# The University Senate of Michigan Technological University

# Proposal 10-13

(Voting Units: Academic)

# Proposal for a Spin-Off from "B.S. in Management" to a "B.S. in Management with a Concentration in Supply Chain and Operations Management"

#### 1. Program Description

The current degree program B.S. in Operations and Systems Management (BSOSM) has a curriculum that emphasizes quantitative business problem solving and decision making. The emphasis is on both service and manufacturing industries. There is also heavy emphasis on the supply chain as recognized by manufacturers and operations management, which is more widely recognized by service providers.

The current program title is unique to the Michigan Technological University School of Business and Economics (SBE) and is not widely recognized. Because of a need to have a more contemporary and recognizable name, along with a general need to update the program curriculum, and because of lower enrollments in the current B.S. in Operations and Systems Management Major, a new concentration in the B.S. in Management called Supply Chain and Operations Management (SCOM) is being proposed.

#### 2. Rationale

#### Overview

This concentration in SCOM would be a "spin-off" of the existing B.S. in Operations and Systems Management. There are many employers who come to Michigan Tech to seek students whose primary emphasis or concentration is in Supply Chain and Operations Management. Because of the currently misaligned program title, employers tend to hire students from the manufacturing concentration in Mechanical Engineering, instead of hiring business students. Better recognition of the program by prospective employers would be achieved by changing the program name. The reason for not referring to the proposed program exclusively as Supply Chain Management is because service industries, which are the largest number of employers, are now moving more towards Supply Chain Management, but many still refer to this aspect of the business as Operations Management. Thus, the proposed name change would allow for the greatest potential for students to obtain employment upon graduation. Also, Supply Chain and Operations Management better reflects the breadth of the proposed degree. Adding a few new courses and updating some existing courses will better align this program with other universities and colleges offering similar programs.

#### Link to Strategic Plan

The "spin-off" degree program contributes to Michigan Tech's Strategic Plan by "Delivering a distinctive and rigorous discovery-based learning experience grounded in science, engineering, technology, sustainability, the business of innovation,..." (Michigan Tech Strategic Plan, <a href="http://www.mtu.edu/stratplan/">http://www.mtu.edu/stratplan/</a>). Additionally, this "spin-off" degree program supports the School of Business and Economics mission to "... integrate[s] the University's technological prominence with experience-based learning to develop leaders in global business and innovation ..." (School of Business and Economics Mission, <a href="http://www.mtu.edu/business/school/dean/mission-values/">http://www.mtu.edu/business/school/dean/mission-values/</a>). Management majors with a Concentration in Supply Chain and Operations Management are in great demand in both the service and industrial sectors. There are a few schools in Michigan that offer this program but because of their size or curricular focus are unable to provide the close working relationship with technology, science, and engineering students that Michigan Tech can provide.

Supply chain management focuses on the global coordination of resources, from the initial supplier to the final end user or customer. All companies, whether they are service or goods providers, are impacted by decisions associated with the supply chain. The management of inventory or supplies requires a concerted effort of multiple disciplines like accounting, finance, engineering, marketing, or human resources. For manufacturing companies, the majority of the cost is associated with all dimensions of production. Companies are highly dependent on the management of supplies, whether they end up in the final product or are need to manufacturing the goods. Procurement and purchasing, along with logistics and transportation, are important functions associated with supply chain management.

There are entry level positions as well as the opportunity to advance in the organization to become a supply manager or in the area of supplier development. This is a rapidly growing field and requires more breadth and depth of education and experience than the traditional purchasing positions of the past. An individual in this field can expect to be involved with many different aspects of the supply chain.

What Can You Do With a College Major in Management with a Concentration in Supply Chain and Operation Management? [1].

Supply chain and operations management professionals support every industry. There are a number of different positions they can pursue, depending on their interest and business acumen in the area of quantitative and business analytics. Individuals should possess strong analytical skills as well as the ability to work with a wide variety of different disciplines within an organization. They must embrace rapid changes and the ability to communicate through multiple channels. Much of the work today in this field focuses on the global market place which requires an understanding of cultural dimensions of decision making. There are needs for this skill set in small and large organizations.

