

# The Senate of Michigan Technological University

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## PROPOSAL 4-85

### PROPOSAL ON GENERAL EDUCATION

#### BACKGROUND:

In many instances the potential of the general education component to contribute to total educational objectives is not realized because the requirements in this area are incoherent, vaguely stated, and lack uniformity and purpose throughout the University. As a result, student selections often involve random combinations of courses selected from a large number of approved courses, mainly at the introductory level, with these choices dependent on convenience and accidents of scheduling. Given these circumstances, students often view general education requirements as a collection of "credit hurdles" that infringe on the time they need to devote to their major programs.

The objective of a university curriculum must be to provide students with the skills and perspectives necessary for lifelong learning. This requires emphasis on the acquisition of the ability to communicate effectively; the ability to analyze evidence, both expository and quantitative; the ability to use analytical tools; the ability to identify the knowledge, resources, and information necessary to solve problems. The emphasis should be on skills and abilities that can be generalized to a variety of situations and that will aid students in adapting to changing professional, social and personal circumstances. The teaching of occupational skills must be subordinated to the development of generalizable abilities.

When measured in terms of knowledge imparted, university curricula represent a series of choices and compromises. Recognition of these limitations draws attention to the important objectives of university educational programs, including:

- a principle-oriented education in the area of specialization.

- the development of the habits, skills, and basic foundations needed for continued education.

- the development of effective written and oral communication skills.

- exposure to literature, the arts, world cultures and social problems with a historical as well as a contemporary perspective.

- an appreciation for the methodologies, issues, and prospects, as well as the social impact, of the sciences and technology.

Achievement of these objectives will provide the basis for lifelong learning. This basis will equip students with the skills necessary to adapt to rapid technological progress. Without these, any highly specialized training and vocationalism will be useful only for a decreasing fraction of a working lifetime. Although vocationally useful learning may be a part of the curriculum, it must be supported by sound general education principles. Universities work with the desires of students to master a vocation while preparing them for lifelong development.

# PROPOSAL:

## General Education Statement

The University general education requirements, when combined with the major, major support courses, and electives, assures that each graduate has made significant progress toward becoming a truly educated person capable of lifelong learning. In particular, the purpose is to provide a means by which graduates will have:

1. developed the ability to reason clearly and logically, to find and critically evaluate information, to communicate effectively, and to perform quantitative functions;
2. acquired knowledge and understanding of their own physical and mental being, about the development and functioning of human society, about the physical world, and about the cultural endeavors and legacies of human civilization;
3. learned the principles, methodologies, value systems, and thought processes employed in human inquiry.

## General Education Requirements

The following minimum requirements apply to all baccalaureate degree programs except existing four-year programs which involve a full year of apprenticeship or internship away from the University. In many instances, a college, school, or department will place restrictions on the courses that may be used to satisfy these requirements. However, these restrictions must not violate the intent of the general education requirements. No courses or credits may be counted in more than one of the six categories except that three credits of the thematic studies group may count as Humanities or Social Sciences requirements.

### 1. Communications

Nine credits of written and oral communications.

### 2. Quantitative Knowledge

- a. Nine credits of science. At least one course must contain a laboratory component.
- b. Twelve credits of mathematics, statistics, logic, and/or computer science including at least three in mathematics/statistics and three in computer science.

### 3. Humanities

Nine credits among the arts, philosophy, literature, language, and foreign languages to be selected from at least two of these areas.

### 4. Social Sciences

Twelve credits dealing with social, political and economic behavior and institutions, human behavior, and their historical background including at least three credits of study in the area of American Governmental institutions.

### 5. Physical Education

Four credits in activities

## 6. Upper Division Thematic Studies

Nine credits of integrated thematic, or in-depth, study at the upper division (300 or 400) level to be chosen from one of a series of coherent course groupings. The courses in these groupings shall not be cognate to the student's major and will generally require prerequisite work.

The intent of this requirement is to provide the opportunity to study a particular theme area from a variety of disciplinary points of view, and/or to provide in-depth study in an academic area outside the major. These coherent course groupings will be based either within a traditional discipline, or on a unifying theme involving courses from several disciplines. Course groupings will evolve through the efforts of faculty who share common interests, although they may represent a variety of scholarly backgrounds. Successful implementation of this requirement will depend upon interaction and dialogue between individual degree-granting units and the faculty involved in teaching the courses.

### **Implementation and Administration**

The development of courses designed to meet the general education requirements and objectives shall be done by faculty in departments and schools with the appropriate expertise. These may be existing, revised or new courses.

A General Education Committee composed of academic faculty shall oversee the continued implementation of the General Education Requirements. This committee will monitor the general education program, interpret general education policy, propose necessary policy changes for adoption by the University, and ensure that general education has adequate support and visibility within the University structure and publications.

The initial General Education Committee will be composed of five faculty: two faculty appointed by the President of the University, two faculty appointed by the President from a slate of three nominees named by the Senate, and the Chair of the Curricular Policy Committee. One of the faculty appointed from those nominated by the Senate and one of the faculty appointed directly by the President shall be appointed for two-year terms, the other two faculty appointed shall be given one-year terms. In following years, one new member will be appointed by the President of the University and one new member will be appointed by the President from a slate of nominees named by the Senate. Each will be appointed for two-year terms. No person shall be appointed for more than two consecutive terms.

The Senate, shall, no later than May 1988, conclude an evaluation of these general education requirements and, in particular, the Upper Division Thematic Studies requirement. This evaluation shall consider the effectiveness of these requirements in meeting the objectives of general education. It shall also address any difficulties in implementation and the effects of the requirements on the overall curriculum.

**Adopted by Senate: 6 February 1985**

**Approved by Administration: 14 February 1985**