Technology Minor
Department of Technology

Description

The technology minor is for all students who want to develop technological literacy and skills using a variety of technologies and technological systems. Students will engage in authentic, contextual, and hands-on learning experiences to develop new skills, integrate STEM concepts, learn sustainable practices, and make informed decisions about technology. Students in sciences, arts, theater, engineering, communications, business, and other areas can benefit from this minor through flexible and diverse course options.

All students will complete a foundation course, TEL 101 Engineering Graphics and Technical Illustration, in order to develop graphical communication skills that will be applied in future courses. Students will have the flexibility to select coursework that best suits their personal and career goals related to materials technologies, communications, electronics, design, or energy studies through recommended tracks or individually developed programs. Students will also complete TED 310 Technology and Civilization to study the benefits, risks, and impacts of technologies. (Note: TED 310 Technology and Civilization meets the World Awareness Social and Behavioral Sciences (WASB) General Education Requirement.)

Learning Outcomes and Assessment

Students completing the Technology Minor will be able to:

1. Utilize technologies in applied and contextual environments to develop products and solutions that address human needs.
2. Integrate technological components into designed systems, evaluate outcomes, and optimize solutions to technological problems.
3. Articulate and evaluate the benefits, risks, and impacts of technologies on a global economy, society, and cultures.

Assessment of these outcomes would be initiated three years after starting the minor, and would repeat on three year increments after.
Curriculum Outline – 21 Credit Hours

**Required Courses**  (9 CH)

TEL 101 Engineering Graphics and Technical Illustration
TEL 120 Materials Technology *or*
TEL 130 Computing Technology and Information Systems for Technology Careers
TEL 310 Technology and Civilization

**Select Two Lower Level Electives from the following list: (6 CH)**

TEL 203 Materials Processing and Fabrication
TEL 204 Materials Molding and Forming
TEL 205 Materials Precision Production
TEL 210 Design and Problem Solving
TEL 240 Electronics Technology
TEL 247 Computer Aided Design

**Select Two Upper Level Electives from the following list: (6 CH)**

TEL 323 Construction Systems
TEL 328 Computer Aided Estimating and Site Management
TEL 343 Digital Electronics Systems
TEL 353 Transportation Systems
TEL 355 Energy and Power Technology
TEL 363 Communication and Multimedia Systems
TEL 393 Manufacturing Systems
TEL 401 Architectural Drawing
TEL 412 Design Probe I
TEL 442 Mechatronic Systems
TEL 415 Advanced Energy Technologies and Systems
TEL 423 Wood Production and Manufacturing
TEL 433 Metals Manufacturing Processes
TEL 457 CAD: Engineering and Analysis

Note that all of the courses listed above are existing courses being offered by the Department of Technology in existing laboratory facilities. Additional course choices may become available as program offerings are expanded.