

# The University Senate of Michigan Technological University

## **PROPOSAL 13-07** (Voting Units: Academic)

### **MASTER OF SCIENCE IN APPLIED NATURAL RESOURCE ECONOMICS NAME CHANGE FOR THE MASTER OF SCIENCE IN MINERAL ECONOMICS DEGREE**

The proposal is to change the name of the Master of Science in Mineral Economics degree in the School of Business & Economics at Michigan Technological University to a Master of Science in Applied Natural Resource Economics degree.

#### Current General Program Description and Characteristics

1. The current Master of Science in Mineral Economics is designed to prepare persons with undergraduate degrees in technical fields or business for careers involving nonrenewable resources and related industries. The program requires 30 credit hours beyond the bachelor's degree. The program consists of a 15 credit hour core, 9 credit hours of approved electives, and a 6 credit hour thesis (Plan A). It is usually completed in 4-5 semesters.

#### 2. Rationale

The Master of Science in Mineral Economics began in 1983 on the recommendation of an external advisory group to provide opportunities for the faculty in the School of Business and Economics to be involved in graduate education and research initiatives at Michigan Technological University in mineral exploration and development. Over the years, this involvement in graduate education and research has grown beyond metals and energy to include other resources like water and the environment since the same skills are used and Michigan Tech's resource and environmental initiatives have expanded. In accordance, the requirements of the master's program have become more general to allow students the opportunity to focus on other resources besides nonrenewable resources. The requested name change would more accurately reflect the more flexible nature of the program and would make it easier to recruit students who have interests outside of nonrenewable resources.

#### 3. Discussion of Related Programs within the Institution and at other Institutions

Three other US universities have offered degrees in mineral economics since the 1980s, and all three have made name changes in recent years to reflect a broader focus. The Pennsylvania State University changed the name to Energy, Environmental, & Mineral Economics. West Virginia University combined its mineral economics program with other related programs to create a single Natural Resource Economics program. Colorado School of Mines changed its department name to the Division of Economics & Business and increased its degree offerings.

#### 4. Curriculum Design

A common core of analytical courses (statistics, finance, and economics)-15 credits

-Approved course in statistical methods, usually EC4200 Econometrics

-BA5400 Finance

-EC5300 Managerial Economics

-EC5400 Advanced Engineering Economics

-EC5600 Natural Resource and Environment Economics

Approved electives in specific field of interest (9 credits)

Plan A Master's thesis (6 credits)

Total hours: 30 credit hours

5. New Course Descriptions

None are proposed.

6. Additional Resources Required

None

7. Accreditation requirements

As a research economics degree requiring only one business course, it does not come under AACSB accreditation.

8. Planned Implementation Date

September 2007

**Introduced in Senate: 29 November 2006**

**Adopted by Senate: 13 December 2006**

**Approved by Administration: 22 December 2006**

**Approved by Board of Control: 4 May 2007**