Construction Systems Management

Construction systems management (CSM) is the management and operation of the business and technological aspects of the construction industry. The CSM major focuses on developing managerial skills to prepare for careers in coordinating and directing activities in a range of industry sectors including residential, commercial and heavy construction.

Pursuing Construction Systems Management at Ohio State
All freshman applicants are considered within a competitive admission process for the Columbus campus; find admissions criteria at go.osu.edu/admissions.

Admitted students who indicate the CSM major on their application directly enroll in the College of Food, Agricultural and Environmental Sciences. CSM students receive academic advising from a CSM faculty member and the academic program coordinator for the Department of Food, Agricultural and Biological Engineering.

Construction Systems Management Requirements
A minimum of 130 semester credit hours must be earned to receive a Bachelor of Science in Construction Systems Management from the College of Food, Agricultural and Environmental Sciences.

Specific topics in the CSM core courses include construction materials and methods, mechanical systems, electrical and lighting systems, surveying and site development, estimating, scheduling, structures, heavy construction, safety and health, project management, contracts and documents, and professional development. Additionally, students in the CSM major take supporting courses in business management and technical electives to enhance the managerial and technical skills necessary for success as construction project manager in any sector of the construction industry.

In order to receive a well-rounded education, students must also take courses to meet the General Education (GE) requirement. GE courses include math, science, writing and communication, social science and diversity, art, literature, and historical studies.

A minor is not required for students studying construction systems management, but construction management supporting courses in business management, accounting, business law, finance, human resources, and technical electives are requirements of the major. A student may elect to complete a minor in addition to these courses.

Program Educational Objectives
Upon completion of the program, the construction systems management graduate will be able to:

1. Plan and manage the construction of buildings and other infrastructure, and associated systems that meet all functional, safety, environmental, legal and economic requirements.
2. Follow the business principles and ethical practices necessary to build and maintain a viable company serving the construction industry.
3. Function effectively both as a team member and leader interacting successfully with clients, owners, government officials, the general public and construction industry professionals from diverse ethnic and cultural backgrounds.
4. Become an accomplished professional in the construction industry who continuously updates his or her technical and management skills and serves relevant industry associations and organizations.
5. Contribute technical and management expertise to the improvement of local communities through active participation in community activities, organizations and charities.

Co-Curricular Opportunities
The Construction Systems Management (CSM) Club offers students many networking opportunities with their peers and industry representatives both locally and nationally. Club activities include leadership development, community outreach, and service learning. Club meetings may feature guest speakers, industry-oriented programs, or social and recreational activities.

Upper-level students who maintain a record of superior academic achievements are invited to join Alpha Mu, the CSM national honorary student organization.

For more information, check these websites:

Food, Agricultural and Biological Engineering: fabe.osu.edu
College of Food, Agricultural and Environmental Sciences: cfaes.osu.edu/students
Ohio State: osu.edu
Admissions: undergrad.osu.edu
First Year Experience: fye.osu.edu
**Curriculum Sample**

This is a sample list of classes a student will take to pursue the CSM major. Since university students need more than specific education in a narrow field, they also will take classes to complete General Education (GE) requirements. Because GE courses come from a variety of academic areas of study, this course work helps students develop fundamental skills essential to collegiate success and allows them to tailor these courses toward their interests. Note: This sample curriculum represents one of several possible paths to a degree in construction systems management. Consult the department website, [fabe.osu.edu](http://fabe.osu.edu), for details.

**Freshman Year:**
- Food, Agricultural and Environmental Sciences Survey 1
- Introduction to Construction Systems Management 3
- Construction Materials and Methods I 3
- Graphics Presentations I 3
- First and second writing courses 6
- Entomology 4
- Math 3
- Physics 5
- Economics 3

**Total hours** 31

**Sophomore Year:**
- Construction Materials and Methods II 3
- Electrical and Lighting Systems 3
- Mechanical Systems for Buildings 3
- Construction Surveying and Site Development 4
- Construction Safety and Health 3
- Computer Assisted Problem Solving for Construction 3
- Professional Development I 2
- Data analysis 3
- GE courses 9

**Total hours** 33

**Junior Year:**
- Estimating 4
- Scheduling 4
- Structures for Construction Managers I and II 6
- Construction management supporting courses 8–11
- GE courses 10

**Total hours** 34–37

**Senior Year:**
- Construction Project Management 2
- Construction Contracts and Documents 2
- Heavy Construction Management 3
- Construction Management Capstone 3
- Professional Development II 2
- Construction management supporting courses 8–11
- GE courses 9
- Free electives 3

**Total hours** 32–35

**Revised June 2015.** Information subject to change. For the most up-to-date information on the construction systems management program, please visit [fabe.osu.edu](http://fabe.osu.edu).

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