

# The University Senate of Michigan Technological University

## **Proposal 11-09**

(Voting Units: Academic)

### **A Proposal for a Name Change in an Academic Program from “B. S. in Business Administration with a Concentration in Operations and Systems Management” to “B. S. in Operations and Systems Management”**

#### **1. Program Description**

The proposed Operations and Systems Management B.S. degree to be offered by the School of Business and Economics (SBE) is a spin-off of the current Bachelor of Science Degree in Business Administration (BSBA) with an Operations and Systems Management *concentration*. The proposal is to award a B.S. with a *major* in Operations and Systems Management. The BSBA was initiated at Michigan Technological University on February 25, 1955. Graduates are prepared for careers in industry, consulting, nonprofit management, or government. The BSBA currently offers concentrations in six areas: Accounting, Finance, Management, Marketing, Management Information Systems and Operations and Systems Management. All students in the BSBA program take a common set of core courses. The curriculum develops strong quantitative and analytical skills which prepare students for the constantly changing demands of a technology-oriented society, as well as the teamwork, leadership and planning skills needed to excel in organizations. The curriculum offers a strong foundation in science, mathematics, humanities, social sciences, and computer science during the first two years, a comprehensive common core of business and economics courses during the third year, and a focused concentration in a field of business during the fourth year.

#### **2. Rationale**

SBE graduates are currently labeled and marketed as having a degree (B.S.) with a major in business administration (BA), hence the BSBA degree. Thus, many of the SBE students who have an Operations and Systems Management concentration are unlikely to capture the attention of prospective employers. Having a B. S. degree with a major in Operations and Systems Management adds credibility and recognition to the B. S. degree and is consistent with other Michigan universities (Related Programs). We anticipate that having an Operations and Systems Management major will increase job placement rates at graduation.

#### **3. Related Programs**

Central Michigan University: Operations Management Major

Ferris State University: BS Operations and Supply Management Program

University of Michigan- Ann Arbor: BBA Operations and Management Science Concentration

University of Michigan- Flint: BBA Operations Management Concentration

#### **4. Projected Enrollment**

Currently, we have 3 students seeking an Operations and Systems Management concentration. Adopting an Operations and Systems Management major should increase this number due to higher job placement rates.

## 5. Scheduling Plans

The Operations and Systems Management B.S. will be a regular on-campus program offering.

## 6. Curriculum Design

The Operations and Systems Management B.S. retains the curriculum design currently in place for the BSBA with an Operations and Systems Management concentration. Two GPAs will be calculated: a cumulative (overall) GPA and a School GPA consisting solely of Business Administration (BA) and Economics (EC) courses.

### *Required CORE Courses*

|         |                              |           |
|---------|------------------------------|-----------|
| BA 1100 | Introduction to Business     | 3         |
| BA 1200 | IS/IT Fundamentals           | 3         |
| BA 2110 | Quantitative Problem Solving | 3         |
| BA 2330 | Accounting 1                 | 3         |
| BA 2340 | Accounting 2                 | 3         |
| BA 2500 | Business Law                 | 3         |
| BA 2700 | Business Problem Solving     | 3         |
| BA 3200 | IS/IT Management             | 3         |
| BA 3400 | Principles of Finance        | 3         |
| BA 3610 | Operations Management        | 3         |
| BA 3700 | Organizational Behavior      | 3         |
| BA 3800 | Principles of Marketing      | 3         |
| BA 4700 | Strategic Management         | 3         |
| EC 2001 | Principles of Economics      | 3         |
| EC 3300 | Industrial Organization      | 3         |
|         | <b>Credit Total</b>          | <b>45</b> |

### *Required Courses within major*

|         |                         |           |
|---------|-------------------------|-----------|
| BA 3600 | Quality Management      | 3         |
| BA 3620 | Project Management      | 3         |
| BA 4620 | Supply Chain Management | 3         |
| BA 4630 | Operations Strategy     | 3         |
|         | <b>Credit Total</b>     | <b>12</b> |

Choose 3 of the following:

|         |                                       |          |
|---------|---------------------------------------|----------|
| BA 3780 | Entrepreneurship                      | 3        |
| BA 3900 | Business Internship                   | 1 - 4    |
| BA 4950 | CenTILE Projects                      | 1-6      |
| BA 4600 | Management of Technology & Innovation | 3        |
| BA 4690 | Systems Thinking and Dynamic Modeling | 3        |
|         | <b>Credit Total</b>                   | <b>9</b> |

Technology Block 9 Advisor Approved Credits

**Credit Total 9**

*Mathematics requirements*

(MA 1030, College Algebra I and MA 1031

College Algebra II with Trig, or MA 1032

Data, Functions, & Graphs Plus) 4-6

and

(MA 1135, Calculus for Life Sciences or MA 1160

Calculus with Technology I) 4

and

MA 2720 Statistical Methods 4

**Credit Total 12-14**

*Lab Science Requirement*

BL / Biology , CH / Chemistry , FW / Forestry, GE / Geology , PH / Physics

**Credit Total 3-4**

*General education requirements*

UN 1001 Perspectives 3

UN 1002 World Cultures 4

UN 2001 Revisions 3

UN 2002 Institutions 3

EC 3100 International Economics 3

Humanities, Arts and Social Science Courses 12

**Credit Total 28**

**Total credits** required 128.

## **7. New Course Descriptions**

No new courses are being submitted as part of the proposed change.

## **8. Library and other Learning Resources**

The support of the J. R. Van Pelt and John and Ruanne Opie Library is currently sufficient.

## **9. Computing Access Fee:**

A basic computing access fee is paid by all SBE students and will continue under this major.

## **10. Faculty Resumes**

School of Business and Economics faculty resumes are found at <http://www.sbe.mtu.edu/cv/>

## **11. Available Needed Equipment**

All equipment required exists within the SBE labs and classrooms.

## **12. Program Costs**

No new costs are expected because the proposed change is a spin-off of an existing degree.

## **13. Space**

No new labs, classrooms or faculty space is required.

## **14. Policies, Regulations and Rules**

None are required.

## **15. Accreditation Requirements**

The BSBA is accredited by AACSB International. The process and criteria for maintaining accreditation is unaffected by the proposed change. The Operations and Systems Management, B. S. will be automatically accredited and subjected to periodic review by AACSB.

## **16. Internal Status of Proposal**

|   |                         |
|---|-------------------------|
| Faculty School of Business and Economics, | date approved 3/20/2009 |
| Dean School of Business and Economics,    | date approved 3/20/2009 |
| Provost,                                  | date approved           |
| University support units                  | date approved           |
| University senate,                        | date approved           |
| Academic Affairs Officers,                | date approved           |
| Board of Control                          | date approved           |

## **17. Planned Implementation date**

Fall semester 2009.

**Introduced to Senate: 01 April 2009**

**Adopted by Senate: 15 April 2009**

**Approved by Administration: 22 April 2009**

**Approved by BOC: 16 July 2009**