

# MichiganTech

## SCHOOL OF TECHNOLOGY ACADEMIC PROGRAM INFORMATION

### Bachelor of Science in Construction Management

Construction Management graduates are hands-on problem solvers. They fill a critical need in business and industry as supervisors and managers who possess a combination of technical and managerial backgrounds. The ability of Tech graduates to contribute on the job from day one increases their value while providing them professionally rewarding careers with significant potential for advancement.

**Undergraduate enrollment:** 75

**Faculty:** 4

**Average class size:** 16

**Average lab size:** 12

**Courses with labs:** 5 of 17

**Credit hours required:** 127

**Advisor:** James C. Loman

**Phone:** (906) 487-2259

**Fax:** (906) 487-2583

**Email:** [jcloman@mtu.edu](mailto:jcloman@mtu.edu)

**Website:** <http://www.tech.mtu.edu>

**Student/professional organizations:**

- Associated General Contractors
- National Association of Home Builders
- Construction Enterprise

**Accreditation agency:** Pending

**Why get a degree in Construction Management?**

The vast majority of today's constructors are college educated. The most effective education for constructors, at all levels of managerial responsibility, is a meaningful synthesis of general education, math and science, construction design, construction techniques, and business management at the undergraduate level. Good employment opportunities are expected and employers prefer individuals who combine construction industry work experience with a bachelor's degree in construction science, construction management, or civil engineering. While the construction industry will always require many persons educated solely as architects, engineers, or in pure managerial skills, those planning a career in construction should strive for a baccalaureate degree in construction management.

**What will I learn?**

It is the breadth of the curriculum that clearly distinguishes construction management education from those of civil engineering, architecture, and business. A sampling of course topics from the Construction Management program follows:

- Communication, both oral and written
- Ethics
- Physics (lab based)
- Pre-calculus and Statistics
- Economics
- Basic Accounting
- Construction Accounting & Finance
- Principles of Management
- Business Law
- Construction Law
- Construction Project Management
- Computer Applications in Design, Estimating, Scheduling and Management
- Design Theory
- Analysis and Design of Construction Systems
- Construction Methods and Materials
- Construction Graphics, print reading and interpretation of architectural/engineering drawings and specifications
- Site Planning and Development
- Construction Surveying
- Estimating
- Planning and Scheduling
- Safety

# MichiganTech

## Construction Management

### What is Construction Management?

Construction is the most diversified industry in the country, accounting for approximately ten percent of the gross national product. A key player in this vast enterprise is the constructor, a term given to the leaders and managers in the construction industry having skills and knowledge, acquired through education and experience, to manage the planning, design, and construction of a project from inception to completion, for the purpose of controlling time, cost and quality. The constructor can be involved in the planning, design, and construction of many types of facilities including, but not limited to:

- commercial (i.e., office buildings and shopping centers);
- institutional (i.e., hospitals and schools);
- industrial (i.e., factories and refineries);
- residential (i.e., homes and apartments);
- civil (i.e., highways and utilities).

### Who will I work for?

Graduates from Construction Management programs are highly sought after by the construction industry and its suppliers. New graduates can expect excellent starting salaries with almost 100% placement. A constructor is primarily employed by or works as a general (or prime) contractor or a sub (or specialty) contractor. One can also find constructors working in other types of organizations such as construction management firms, architectural/engineering offices, material suppliers, governmental agencies, financial institutions, and for users of construction which have their own in-house construction management personnel. The following companies are typical of those that hire graduates of Construction Management programs:

- Bechtel
- Black & Veatch
- Centex Homes
- CSX Corporation
- Granite Construction
- Hensel-Phelps Construction Company
- Kiewit Construction
- M.A. Mortenson Company
- Pulte Homes
- TIC – The Industrial Company

### How much will I make?

National Public Radio (NPR) recently reported that "a major called Construction Management is booming." NPR stated that Construction Management has a "voracious job market and a median starting salary of \$46,000. Graduates say that figure often ranges from \$70,000 to \$100,000 after five to 10 years."

### What preparation do I need in high school?

In preparation for a degree in technology, the high school student should take at least three years of math and as much science, English and communications as possible. In addition, practical, hands-on courses and at least one year of hands-on computer experience is strongly recommended.

**Average ACT:** Composite 25.1; English 23.7; Math 26.2

**Average high school GPA:** 3.50

### Construction Industry Facts

*State of the Construction Industry 2002-2012 According to U.S. Department of Labor - Bureau of Labor Statistics*

- Construction is the only goods-producing sector in which employment is projected to grow.
- Construction employs approximately 6.9 million individuals annually.
- 80% of construction firms have fewer than 10 employees, only 1% employ 100 or more and .1% of construction firms employ over 500 individuals.
- From June 2003 to June 2004 construction added 193,000 employees -- nearly one out of seven new non-farming jobs.