

# College of Engineering

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Date: 27 March 2015

To: Randy Smith

Vice Provost, Office of Academic Affairs (OAA)

From: Ed McCaul Searctary, College Committee on Academic Affairs (CCAA)

Subject: Technological Studies Minor

CCAA has reviewed and approved the attached Technological Studies Minor request to be held in "limbo" on the 26th of March 2015. The request is being submitted to you as required by the university's new minor policy. If you have any questions concerning this request please let me know.



# EEIC Engineering Education Innovation Center

College of Engineering

244 Hitchcock Hall 2070 Neil Avenue Columbus, OH 43210

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eeic.osu.edu

March 13, 2015

To: CCAA

From: Ann D. Christy Interim Director

**Engineering Education Innovation Center** 

RE: Request to postpone submittal of Technological Studies Minor proposal

I am requesting that the Technological Studies Minor be held in limbo for another year as we are not in a position to submit a proposal for the full minor. This minor is designed for non-engineering students with an interest in learning more about technology's role in today's society and who may be working with engineers in the future. Unlike our Engineering Sciences Minor (ESM), the Technological Studies Minor (TSM) does not require calculus as a pre-requisite to required courses in the minor. The TSM was designed under the university's quarter-based curriculum, but not officially launched before we transitioned to semesters. Most of the required course modules have been built, and several faculty have expressed interest in developing the rest of the curriculum. The current TSM curriculum sheet is included.

# The Ohio State University College of Engineering Approved by the College of Arts and Sciences

# Technological Studies Minor (College of Engineering) (TECHSTS-MN)

College of Engineering
Engineering Education Innovation Center (EEIC)

http://engineering.osu.edu/eeic/index.php

244 Hitchcock Hall; 2070 Neil Ave Columbus, OH 43210-1278; 614-247-8953

Advisor: Robert J. Gustafson

This minor has the goal of allowing students to learn about technology and to become more technologically literate persons. Specific learning goals include:

- Better understand the role of technology (engineering) in society and the interactions of technology (engineering) with their major field
- Understand how to access and interpret reliable information to make informed decisions regarded technological issues
- Develop a basic understanding of the engineering design process

#### **Key Curriculum Components (minimum 20 credits)**

#### Core (9-10 Credit Hours)

Two options are available for the core element of the Technological Studies minor. For the first core option, two new courses are included specifically to introduce technological concepts for a non-engineering audience. Technical and practical aspects of several technology areas will be explored. A prerequisite of any one GEC Natural Science course is required. The second core option may appeal to those who have the higher mathematics prerequisite and want a quantitatively more rigorous approach.

### Option 1:

ENG 201 (5) Designing Our World: An Introduction to Engineering Design, (New Course) and ENG 202 (5) Analyzing Our World: Foundations of Engineering Analysis (New Course)

#### Option 2:

ENG 181 (3) Introduction to Engineering I, and ENG 183 (3) Introduction to Engineering II ISE 504 (3) Engineering Economic Analysis

#### **Computational Technology** (4-5 Credit Hours)

Competence Facility with computational technology is needed for technology considerations, therefore the curriculum requirement in this area are for both minors.

CSE 200, 201, 202, 203, 204 or Higher Level CSE Class Permitted

## **Technology and Society** (5 Credit Hours)

Students also need to be able to place the technological development in a societal context as is the focus of the Technology and Society course requirement.

Comparative Studies 272, 597.01, ENG 360.02, 367, History 362, Physics 367, Soc 302

### Capstone Seminar (2 Credit Hours)

A capstone seminar focusing on current technological topics of broad interest will complete the minor package.

ENG 582 Technology Issues Seminar (New Course)

The program advisor will work with you in selection of a suitable minor program to meet your specific career objectives. Upon completion of the minor, the advisor will approve and sign the Minor Program Form. You may then file the Minor Program Form with your college or school to receive a minor in Technological Studies.

#### **General Guidelines**

Required for graduation: No

Credit hours required: A minimum of 20

<u>Transfer credit hours allowed</u> No more than 10 hours of transfer credit may be applied to the minor.

Overlap with the GEC: Permitted

<u>Grades required:</u> No grade below a C- will be permitted in courses comprising the minor.

A minimum - 2.00 cumulative point-hour ratio is required for the minor.

Course work graded Pass/Non-Pass cannot count on the minor.

<u>Filing the minor program form:</u> A minor program form must be filled out no later than the time the application for graduation is submitted. It will require the signature of the student and the student's major program advisor.

Exclusions to minor: Not open to Engineering majors.

# Additional Guidelines for ASC Students

Overlap between minors: Each minor completed must contain 20 unique hours.

<u>Changing the minor:</u> Once a minor is on file in the college/school office, any changes must be discussed with the faculty advisor and/or the college/school counselor.

Overlap with the major: Not allowed and the minor must be in a different subject than the major.

# **General Guidelines for Engineering Students**

Exclusions to minor: Not open to Engineering majors.
Changing a minor: Once the minor has been filed, any changes must be approved by the Chair of the Minors Oversight Committee. This form will be available on the CoE website.

Overlap Policy: Engineering places no restrictions on the use of a course both in a minor and major program. However, students should consult their major program for any constraints that may be applied there.

College of Arts and Sciences Curriculum and Assessment Services 154 Denney Hall,164 W. 17<sup>th</sup> Ave. http://artsandsciences.osu.edu