The University Senate of Michigan Technological University

PROPOSAL 15-06
(Voting Units: Academic Departments)

PROPOSAL FOR BACHELORS DEGREE TITLE CHANGE

Proposal to change

"BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY"
MECHANICAL ENGINEERING TECHNOLOGY CONCENTRATION

TO

"BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY"

1. **General description and characteristics of program.**

   Industrial Technology is a recognized field of study based on a foundation of science and math. Degree programs range from the associate to doctorate level. Industrial technology programs are designed to prepare technical and/or technical management-oriented professionals for employment in business, industry, education, and government. The BSIT curriculum is well suited for students having associate degrees in engineering technology or applied technology from community colleges. The major requirements incorporate appropriate math and science course work along with upper division management oriented courses that serve to integrate a wide variety of technical disciplines. The technical concentration is defined by the AAS degree. These courses in conjunction with the general education requirements are sufficient to meet the educational outcomes of an industrial technology degree eligible for accreditation under the criteria of the National Association of Industrial Technology (NAIT). The program is designed to accept all courses that apply to the associate degree allowing us to create a seamless transfer process while maintaining the manufacturing flavor of the existing degree program.

2. Rationale.

   In 2005 the BSMET degree was approved as a spin-off of the Bachelor of Science in Engineering Technology - Mechanical Engineering Technology Concentration (BSET/MET). Subsequent curricular changes to the BSET/MET concentration focused on expanding access to the baccalaureate degree and improving the transfer process from community colleges consistent with Cherry Commission recommendations. Input from our Industry Advisory Board (IAB) addressed the need for more management type courses in conjunction with a technical curriculum. Implementation of these changes resulted in a curriculum that is more appropriately identified as Industrial Technology.

   Previous efforts to accommodate community college transfer students were hindered by a narrow focus on traditional engineering technology disciplines and perceived accreditation concerns. By shifting this focus to the broader discipline of industrial technology we can simultaneously expand access to a broader range of associate degrees to include applied technology as well as engineering technology. The formal recognition of a broader spectrum of technology based programs is entirely appropriate for a technological university and will further expand access to programs.

3. **Discussion of related programs within the institution and at other institutions.**

At Michigan Technological University:

The main difference between the Industrial Technology degree and existing engineering technology degrees is in the amount of math required, number of required business courses, and accrediting agency. The most similar degree program is the BS in Construction Management.

Other Institutions:

NAIT currently accredits a total of 103 Baccalaureate level programs (130 program/options) in 54 institutions and a total of 108 Associate level programs (184 program/options) in 29 institutions.

Summary:

The recent successful program startups in the School of Technology are by definition, Industrial Technology programs. The proposed program also has excellent potential for integrating with the Enterprise program. The relatively large number of universities and colleges with accredited industrial technology degrees and their reported successful placement of graduates support the proposition that there is a demand for graduates.

1. Curriculum design (refer to format of degree audit form).

   Name change only, no curricular revisions.

2. New course descriptions. (New Course Add Forms are needed for each course and will be processed upon final approval of program.)

   No new courses are required or proposed.

3. Additional resources required. No additional resources required.

   Name change only.

4. Accreditation requirements.

   NAIT accreditation.

5. Planned implementation date.

   August 2006.

Introduced in Senate: 18 January 2006
Adopted by Senate: 1 February 2006
Approved by Administration: 6 February 2006