

# Construction Systems Management

**C**onstruction Systems Management (CSM) is the study of the business and technological aspects of the construction industry. The program focuses on developing managers who can coordinate and direct activities involved in construction, from commercial facilities and residential subdivisions to roadway and bridge infrastructures. Students in this program will take courses in construction methods and materials, mechanical and electrical systems, construction control documents, safety, structural design, surveying, site development, estimating and scheduling, project management, communications, business management, marketing, accounting, finance, and business law. After graduation, excellent employment opportunities exist with a wide variety of construction companies locally, nationally, and internationally. Many of these starting positions have potential for rapid advancement.

## Pursuing Construction Systems Management at Ohio State

Criteria for admission to the CSM program and to the college include completion of the applicant's high school college preparatory program, superior class rank and/or grade point average, and acceptable performance on either the ACT or SAT. All freshmen applicants are considered within a competitive admission process for the Columbus campus. Admitted students who indicate the CSM major on their application will be directly enrolled 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 student must earn a minimum of 185 quarter credit hours to receive a Bachelor of Science degree in Construction Systems Management from the College of Food, Agricultural, and Environmental Sciences.

Required courses include the following:

- A survey course during the first quarter. The course teaches academic policies and procedures, university resources and services, career and advanced study opportunities in construction, academic requirements, and study skills helpful to new members of the university community.

- General Education Curriculum (GEC) requirements, such as writing and related skills, social sciences, arts and humanities, diversity, and contemporary issues.
- Major courses beginning with the principles of physical structures and systems, followed by core courses about fundamentals of managing a variety of construction systems from residential commercial and heavy-machines.
- Professional support courses in computer-aided drafting and business computing.
- A minimum of six sources from a designated list of offerings by the Fisher College of Business and the Department of Agricultural, Environmental, and Development Economics to develop a fundamental understanding of business management, finance, human resources, and business law prior to graduation.

## Co-Curricular Opportunities

The Construction Systems Management Student Club offers students opportunities to participate in professional and social activities with their peers both locally and nationally. Club meetings may feature guest speakers, industry-oriented programs, and/or social and recreational activities.

All Construction Systems Management students are required to complete at least one ten-week internship to gain practical, hands-on experience to augment on-campus course work. The College of Food, Agricultural, and Environmental Sciences' Career Services Office assists students in locating internship opportunities through career fairs held during autumn and winter quarters and through the Hire-a-Buckeye web site, [cfaes.osu.edu/career](http://cfaes.osu.edu/career).

Departmental scholarships up to \$1000 annually are awarded to students on the basis of academic achievement, leadership qualities and experiences, special interests noted on their scholarship application, home location, or for international study/research.

CSM major courses are taught in the Agricultural Engineering Building with 97,000 square feet of classrooms, teaching and research laboratories, student activity areas, computer facilities, and faculty and administrative offices.

**For more information, check these web sites:**

**Food, Agricultural and Biological Engineering:**  
[fabe.osu.edu](http://fabe.osu.edu)

**Ohio State:** [osu.edu](http://osu.edu)

**College of Food, Agriculture, and Environmental Sciences:**  
[cfaes.osu.edu](http://cfaes.osu.edu)

**Admissions:** [undergrad.osu.edu](http://undergrad.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 a specific education in a narrow field, they also will take classes to complete the General Education Curriculum (GEC). The GEC allows students to develop the fundamental skills essential for collegiate success across major programs. Course options satisfying the GEC often come from a variety of academic areas of study and allow students to tailor their GEC toward their own interests. Note: This sample curriculum represents one of several possible paths to a degree in Construction Systems Management. Consult the college web site, [fabe.osu.edu](http://fabe.osu.edu), for details.

### Freshman Year:

|                           |           |
|---------------------------|-----------|
| Survey course             | 1         |
| Biological sciences       | 5         |
| GEC (science)             | 5         |
| CSM Core                  | 4         |
| Economics                 | 5         |
| Engineering Graphics      | 3         |
| GEC (English composition) | 5         |
| GEC (social science)      | 5         |
| Math                      | 4         |
| Physics                   | 5         |
| <b>Total hours</b>        | <b>42</b> |

### Sophomore Year:

|                                        |           |
|----------------------------------------|-----------|
| Computer Applications for Construction | 4         |
| CSM Core                               | 18        |
| Data Analysis                          | 5         |
| GEC (second writing course)            | 5         |
| CSM Business Core                      | 4         |
| Oral Communications                    | 5         |
| Second course in science sequence      | 5         |
| <b>Total hours</b>                     | <b>46</b> |

### Junior Year:

|                       |           |
|-----------------------|-----------|
| CSM Core              | 25        |
| GEC (history)         | 5         |
| GEC (natural science) | 5         |
| CSM Business Core     | 8         |
| Electives             | 3         |
| <b>Total hours</b>    | <b>46</b> |

### Senior Year:

|                                           |           |
|-------------------------------------------|-----------|
| CSM Core and professional support courses | 15        |
| CSM Business Core                         | 4         |
| Accounting                                | 5         |
| GEC (literature)                          | 5         |
| GEC (social science)                      | 5         |
| GEC (visual and performing arts)          | 5         |
| Internship                                | 3         |
| Electives                                 | 3         |
| <b>Total hours</b>                        | <b>45</b> |

## Honor & Scholars Programs

Incoming first year students in the top 10 percent of their high school graduating classes with an ACT composite score of 30 or higher, or combined SAT Critical Reading and Math scores of 1340 or higher, are offered admission to the University Honors program. The honors program is designed to challenge superior-ability students. It is based on the concepts of flexibility in course selection, accelerated or advanced classes, and an honors research or scholarly project. Honors program students are given priority scheduling. Course flexibility enables the honors student to achieve breadth and depth in their academic program and to define academic growth in a more personal way. Honors courses are designated with an "H" before the course on student transcripts. Those who complete the honors program satisfactorily, meeting all requirements, will graduate "with distinction" in their area of specialization.

Already enrolled students may also apply to the Honors program by submitting an Individualized Honors Curriculum after earning at least a 3.5 CPHR after 30 hours at Ohio State. Student must maintain a minimum 3.5 CPHR to remain in the honors program.

Upper level students in the Construction Systems Management program who maintain a record of superior academic achievement at Ohio State are invited to become members of Alpha Mu, the Construction Systems Management national honorary student organization. Learn more at [fabe.osu.edu/asmc/alpha\\_mu.htm](http://fabe.osu.edu/asmc/alpha_mu.htm).

## Career Prospects in Construction Systems Management

CSM graduates are employed by building contractors and construction supply companies, companies and agencies providing construction materials and services, or they may be self-employed as contractors, consultants, or owner/operators of construction businesses in the residential, commercial, or heavy highway/infrastructure sectors of the construction industry.

CSM majors are among those graduates of the College of Food, Agricultural, and Environmental Sciences who are offered starting salaries ranging from \$35,000 to over \$60,000, depending on the candidate's qualifications, experience, and future locations. Salary offers made to CSM graduates are consistently some of the highest starting salaries offered to graduates from this college.

**Revised June 2009.** 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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