For more information on supply chain and operations management, please consult the Guide to College Majors in Supply Chain Management at:

http://www.worldwidelearn.com/online-education-guide/business/supply-chain-management-major.htm Enrollment in BSOSM/BSBA with Concentration in Operations and Systems Management and Demand for Graduates by Employers Recruiting at Michigan Tech

The data below shows the positive enrollment growth

Fall 2009 1
Spring 2009 2
Fall 2010 6
Spring 2011 7
Fall 2011 12
Spring 2012 16 (differs from Banner because of corrections)
Fall 2013 25 (estimated and includes former BSBA and current BSOSM)

*Note:* Some of the earlier numbers are small because of the transition from B.S. in Business Administration with concentration in Operations and Systems Management. As of Spring 2012, there are 8 students still enrolled in the B.S. in Business Administration with concentration in Operations and Systems Management.

A memo of support from Jim Turnquist, Director of Career Services, regarding the demand for Majors in Management with a Concentration in Supply Chain and Operations Management is found at the end of this proposal.

In Spring 2012, Michigan Tech students majoring in the B.S. in Operations and Systems Management are participating in the pilot competition for the Project Management Institute. There are seven schools participating in the competition. Michigan Tech was the only school to field two teams this year. In addition to attracting students, this participation in the competition will increase recognition for Michigan Tech and also increase the number of recruiters of Michigan Tech School of Business and Economics graduates.

#### Notable Information

There are several notable points supporting the plans to create this concentration within the current major:

- a. Students in concentrations prior to 2003 focused on a combination of industrial marketing and management. However students sought jobs in either one of the two areas: industrial marketing or industrial management.
- b. Students sought two concentrations, typically in operations management and management information systems. They were not counted in the operations management concentration.
- c. Employers were somewhat confused by the title Operations and Systems Management, specifically, they confused it with Management Information Systems. Even though the two current majors are different, there was a lack of clarity. When given the opportunity to talk with employers, they felt that a B.S. in Management with a Concentration Supply Chain and Operations Management was a better title describing the degree.
- d. For three years there were minimal marketing materials for the former Operations Management and Operations and Systems Management concentration. When all concentrations were included on a single marketing piece, this concentration had been left off. The only reasons some students continued in the concentration was because of contact with faculty.
- e. One of the Operations and Supply Chain Management faculty taught mostly graduate courses and limited undergraduate offering. Given the past and current shortage, some of the recruitment typically conducted by faculty was sorely lacking. There has been some improvement as there is more attention on the undergraduate program.
- f. In the 1980s and 1990s and even in the initial re-establishment of the MSBA program in 2004-2006 (prior to changing to the MBA), there was heavy emphasis on operations management field and student numbers were up in this area. From the late 1990s to present, the field of operations management has become better known as Supply Chain and Operations Management.

The student advising group will need to more carefully classify students by Concentrations in the B.S. in Management. Communication to incoming students will ensure they are placed in the correct category from their initial enrollment.

Companies seeking graduates with this Concentration helps to attract new students and retain existing students. In the past two years, more than 30 companies have sought students in this Concentration, yet we do not graduate enough to meet existing demand. We are collaborating with Jim Turnquist, Director of Career Services, to ensure the curriculum meets the needs of future employers. Appendix A is a summary of the companies seeking students with this Concentration. It can be observed that the demand exceeds the supply of student available to fill permanent, internship, and cooperative education positions.

Comparison – Major (B.S. in Supply Chain and Operations Management) versus a B.S. in Management with a Concentration in Supply Chain and Operations Management Below are comparative points regarding the differences between a Major and a Concentration and why we propose a Concentration:

- Uncertain enrollments in School of Business and Economics curriculum. The risks associated with enrollment projections make offering the separate BSOSM major and supporting courses inefficient. Incorporating the major as a concentration will allow it to thrive as part of a robust degree program with higher enrollments.
- Four supply chain and operations management courses for a Concentration versus six supply chain and operations management courses for a Major. One of the courses can be taken in

Mechanical Engineering-Engineering Mechanics (MEEM 4650 Six Sigma Fundamentals) on alternating years when it cannot be taught with current SBE faculty.

