# **University Senate of Michigan Technological University**

## Proposal 30-05

(Voting unit: Academic Senators)

#### Proposal to change

"Bachelor of Science in Engineering Technology with concentration in Mechanical Engineering Technology"

to

## "Bachelor of Science in Mechanical Engineering Technology"

1. General description and characteristics of program.

The School of Technology currently offers a Bachelor of Science in Engineering Technology with three concentrations: Construction Management Technology, Electrical Engineering Technology, and Mechanical Engineering Technology. This proposal would create a separate Bachelor of Science in Mechanical Engineering Technology (B.S.M.E.T.) degree. Separate proposals will similarly spinoff the Construction Management Technology (CMT) and Electrical Engineering Technology (EET) concentrations.

### 2. Rationale.

The School of Technology at Michigan Technological University currently offers Associate of Applied Science degrees (AAS) in Electrical Engineering Technology, Electro-Mechanical Engineering Technology, and Civil Engineering Technology and Bachelor of Science degrees (BS) in Computer Networking and System Administration, Surveying, and Engineering Technology. Currently the BSET degree serves as an "umbrella" for three *concentrations*: Electrical Engineering Technology (EET), Mechanical Engineering Technology (MET), and Construction Management Technology (CMT). Since these three fields of study are listed only as concentrations, they lack the distinction and visibility of stand-alone degree programs. For example, ASEE's <a href="Profiles of Engineering and Engineering Technology Colleges">Profiles of Engineering and Engineering Technology Colleges</a> does not recognize concentrations, leading the PEETC reader to believe that MTU does not offer any educational opportunities in EET. Similarly, the MTU internal database fails (in many cases) to distinguish between the various BSET students. The Dean's List only acknowledges the success of BSET students, recruiters have difficulty interpreting the generic BSET title, and at graduation CMTs, METs and EETs are all lumped together under the generic BSET heading. The lack of distinction between three totally separate disciplines truly results in tracking and identity problems spanning from initial enrollment through graduation.

Officially defining three explicit baccalaureate technology programs will enhance not only the recruitment of students, but will also serve to improve the employability of CMT, MET and EET students upon graduation. Additionally, the formal recognition of these programs will serve notice as to the diversity of programs within the School of Technology.

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

### At Michigan Technological University:

BSET with concentration in Construction Management Technology BSET with concentration in Mechanical Engineering Technology

#### Other Institutions:

With BS in Engineering Technology or BSET degrees:

- 10 colleges and universities nationwide with TAC/ABET accredited programs *In Michigan:*
- Lawrence Technological University

#### Other Institutions:

With BS in Electrical or Mechanical Engineering Technology:

- 48 colleges and universities nationwide with TAC/ABET accredited programs In Michigan:
- Wayne State University
- Ferris State University

Similar programs in Michigan with NAIT accreditation:

- Eastern Michigan University

#### Summary:

The relatively large number of universities and colleges with specific BS degrees in electrical or electronics engineering technology supports the proposition that having a separate BSMET degree provides better visibility than having it be a concentration under the BSET degree.

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

No curriculum design changes are required or proposed.

 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.

6. Additional resources required. (Additional information may be requested by the Senate Finance Committee.)

No additional resources are required or proposed.

7. Accreditation requirements.

TAC/ABET accreditation.

8. Planned implementation date. August 2005.

13 April 2005: Adopted by the Senate

20 April 2005: Approved by President Mroz

24 June 2005: Approved Board of Control