PROPOSAL 20-01

DEPARTMENT OF BIOMEDICAL ENGINEERING

The Senate supports the recommendation to create a Department of Biomedical Engineering as described below.

Executive Summary

This document proposes the establishment of a Department of Biomedical Engineering at Michigan Technological University. The Department will build on the success of the Center for Biomedical Engineering, which will be eliminated upon the establishment of the new department.

Prior to 1997, there was no structured program in biomedical engineering at Michigan Tech. A few students (1 - 2 per year, typically) would craft *ad hoc* biomedical engineering curricula under the "Bachelor of Science in Engineering" (BSE) program. Starting in the mid-90's, surging interest in biomedical engineering necessitated a more formalized programmatic structure. Since 1997, the biomedical engineering program at Michigan Tech has been administered by the faculty and staff of the Center for Biomedical Engineering (CBE), which was established with the help of a major grant from The Whitaker Foundation of Rosslyn, VA. The CBE has grown to include five full-time, tenure-track faculty members (a sixth will be added in 2001) and two staff members (one full-time, one half-time).

There is a nascent graduate program - faculty members in the Center advise graduate students enrolled in degree programs in biological sciences, mechanical engineering, electrical engineering, and materials science and engineering. The CBE is, effectively, a department; it has outgrown the emergent "Center" organizational structure.

The Department of Biomedical Engineering will administer the Bachelor of Science in Biomedical Engineering (BSBE) degree program and oversee the progress toward ABET accreditation of that program. The Department will also oversee the development of a graduate program in biomedical engineering. A proposal for a Master of Science in Biomedical Engineering (MSBE) is under development. The faculty of the Department of Biomedical Engineering will also participate in the development of an interdepartmental doctoral program (or EPD program) in biomedical engineering.

The Department of Biomedical Engineering will be closely allied with existing departments in the College of Engineering (ME-EM, Electrical and Computing, Materials Science and Engineering) and the College of Sciences and Arts (Biological Sciences). The new department will catalyze research, design and development with applications to human and animal medicine and physiology, health and safety. These areas of investigation are in the highest priority group under the University's draft strategic plan.

Please contact the Senate office for a copy of the subsequent pages.

Adopted by Senate: May 2, 2001 Approved by President: May 7, 2001