- Electives can be offered in alternating years, whereas more required courses would have to be offered every year, which would require another faculty line.
- Leveraging of Management faculty resources and more efficient utilization with a concentration than a major.
- Higher utilization and efficiency equating to sections with larger enrollment with a concentration than a Major.
- Although we expect increases in enrollments, it is not expected for at least five years that there will be critical mass to have a Major and add another faculty line. Given these resource limitations, we do not believe it is possible to support a Major at this time.
- Flexibility by the operations and supply chain management faculty to teach 3-4 courses during the Summer semester allows us to have sufficient resources to offer a concentration. The courses offered during the summer will likely be offered online unless there is sufficient demand to support an on campus class. Resource wise we do not believe it is possible to offer a Major, even with offering courses during the summer.

#### Shelving of the BSOSM:

• If this program spin-off is approved, the current B.S. in Operations and Systems Management major will be shelved effective at the end of the 2012-2013. Current students will be allowed to complete the degree or move to the B.S. in Management with a Concentration in Supply Chain and Operations Management. Also, there will be no more student admits to this program.

#### 3. Related Programs

Michigan State University – Broad College of Business: Supply Chain Management Major (Top 10 program in country) – they heavily emphasize a split between Supply Chain Management and Marketing; SCOM emphasizes the supply chain and operations components together.

Western Michigan University: Haworth College of Business: Integrated Supply Management – this is an interdisciplinary degree with engineering. The MTU proposal focuses on all aspects of business.

Ferris State University: Operations and Supply Management Program – more emphasis is placed on operations and less on supply chain management.

Wayne State University: Global Supply Chain Management Major – this is a modification of their management majors.

Ferris State University: Logistics Management Major – this is a much narrower focus than proposed herein.

Kettering University: BS Business Administration with Concentration in Supply Chain Management – this is a concentration within business administration but not management.

University of Michigan – Dearborn: BBA Supply Chain Management – this is a Bachelor of Arts degree; our proposal and Michigan Tech's business programs are all Bachelor of Science programs, which are more relevant to business programs in a more technologically focused university.

#### 4. Projected Enrollment

There are currently 17 students enrolled in the B.S. in Operations and Systems Management major, with eight other students finishing the BSBA with concentration in Operations and Systems Management.

Enrollments are expected to continue to grow but not at a sufficient pace to offer a Major because of the uncertainty in how future students will select majors. Currently there are two faculty lines for this Operations and Systems Management major. Because we are able to leverage resources by becoming a Concentration in the B.S. in Management, which currently has seven faculty, we are better able to support the Concentration and demand from the students.

Targeted enrollment in the longer term is expected to approach 50-60 students, which is comparable to other majors in the School of Business and Economics. These numbers are for new incoming students and transfers from internal students.

2013-2014	30
2014-2015	35
2015-2016	40
2016-2017	45
2017-2018	50

*Note:* The increase will be as a result of actively seeking students internally for those students in engineering and computer science who may otherwise leave Michigan Tech. This will be accomplished through actively communicating and meeting with advisors in these units. Additionally, a greater awareness of career opportunities and collaboration with SBE outreach coordinator will help increase new student (freshman and external transfers).

#### 5. Scheduling Plans

The B.S. in Management with a Concentration in Supply Chain and Operations Management will be a regular on-campus program offering.

#### 6. Curriculum Design

The proposed spin-off of the B.S. in Management with concentration in Supply Chain and Operations Management retains most of the curriculum design currently in place for the B.S. in Operations and Systems Management with the exception of four new courses and two changed courses. Details of these changes are provided in 7. New course descriptions. The entire curriculum is appended to the end (See attached).

