

Richard Koubek, President

# **Office Memo**

Date

Phone: (906) 487-2440 Office of the Provost and Senior Vice President for Academic Affairs Fax: (906) 487-2935 Jacqueline E. Huntoon, Provost & Senior Vice President for Academic Affairs TO: Richard Koubek, President FROM: DATE: November 15, 2021 SUBJECT: Senate Proposal 6-22 Attached is Senate proposal 6-22, "Minor in Construction Management," and a memo stating the Senate passed this proposal at their November 10, 2021 meeting. I have reviewed this memo and recommend approving this proposal. I concur\_\_\_\_X do not concur\_\_\_\_ with this recommendation. 11/16/21



# **University Senate**

**DATE:** November 11, 2021

**TO:** Richard Koubek, President

**FROM:** Sam Sweitz

**University Senate President** 

**SUBJECT:** Proposal 6-22

**COPIES:** Jacqueline E. Huntoon, Provost & Senior VP for Academic Affairs

At its meeting on November 10, 2021, the University Senate approved Proposal 6-22, "Minor in Construction Management". Feel free to contact me if you have any questions.

# The University Senate of Michigan Technological University

## **Proposal 6-22**

(Voting Units: Academic)

## "Minor in Construction Management"

1. February 24, 2021

#### 2. Proposer Contact Information:

Lynn Artman (<u>laartman@mtu.edu</u>), Director, Construction Management Program Audra Morse (<u>anmorse@mtu.edu</u>), Chair, Civil and Environmental Engineering Dean Johnson (<u>dean@mtu.edu</u>), Dean, College of Business

#### 3. Introduction

Goal: This minor will offer students, outside of Michigan Tech's Construction Management Program, the background to work in the Construction Industry at a management level immediately after graduation.

The students most likely interested in this minor would be civil, environmental, mining engineering, and business majors; however, students from other engineering disciplines, such as electrical and mechanical engineering might also be interested in the minor.

The following universities are some of those also offering a Minor in Construction Management:

Arizona State University
Cal Poly
Eastern Michigan University
North Carolina A & T State University
Syracuse University
University of Colorado
University of Minnesota
University of Maryland
University of Nebraska - Lincoln

#### 4. Rationale

The 1.3 trillion-dollar construction industry requires a diverse group of people to manage specific projects and construction companies themselves. These people include engineers and business majors of various backgrounds. The construction industry operates very differently than most industries, due to the nature of their work. As a result, they apply some unique principles, practices and procedures in the management of both the company and specific projects. This minor will prepare our graduates that may choose to work in the industry the ability to enter at a management level.

Student learning outcomes, where the American Council of Construction Educators (ACCE) is the accrediting body for the Construction Management Program, are as follows. Upon successful completion of the minor, student will be able to do the following:

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ACCE SLO 12 Compare and contrast different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

ACCE SLO 17 Interpret the legal implications of contract, common, and regulatory law to manage a construction project.

#### 5. Details:

I. Title of Minor: Construction Management

#### II. Catalog Description:

Gain valuable industry-specific skills for working in the construction industry, including estimating, safety, scheduling, contracts, project management, and project controls. Students are introduced to industry-standard technologies and up-to-date methods that will prepare them to be successful in the industry.

III. List of courses include course numbers, titles, credits and prerequisites:

Required – 10 credits	Number of	Student Learning	Prerequisite
	Credits	Outcome	
CEE 3332 Fundamentals of Construction Engineering	3		Sophomore Standing
CMG 4200 Construction Contracts	3	SLO 17	BUS 2200 and
			Junior Standing
CMG 4210 Construction Project Management	4	SLO 12	CEE 3332 or CMG 4200
			and Junior Standing
Choose an additional 9 credits from the list below:			
CMG 3265 Construction Cost Estimating (4 Credits)	3 or 4		CEE 3332
or CEE4333 Estimating and Planning (3 Credits)			Junior Standing
CMG 4120 Construction Planning and Scheduling	3		CMG 3265 or CEE 3332
or CEE 4344 Construction Scheduling			and Junior Standing
CMG 4300 Construction Finance and Accounting	3		ACC 2000 and EC 3400
			Junior Standing
CMG 4400 Construction Safety Management	3		Junior Standing
TOTAL REQUIREMENTS:	19		

### 6. New Course Descriptions

No new courses are being proposed for this minor.

#### **Estimated Costs**

No additional resources or costs are expected with the implementation of the minor.

#### 7. Planned Implementation Date

Spring 2022

F INDICATES COURSE IS OFFERED FALL SEMESTER

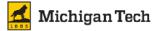
S INDICATES COURSE IS OFFERED SPRING SEMESTER

Su INDICATES COURSE IS OFFERED SUMMER SEMESTER

(C) INDICATES THE COURSE CAN EITHER BE TAKEN AT THE SAME TIME (CO-REQ) OR TAKEN PRIOR TO THE COURSE (PRE-REQ)

Fall Year 1 Spring

# Minor in CONSTRUCTION MANAGEMENT FLOWCHART



## Academic Year 2020-21

Fall Year 2 Spring Fall Fall Spring Year 3 Spring Year 4 JR. STDG UN1015 EC 3400 UN1025 ECONOMIC DECISION ANALYSIS (3 CREDITS) F, S JR STDN JR STDN ACC 2000 CMG 4400 CONSTRUCTION CMG 4300 SAFETY MGT CONSTRUCTION (3 CREDITS) FINANCE & ACC. (3 CREDITS) JR STDN JR STDN CEE 3332 or CEE 3332 CMG 4200 BUS 2200 CMG 4200 CMG 4210 (L) CONSTRUCTION CONSTRUCTION CONTRACTS PROJECT MGT (3 CREDITS) (4 CREDITS) JR STDN CMG 3230 or JR STDN CEE 3332 CEE 3332 SOPH STDN CMG 4120 (L) **CEE 3332** CMG 3265 CONSTRUCTION COST FUNDAMENTALS of CONSTRUCTION

PLANNING & SCHED.

(3 CREDITS)

**ESTIMATING** 

(4 CREDITS)

CONSTRUCTION ENGI.

(3 CREDITS)