....	3
ETE 2210 Electrical Engineering for Nonmajors .....	4
ETE 2220 Civil Engineering and Architecture.....	3
ENGL 2010 (CL2) Intermediate Writing: Research Writing in a Persuasive Mode.....	3
ENGR 2030 Engineering Mechanics Dynamics .....	3

## Junior Year (33 credits)

**Note:** Students should apply to the Secondary Teacher Education Program (STEP) during August of their Junior Year.

### Fall Semester (17 credits)

ETE 3050 Computer Systems and Networking .....	3
ETE 3440 (DSC) Science, Technology, and Modern Society .....	3
University Studies Breadth American Institutions (BAI) course .....	3
University Studies Breadth Life Sciences (BLS) course.....	3
University Studies Breadth Social Sciences (BSS) course .....	3
Elective course(s).....	2

### Spring Semester (16 credits)

ETE 2660 Principles of Engineering Education.....	3
ETE 3200 <sup>2,3</sup> Methods of Teaching Engineering and Technology Education I .....	3
ETE 3300 <sup>2,3</sup> Clinical Experience I .....	1
SCED 3100 <sup>2,3</sup> Motivation and Classroom Management.....	3
SCED 3210 (CI/DSS) <sup>2,3,4</sup> Educational and Multicultural Foundations .....	3
Elective course(s).....	3

**Note:** Prior to Student Teaching, the Praxis Content Exam must be passed.

## Senior Year (28 credits)

### Fall Semester (16 credits)

ETE 4300 <sup>2,3</sup> Clinical Experience II .....	1
ETE 4400 <sup>2,3</sup> Methods of Teaching Engineering and Technology Education II .....	3
INST 4015 <sup>1</sup> Technology Tools and Integration for Teachers .....	1
SCED 4200 (CI) <sup>2,3</sup> Reading, Writing, and Technology .....	3
SCED 4210 <sup>2,3</sup> Cognition and Evaluation of Student Learning .....	3
SPED 4000 <sup>2,3</sup> Education of Exceptional Individuals .....	2
University Studies Depth Humanities and Creative Arts (DHA) course .....	3

### Spring Semester (12 credits)

ETE 5500 <sup>2,3</sup> Student Teaching Seminar .....	2
ETE 5630 <sup>2,3</sup> Student Teaching in Secondary Schools .....	10

<sup>1</sup>The INST 4015 requirement has been waived. However, INST 4500 is recommended.

<sup>2</sup>This course is included in the Secondary Education Licensure Requirements. Prior to enrolling in this course, students must be admitted to the STEP.

<sup>3</sup>Students must maintain a cumulative 2.75 GPA for admission to the Emma Eccles Jones College of Education and Human Services, for student teaching, and to receive secondary education licensure.

<sup>4</sup>PHYS 2220 fulfills the University Studies Breadth Physical Sciences (BPS) requirement. SCED 3210 fulfills the University Studies Depth Social Sciences (DSS) requirement.