See attachments.

[curriculum flow chart and degree audit would appear here]

## 7. New Course Descriptions

Below are new/changed/deleted courses course titles and descriptions.

## **OSM 3150 - Supply Chain Management (New)**

An introduction to supply chain management to gain a perspective on integration and coordination issues. Topics include strategy, network design, facility design, sourcing, logistics, forecasting, inventory, relationship management, and global and sustainable supply chain management.

Credits: 3.0

**Lec-Rec-Lab:** (3-0-0)

Semesters Offered: Spring

Pre-Requisite(s): MA2720 or comparable statistics course and MA1135 or MA1160 or MA1161 AND

OSM3000

Note: It is anticipated that other SBE majors may enroll in this course.

## **OSM 3600 – Procurement and Supply Management** (New)

Addresses processes that facilitate the management of value added transactions and relationships between supplier and customer organizations. The course examines the management of the business purchasing function, including supplier selection and development, cost management, performance measures, buyer-supplier relationships, and negotiation.

Credits: 3.0

Lec-Rec-Lab: (3-0-0)

Semesters Offered: Fall

**Pre-Requisite(s):** MA2720 or comparable statistics course and MA1135 or MA1160 or MA1161

*Note:* It is anticipated that other SBE majors may enroll in this course.

#### **OSM 4150 – Advanced Supply Chain Management (New)**

A quantitative treatment of supply chain decision modeling topics with emphasis on network design, forecasting methods, aggregate planning, inventory control, and design of transportation systems. Includes the use of spreadsheet modeling tools to solve complex supply chain problems.

Credits: 3.0

Lec-Rec-Lab: (3-0-0) Semesters Offered: Fall

Pre-Requisite(s): BUS 2300, OSM 3150

*Note:* It is anticipated that other SBE majors may enroll in this course.

#### OSM 4200 – Advanced Project Management (Changed from BUS4950)

A project oriented, business development class focused on a real-life and advance applications of project management techniques. Students participate in a competition, prepare for the PMI CAPM exam, and sit for the exam to obtain certification.

Credits: 3.0

Lec-Rec-Lab: (3-0-0) Semesters Offered: Spring Pre-Requisite(s): OSM 3200

*Note:* It is anticipated that other SBE majors may enroll in this course. Also, because 50% of the students enrolled in the OSM 3200 course are from non SBE majors, it is anticipated that these students may enroll in this course.

#### **OSM 4700 – Logistics and Transportation Management (New)**

Focuses on the transportation and distribution services that support demand fulfillment from the receipt of customer orders to order fulfillment. Topics include customer service, order fulfillment, inventory, transportation costs and modes, facility design and operation, carrier selection, and negotiation.

Credits: 3.0

Lec-Rec-Lab: (3-0-0) Semesters Offered: Spring

Pre-Requisite(s): MA2720 or comparable statistics course and MA1135 or MA1160 or MA1161

*Note:* It is anticipated that other SBE majors and majors with emphasis in transportation may enroll in this course. There was a recent initiative to hire faculty in the Transportation discipline as a part of the Strategic Faculty Hiring Initiative (SFHI). The proposed Certificate in Rail Transportation Engineering plans to use this course as a requirement for the certificate.

The following courses have been cross-listed with Service Systems Engineering (SSE). They will be removed from the OSM course listings, but will remain as SSE courses:

### OSM 2100 Introduction to Industrial and Service Systems Engineering

**OSM 3400 Human Interactions in Service Systems** 

**OSM 3500 Service Systems Engineering** 

OSM 3730 Systems Dynamic and Design OSM 4300 Project Planning & Management for Engineers

**OSM 4750 Risk Analysis and Management** 

OSM 4760 Optimization Methods in Design and Decision Making

The following course will be deleted:

#### **OSM 4000 Supply Chain Management**

#### 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. This cost covers any software required for the new and existing courses.

#### 10. Faculty Resumes

School of Business and Economics faculty resumes are found at <a href="http://www.mtu.edu/business/school/faculty/">http://www.mtu.edu/business/school/faculty/</a>

Primarily faculty for major courses and concentration requirements include (links will produce each individual's webpage and from there links to each person's CV):

- Dr. Gregory A. Graman, Associate Professor, Operations and Supply Chain Management
- Dr. Sonia M. Goltz, Professor, Organizational Behavior
- Dr. Dana M. Johnson, Professor, Operations and Supply Chain Management
- Dr. Andre Laplume, Professor of Management
- Dr. Saurav Pathak, Rick and Jo Berquist Assistant Professor of Entrepreneurship and Innovation
- Dr. Latha Poonamallee, Assistant Professor, Organizational Behavior
- Dr. Manish Srivastava, Assistant Professor of Strategic Management and Innovation
- Dr. Tang Wang, Charles C. and John G. Gates Assistant Professor in Entrepreneurship and Innovation
- Mr. Roger Woods, Lecturer, Operations Management

#### 11. Available Needed Equipment

All equipment required exists within the SBE labs and classrooms.

## 12. Program Costs

No additional faculty will be required. No other costs will be incurred. [

## 13. Space

No new labs or classroom is required.

## 14. Policies, Regulations, and Rules

None are required.

## 15. Accreditation Requirements

The BSOSM is accredited by AACSB International. The process and criteria for maintaining accreditation is unaffected by the proposed change. The changing to a B.S. in Management with a Concentration in Supply Chain and Operations Management will be automatically accredited and subjected to periodic review by AACSB.

## 16. Internal Status of Proposal (tentative approval dates noted)

Faculty School of Business and Economics, September 27, 2012

Dean, School of Business and Economics, September 28, 2012

Provost, October 1, 2012

Deans' Council, October 17, 2012

University support units,

University Senate,

Academic Affairs Officers,

Board of Control December 14, 2012

## 17. Planned Implementation Date

Fall semester 2013

Audit Form for 2013-14

**Concentration Sequencing** 

Jim Turnquist support letter

# APPENDIX A: COMPANIES RECRUITING FOR MANAGEMENT MAJOR WITH CONCENTRATION IN SUPPLY CHAIN AND OPERATIONS MANAGEMENT

#### Fall 2011

Company	Majors and Concentrations Sought	Job Types
AAM	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECP TCSA SCS SCSY SSEN EEE EGN EGR EMSE EME	full-time intern
ALLETE - Minnesota Power	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM SCH ECE TCE TCMG EGR3 ECP TCSA SCS SCSY TEE TEET EEE TEM EPD EBS TET EGN EGR EMSE EEN EENS SSEP EGR4 SMA TINT TMD EME TMET SCCS	full-time intern
<u>ArcelorMittal</u>	BBA BMGT BOSM ECP SCS SSEN TEET EEE EMSE EME TMET	full-time
Auto-Owners Insurance Co.	ALL	full-time intern
BNSF Railway	BACC BNRE BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BME BOSM ECE TCE TCMG EGR3 TLS TSE EPD5 ECP TCSA SCS SCSY SSEN TEE TEET EEE TEM EPD EBS TET EGN EGR EMSE EEN EGE EGL EEM TINT TMD EME TMET MEEM	full-time intern

<u>Caterpillar Inc.</u>	EBE BMBA BOSM ECM ECE ECP SCS SSEN TEET EEE TET EGN EMSE EMG EEM TINT EME TMET	full-time intern
Charter Manufacturing	BACC BBA BMBA BEC BFIN BMGT BOSM TEET EGN EGR EMSE EEN EENS EEM EME TMET	full-time intern
Cinetic Automation / Cinetic DyAG	ALL	
Cooper Industries	BMGT BOSM TEET EEE TET EME TMET	full-time
DENSO International America	BACC BBA BFIN BMGT BMKT BOSM ECM ECP TCSA SCS SCSY SSEN EEE EMSE EME	со-ор
<u>Department of Defense</u>	ALL	full-time co-op
<u>Domtar Paper Company</u>	ALL	
Eagle Alloy	BOSM EBS TET EGN EMSE	intern
<u>Epic</u>	ALL	full-time
Generac Power Systems	BACC BBA BFIN BBA4 BMIS BMKT BOSM TEE TEET EEE TEM EPD EBS TET EGN EGR EEM TINT TMD EME TMET MEEM	full-time intern
General Electric	BMIS BOSM EMSE TINT TMD EME TMET	co-op intern
Internal Revenue Service	ALL	full-time
Menard Inc.	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECE TCE TCMG EPD5 ECP TCSA SCS SCSY SSEN TEE EEE TEM TET SMAG SMA TMD EME TMET	full-time
Michigan Technological University Graduate School	ALL	full-time
Michigan Technological University School of Business and Economics	ALL	
MicroEdge, LLC	BACC BBA BMBA BFIN BMGT BMIS BMKT BOSM EPD5 ECP TCSA SCS SCSY SSEN	full-time co-op intern
Mindovo	ALL	full-time co-op intern
Norfolk Southern	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECE TCE TCMG ECP TCSA SCS SCSY SSEN TEET EEE TEM EBS TET EGN TMD EME TMET	full-time co-op
Peace Corps	ALL	full-time
Polaris Industries, Inc.	BOSM EGR EMSE EEM EME	full-time co-op intern
Sentry Insurance	BACC BBA BMBA BEC BMIS BMKT BOSM EPD5 ECP TCSA SCS SCSY SSEN	full-time intern
STERIS Corporation	EBE BBA BMBA BMGT BOSM EEE EBS EEM TINT EME TMET	full-time
Union Pacific Railroad	BACC BBA BEC BMGT BMIS BMKT BOSM ECE TCMG ECP SCS SSEN TEET EEE EGN SMA EME	full-time
United States Steel	BBA4 BMGT BOSM ECM TCM ECE TEE TEET EEE EBS TET EGN EGR EMSE EEN EENS EGR4 EGE EGL EMG EEM EME TMET MEEM	full-time
Walmart	BACC BNRE BBA BMBA BEC BFIN BBA4	full-time intern

# BMGT BMIS BMKT BME BOSM

# **SPRING 2011**

SPRING 2011		
Company	Majors Sought	Job Types
Aleda E. Lutz VA Medical Center	ALL	full-time
ALLETE, Inc. / Minnesota Power	BACC BBA BMBA BEC BFIN BMGT BMKT BOSM ECP TCSA TEE TEET EEE EGN EGR EEN SSEP SMA TINT TMD EME TMET SCCS	full-time intern
ArcelorMittal USA	BACC BBA BFIN BMGT BMIS BOSM ECM ECP SCS SSEN TEET EEE EMSE EME TMET	full-time intern
Auto-Owners Insurance Co	ALL	full-time
Charter Manufacturing	BACC BBA BMBA BEC BFIN BMGT BOSM TEET EGN EGR EEM TINT EME TMET	full-time intern
<u>Department of Defense</u> <u>Civilian Personnel</u> <u>Management Service</u>	ALL	full-time intern
Donaldson Company	EBE BACC BBA BMBA BFIN BBA4 BMGT BMIS BMKT BOSM ECM ECP TCSA SCS SCSY SSEN EPD EBS TET EGN EGR EMSE EEN	co-op intern
<u>Epic</u>	ALL	full-time
<u>Greenheck Fan Corporation</u>	BMIS BOSM EEE EGN EEM EME	full-time co-op
Loram Maintenance of Way	ALL	full-time co-op intern
Menard Inc	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM TCMG ECP TCSA SCS SCSY SSEN TEET TET TINT EME TMET	full-time
Michigan Technological University - Graduate School	ALL	
Mindovo	ALL	full-time co-op intern
MTEC SmartZone	ALL	full-time co-op intern
Nextera Energy	ALL	full-time intern
Norfolk Southern	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECE TCE TCMG EGR3 ECP TCSA SCS SCSY SSEN TEE TEET EEE TEM EBS TET EGR TINT EME TMET	full-time co-op intern
One Prospect Technologies	BMIS BOSM ECP TCSA SCS SCSY SSEN EBS TET	full-time intern
Peace Corps	ALL	full-time
Roehl Transport	BBA BMBA BFIN BMGT BMIS BOSM ECP TCSA SCS SCSY SSEN SCCS SAH SHU SPSY SSS	full-time
School of Business and Economics	ALL	
Sentry Insurance	BACC BBA BMBA BEC BFIN BMGT BMIS BMKT BOSM TCSA SCSY SSEN	full-time
Social Security Administration	ALL	full-time
The Dow Chemical	ALL	full-time
<u>United States Marine Corps</u> <u>Officer Programs</u>	ALL	full-time intern

<u>Valeo Sylvania LLC</u>	ALL	full-time
<u>Walmart</u>	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM SASE BEC2 SEH SCCS SANT SAH SHU SPSY SSS	full-time intern

# Fall 2010

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Company	Majors Sought	Job Types
3M Company	BMIS BOSM ECM ECE ECP TCSA SCS SCSY SSEN EEE EME	full-time intern
<u>Alcoa</u>	BFIN BMGT BMIS BOSM EMSE EEN EME	full-time intern
Auto-Owners Insurance Company	ALL	full-time
<u>Caterpillar Inc</u>	BMBA BOSM ECE TCMG ECP TEET	full-time intern
Compuware Corporation	ALL	full-time
Continental AG	BACC BBA BMBA BFIN BMGT BMIS BMKT BOSM ECM ECP TCSA SCS SCSY SSEN EEE TEM EPD EBS TET EGN EGR EMSE SPE SPH SAP TMD EME TMET MEEM	co-op intern
<u>Cooper Industries</u>	BOSM TEET EEE TINT TMD EME TMET	full-time intern
Cummins Inc.	ALL	full-time co-op intern
Department of Defense/Civilian Personnel Management Service	ALL	full-time co-op
<u>Epic</u>	ALL	full-time
Freeport-McMoRan Copper & Gold	BACC BNRE BFIN BMGT BME BOSM ECM TCM SCH ECE TSE ECP TEE TEET EEE TEM EPD EBS TET EGN EGR EMSE EEN EGE EGL EMG SPE SMAG EEM TINT TMD EME TMET MEEM	full-time intern
General Motors	BACC BBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECM TCM SCH ECP TCSA TEET EEE EBS EGN EMSE EEN TINT EME TMET	full-time co-op intern
Kohler Co.	BACC BBA BMBA BFIN BBA4 BMGT BMIS BMKT BOSM ECM EEE TET EGN EMSE TMD EME TMET STA	full-time co-op
LHP Software, LLC	ALL	full-time
Loram Maintenance of Way, Inc.	BACC BBA BFIN BBA4 BMGT BMKT BOSM TCMG TEE TEET EEE TEM EEM EME TMET	full-time co-op intern
Menard, Inc.	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECE TCE TCMG EGR3 TSE ECP TCSA SCS SCSY SSEN TET EGN EGR EEM TINT TMD EME TMET	full-time intern
Michigan Tech Army ROTC	ALL	full-time intern
Michigan Technological University	ALL	
Michigan Technological University	ALL	full-time
MicroEdge, LLC	BACC BBA BMBA BFIN BMGT BMIS BMKT BOSM EPD5 ECP TCSA SCS SCSY SSEN SASE TET EGN EGR SPE	full-time

Mindovo, Inc.	ALL	full-time co-op
Minnesota Power/ALLETE	SMBB SBL BACC BNRE BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM SMBC ECM TCM SCH ECE TCE EGR3 EPD5 ECP TCSA SCS SCSY SSEN FWF TEE TEET EEE TEM EPD EBS TET EGN EGR EMSE EEN EENS SSEP EGR4 EGE EMG SPE SMAG SMA EEM TINT TMD EME MEEM SCCS	full-time intern
MTEC SmartZone	ALL	full-time co-op intern
Norfolk Southern	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM ECE TCE TCMG EGR3 EPD5 ECP SCS SCSY SSEN TEE TEET EEE EBS TET EGR	full-time co-op intern
Peace Corps	ALL	full-time
<u>Plexus Corp</u>	BOSM SSEN EEE EME	full-time co-op intern
Roehl Transport	BBA BMBA BFIN BMGT BMIS BMKT BOSM SHU	full-time
Sentry Insurance	BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM EPD5 ECP TCSA SCS SCSY SSEN SHU	full-time intern
Social Security Administration	ALL	full-time co-op intern
State of Michigan	ALL	full-time
<u>TranSystems Corporation</u>	BOSM ECE TCE TCMG EGR3 TLS TSE EEE TET EGN EGR EMSE EEN EENS SSEP EGR4 EGE EEM TMD EME TMET	full-time co-op intern
<u>United States Marine Corps</u> <u>Officer Programs</u>	ALL	full-time intern
Walmart	ALL	full-time co-op intern

# **SPRING 2010**

Company	Majors Sought	Job Types
Auto-Owners Insurance Company	ALL	full-time
<u>Caterpillar Inc</u>	BOSM EEE EBS EEN EEM EME TMET	full-time co-op intern
Compuware Corporation	BMIS BOSM ECP TCSA SCS SCSY SSEN	full-time
CSX Transportation	BMBA BOSM ECE TCE TCMG EGR3 TLS TSE FFEM FFR FWEM FWF TEET EEE EBS TET EGN EGR TINT EME TMET	full-time
<u>Department of Defense</u>	ALL	full-time co-op intern
<u>Drug &amp; Laboratory Disposal,</u> <u>inc.</u>	SMBB BMIS BOSM SMBC ECM TCM SCHI SCH SCHP ECP TCSA SCS SCSY	full-time intern
<u>Epic</u>	SMBB SBI SBL EBE SESC BACC BBA BMBA BEC BFIN BBA4 BMGT BMIS BMKT BOSM SMBC ECM TCM SCHI SCH SCHP ECE TCE EGR3 EPD5 ECP TCSA SCS SCSY SSEN FES FWEM TEE TEET EEE TEM EBS EGN EGR EMSE SMAG SMA SPH SAP EEM TINT	full-time

	EME TMET SFAT SCCS SRC STA STC SFSD SEMP SFTT SFET SANT SAH SSM SHU SPSY SSS	
Liberty Mutual	BBA BMIS BOSM ECP TCSA SCSY SSEN TEET EEE EBS TET EGN SMA EME TMET	full-time intern
Michigan Tech Army ROTC	ALL	full-time intern
Michigan Tech MBA	ALL	full-time
Michigan Technological University	ALL	
Mindovo, Inc.	ALL	full-time
MTEC SmartZone	ALL	full-time co-op intern
Norfolk Southern	BBA BMBA BMGT BMIS BOSM ECE TCE TCMG EGR3 ECP TCSA SCS SCSY TEET EEE EBS TET EGN EGR TMD EME TMET	full-time
Peace Corps	ALL	full-time
Plascore, Inc.	BACC BFIN BOSM ECM TCM EEE TET EGN EME TMET	full-time
Roehl Transport	BBA BMBA BEC BMGT BMIS BMKT BOSM SAH SHU SPSY SSS	full-time
Social Security Administration	ALL	full-time co-op intern
State Farm	ALL	full-time
Superior AmeriCorps	ALL	full-time
<u>U.S. Army</u>	ALL	full-time
<u>United States Marine Corps</u>	ALL	full-time intern
<u>US Navy</u>	ALL	full-time

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<sup>2012</sup>http://www.worldwidelearn.com/online-education-guide/business/supply-chain-management-major.htm