

Bemidji State University

TADT 4385: Sustainability and Emerging Technologies

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

A study of sustainability and the emerging technologies that support its major concepts in a laboratory-based course. Students will experience a variety of emerging technologies and understand how such content may be applied in design, engineering, manufacturing and/or the construction industries.

Prerequisites: Junior status or consent of instructor.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. . analyze the components of emerging technologies in terms of sustainability.
2. . compare applications of emerging technologies used in engineering, manufacturing or construction applications.
3. . describe the principles of sustainability from a materials and processes perspective in engineering/manufacturing/construction applications.
4. . explain the economic and environmental benefits of adopting sustainability practices in a variety of engineering/manufacturing/construction applications.
5. . practice principles of sustainability to solve technological problems.
6. . synthesize potential applications for specific emerging technologies.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted