WHAT IS CONSTRUCTION MANAGEMENT?

The Role of a Construction Manager

Construction managers plan, direct, and coordinate construction projects. These projects include commercial and industrial structures, homes and residential developments, roads, bridges, schools, hospitals, etc. Construction managers may be responsible for overseeing an entire project, several projects, or only part of a large-scale project.

Job Description

A construction manager (CM) may work for a general contractor, trade contractor, property owner, or developer. Construction managers participate in building projects, starting from the conceptual development stage and continuing through final construction, ensuring that projects are completed safely, on time, and within budget. They often work in concert with owners, designers, project stakeholders, and other industry professionals.

Construction managers are often responsible for determining the best way to construct projects, while using the most cost-effective methods. They must also accurately budget time, resources, and labor in order to meet established deadlines.

To accomplish this, construction managers use sophisticated estimating and scheduling methods, and specialized computer software. When construction managers become involved early in a project’s design, the project is more likely to meet the owner’s budget and schedule.

Job Site Experience

Whether working out of a main office or a field office, construction managers direct the activities of the project. They travel to the construction site often to ensure the project is going as planned. While they may work on-site, construction managers primary responsibilities are directing the work rather than performing hands-on construction.
Construction in the U.S.
Construction is one of the largest industries in the United States, contributing approximately 10% to the country's gross national product. Construction companies are always in need of capable construction managers in order to meet the demands of this booming industry.

Demand for Construction Managers
According to the Bureau of Labor Statistics, employment opportunities for construction managers are growing at a faster-than-average rate. This means that the number of job openings is expected to exceed the number of qualified individuals seeking to enter the occupation.

The construction industry is in need of competent personnel with professional training and backgrounds in managing employees, finances, materials, and equipment in order to construct quality buildings, safely, on time, and within budget.

Industry Preparation
Today's construction managers are required to know more than ever, with backgrounds in design, business, sustainable building, technology, and personnel management.

Entry-level Management Positions
BYU construction management graduates typically enter the workforce in the following management positions:
- Superintendents
- Estimators
- Schedulers
- Contract Administrators
- Project Engineers
- General or Trade Contractors
- Sales Representatives
- Insurance/Bonding Personnel
- Project Managers
- Real Estate Developers

Other Opportunities
Many construction management graduates continue their education in graduate programs such as construction management, law, business administration, public administration, and architecture. Some entrepreneurial students even go on to form their own companies.
WHY BYU’S CM PROGRAM?

Award-winning Excellence

Recognized as one of the top construction management programs in the nation, BYU has attracted the attention of industry professionals and organizations alike. A large part of the program's success is attributable to a consistently top-notch student body. Admission into the Construction Management Program is based upon a student's leadership, work experience, and academic achievement. One indicator of BYU's success is that student competition teams have won more than 25 first-place awards in regional and national construction competitions. In addition, student teams have also placed second or third on many occasions.

At BYU, students are the faculty's primary concern. Faculty members maintain an open-door policy and strive to provide the best education possible. The program's experienced faculty bring real-world experience and combine it with academic theory for an application-based learning experience in the classroom. Additionally, several faculty members have been awarded outstanding educator and lifetime achievement awards from national construction and academic organizations.

State-of-the-art Facilities

BYU's construction management students have access to the very latest in construction technology. A dual-screen computer lab is equipped with all of the necessary programs for building information modeling, scheduling, estimating, project management, construction accounting, and much more. The program also provides hands-on labs for concrete, electrical, and framing.

Student Clubs & Competition Teams

BYU has active student chapters of the Associated General Contractors (AGC), the Associated Builders and Contractors (ABC), the National Association of Home Builders (NAHB), the Design Build Institute of America (DBIA), and several student clubs, such as the Sustainable Build and Design Club, and the Outdoorsmans Club. All students are encouraged to join and participate in these organizations.

These clubs provide students with opportunities for professional involvement in leadership, national competitions, social activities, field trips, new technologies, and guest lectures. Student chapters also provide students with a great opportunity to serve the community by participating with organizations such as Habitat for Humanity.
Our student chapters have consistently performed in the top tier at national and regional construction competitions. Many students feel that their participation in student competitions is a capstone experience and a highlight of their education. Participating in the competition teams gives students the opportunity to work in small groups on real-life construction scenarios. Many students secure internships and jobs from their participation in these competitions.

Forging Industry Relationships
With years of construction management industry experience among them, the Construction Management Industry Advisory Committee includes leaders of top construction companies and construction-related associations.

Through semi-annual meetings with construction management faculty, the advisory committee helps maintain the program's strong ties to industry, and ensures that students are given the most up-to-date and industry-relevant information.

Undergraduate Curriculum
BYU's curriculum has been designed to equip students with the latest construction management techniques and computer skills, and to develop well-balanced and profession-oriented graduates. The program is designed to provide students with a broad background in construction technology, business, architecture, and engineering—with specific emphasis on management within the industry.

Course requirements include:
- Building Information Modeling
- Sustainable Building
- Soils & Equipment
- Construction Materials & Methods
- Business Management
- Estimating & Bidding
- Project Management
- Company Management
- Safety
- Construction Scheduling
- Concrete & Masonry Systems
- Electrical Systems
- Mechanical & Plumbing Systems
- Architectural Design
- Structures
- Construction Documents
- Construction Law
- Surveying
- Real Estate Principles & Development
Graduate Program

The Master of Science in Technology degree with an emphasis in Construction Management is designed for CM graduates or experienced construction managers who would like to either teach construction management at the university level or focus on research relating to the construction industry.

This degree can be completed in three semesters (generally one to two years depending on student commitment). Degree requirements include 24 hours of course work and 6 hours of thesis.

The CM master’s level courses include the following:
CM 545 — Construction Finance.
CM 600 — Trends and Issues in Managing Construction.
CM 626 — Real Estate Development.
CM 650 — Construction Company Development and Strategic Planning.

Additionally, students will choose elective courses from Business Management, Public Administration, or other programs as approved by the student’s graduate committee and also enroll in the School of Technology core masters courses.

Contact:
The construction management graduate coordinator is Mark Hutchings who can be contacted by email at: mark_hutchings@byu.edu.

Application Process

BYU’s Construction Management Program is a limited-enrollment program. Pre-professional construction management students are required to fulfill prerequisite courses, demonstrate work experience, and show leadership before being admitted into the professional program.

Applicants apply prior to the semester they prefer to begin the program and are notified of admittance in time to register. Due to limited enrollment requirements, all admitted construction management students are required to attend one spring or summer term after they have been admitted to the program.

To download the program application or for more information, visit the construction management website at www.byucm.org.

Construction Management Faculty

BYU Construction Management faculty members have advanced construction management education in addition to extensive industry experience. As skilled construction managers, they are dedicated to working with students in a positive environment.

Faculty members are dedicated to the development of students by providing a learning environment where leadership, character, integrity, confidence, and ethical behavior are nurtured.
Undergraduate & Graduate Advisement

With an excellent advisement and career placement center, construction management students at BYU have access to decades of experience and time-tested methods for ensuring career success. Whether you are an undergraduate or graduate-level construction management student, our office is prepared to assist you with everything from planning course schedules to honing study techniques. Our advisement center will keep you on track.

For contact information, visit the construction management advisement website at [www.et.byu.edu/sot/advisement](http://www.et.byu.edu/sot/advisement).

Job Recruiting & Placement

BYU construction management graduates are heavily recruited by top companies and enjoy successful careers in the United States and internationally. Graduates have taken positions in all facets of the construction industry, including, but not limited to, commercial, residential, and heavy highway.

During each semester, companies from all areas of the industry visit BYU to recruit students for their organizations. Through these networking and learning opportunities the Construction Management Program has maintained a placement rate of nearly 100% for graduates looking for jobs in the industry.

An online job board and recruiting forum helps employers find BYU construction management students who best fit their organization. The online job board is updated regularly to include job openings from Utah to Madagascar.

Typical employers of BYU’s Construction Management graduates include:

- Bechtel
- Big-D Construction
- Clyde Companies
- CW Driver
- Hensel Phelps
- Jacobsen Construction
- Layton Construction
- Magleby Companies
- Mortenson
- Okland Construction
- Pulte Homes
- Richmond American Homes
- Sahara, Inc.
- Sares-Regis Group
- Suffolk
- Swinerton, Inc.
- Webcor
- Weitz Company
Women in Construction Management

The Bureau of Labor Statistics reports that women comprise about 12 percent of the construction workforce today—and that number is only expected to rise. In fact, hundreds of thousands of women already work as construction managers across the nation. Women in BYU’s Construction Management Program excel in the classroom, in the industry, and in student competitions. With a degree from BYU, women construction managers are equipped to enter an industry that is often willing to work with the unique demands of family and home life.

Career Flexibility

Women interested in pursuing a career in construction management have more opportunities available to them now than ever before. With flexible career path options, financial incentives, and a fast-paced work environment, the construction industry is projected to fall far short of personnel needs within the next several decades. Now, more than ever, construction companies are recognizing the unique capabilities of women within the industry.

The BYU Education

Brigham Young University seeks to develop students of faith, intellect, and character who have the skills and the desire to continue learning and to serve others throughout their lives. Established in 1875, the university provides an outstanding education in an atmosphere consistent with the ideals and principles of its sponsor, The Church of Jesus Christ of Latter-day Saints.

Known for its academically minded and internationally experienced student body, its world-class teaching and its beautiful mountain location, BYU is also recognized for its extensive language programs, talented performing arts ensembles, outstanding sports programs, and devotion to combining solid scholarship with the principles of the restored gospel of Jesus Christ. BYU is one of the nation’s largest private universities.

Total Development

At BYU, the emphasis is on the development of the total person. Such a broadly prepared individual will not only be capable of meeting personal challenges and change but will also bring strength to others in the tasks of home and family life, social relationships, civic duty, and service to mankind.