

Bachelor of Science in Construction Systems Management Major: Construction Systems Management

This program specializes in the management and operation of the business and technological aspects of the construction industry. Students develop managerial skills to prepare them for a career in coordinating and directing activities in a range of industry sectors including residential, commercial, and heavy construction. Students in this major will complete a minimum of 130 hours outlined as follows.

| General Education Requirements | | |
|--|--|--------------|
| Requirement | Course Options | Hours |
| GE Launch Seminar | GENED 1201 | 1 |
| Writing and Information Literacy | Student Choice | 3 |
| Mathematical & Quantitative Reasoning/Data Analysis | Major requirement: MATH 1148 * (or Student Choice – see below) | 4 |
| Literary, Visual and Performing Arts | Student Choice | 3 |
| Historical & Cultural Studies | Student Choice | 3 |
| Natural Science | Major requirement: PHYSICS 1200 * (or Student Choice – see below) | 5 |
| Social & Behavioral Sciences | Major requirement: AEDECON 2001 or ECON 2001.01 * (or Student Choice – see below) | 3 |
| Race, Ethnic and Gender Diversity | Student Choice | 3 |
| Theme: Citizenship for a Diverse & Just World^a | Student Choice | 4-6 |
| Theme: Student Choice^a | Student Choice | 4-6 |
| GE Reflection | GENED 4001 | 1 |
| General Education Credit Hours: | | 34-38 |

* Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

| B.S. in Construction Systems Management Degree Requirements | | |
|---|---|-----------|
| Requirement | Course Options | Hours |
| College & Department Survey | FAES 1100 (0.5) & CONSYSM 1100 (0.5) | 1 |
| Oral Expression | AGRCOMM 3130 or COMM 2110 | 3 |
| Additional Science | EARTHSCI 1121 & 1200 | 4 |
| Internship | FAES 3191 & CONSYSM 3191 | 2 |
| Credit Hours: | | 10 |

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

| Major Supporting Coursework | | |
|-----------------------------|--|----------|
| Requirement | Course | Hours |
| Soil Science | ENR 3000 & 3001 | 4 |
| Data Analysis | COMLDR 3537, AEDECON 2005, ANIMSCI 2260, HCS 2260, ENR 2000, or STAT 1450 | 3 |
| Credit Hours: | | 7 |

| Major Coursework | | |
|---------------------------------------|---|-----------|
| Course | Title | Hours |
| CONSYSM 2205 | Intro to Construction Systems Management | 3 |
| CONSYSM 2210 | Graphic Presentation | 2 |
| CONSYSM 2220 | Information Technology for Construction | 3 |
| CONSYSM 2240 | Construction Materials & Methods I | 3 |
| CONSYSM 2241 | Construction Materials & Methods II | 3 |
| CONSYSM 2305 | Professional Development I | 2 |
| CONSYSM 2310 | Electrical & Lighting Systems for Buildings | 3 |
| CONSYSM 2345 | Mechanical Systems for Buildings | 3 |
| CONSYSM 2440 | Construction Surveying & Site Development | 4 |
| CONSYSM 2600 | Construction Safety and Health | 3 |
| CONSYSM 3450 | Estimating | 4 |
| CONSYSM 3451 | Scheduling | 4 |
| CONSYSM 3545 | Structures for Construction Managers I | 3 |
| CONSYSM 3546 | Structures for Construction Managers II | 3 |
| CONSYSM 4605 | Professional Development II | 1 |
| CONSYSM 4641 | Construction Project Management | 2 |
| CONSYSM 4642 | Construction Contracts and Documents | 3 |
| CONSYSM 4660 | Heavy Construction Management | 3 |
| CONSYSM 4900 | Construction Management Capstone | 3 |
| CSM Major Electives: See pg. 2 | | 18 |
| Credit Hours: | | 73 |

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|-----------------------------------|--------------|
| General Education | 34-38 |
| Degree Requirements | 10 |
| Major Supporting Courses | 7 |
| Major | 73 |
| Open Electives | 2-6 |
| Minimum Total Credit Hours | 130 |

| CSM Electives (18 credit hours) | | |
|--|--|---|
| Management (choose one) | | |
| AEDECON 3101 | Principles of Agribusiness Management | 3 |
| BUSMHR 3100 | Foundations of Management and HR | 3 |
| Accounting (choose one) | | |
| AEDECON 2105 | Managerial Records and Analysis | 3 |
| ACCTMIS 2200 | Introduction to Accounting I | 3 |
| ACCTMIS 2000 | Foundations of Accounting | 3 |
| Business Law (choose one) | | |
| AEDECON 3170 | Agribusiness Law | 3 |
| BUSFIN 3500 & 4510 | Legal Environment of Business (1.5) & Legal Business Issues (1.5) – <i>both required</i> | 3 |
| Select 9 hours from the options below, at least one in each category: | | |
| Business Electives | | |
| ACCTMIS 2300 | Introduction to Accounting II | 3 |
| AEDECON 3102 | Principles of Agribusiness Marketing | 3 |
| BUSML 3150 | Foundations of Marketing | 3 |
| BUSML 3241 | Intro to Entrepreneurial Marketing | 3 |
| AEDECON 3103 | Principles of Agribusiness Finance | 3 |
| BUSFIN 3120 | Foundations of Finance | 3 |
| BUSFIN 3290 | Foundations of Entrepreneurial Finance | 3 |
| BUSFIN 3400 | Introduction to Real Estate | 3 |
| BUSFIN 4412 | Real Estate Law | 3 |
| BUSOBA 3130 | Foundations of Operations Management | 3 |
| BUSMHR 3510 | Innovation and Entrepreneurship | 3 |
| AEDECON 3160 | Human Resource Mgt in Small Business | 3 |
| COMLDR 3530 | Foundations of Pers. And Prof. Leadership | 3 |
| COMLDR 4430 | Leadership in Teams and Community | 3 |
| Technical Electives | | |
| CONSYM 5670 | Green Bldg. and Sustainable Construction | 3 |
| CONSYM 5680 | Constr. Renovation and Demolition | 3 |
| GEOG 5210 | Fundamentals of GIS | 3 |

Policies and General Requirements for Degree

- A minimum of **130** total credit hours. (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075; do not count toward the 130-hour minimum requirement for the BS in Construction Systems Management)
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ♣ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major-supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students pursuing a B.S. in CSM must complete an internship of 2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: <https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation>**

4-Year Course Plan B.S. in Construction Systems Management

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis.

| Freshman Year | Autumn Semester | | | Spring Semester | | |
|--|----------------------------------|----------------------------------|-----------|----------------------------------|------------------------------------|-----------|
| Benchmarks | Course/Requirement | Course Name | Hours | Course/Requirement | Course Name | Hours |
| -Complete Math requirement -Complete at least one science -Complete GE WIL Hours: 32 | FAES 1100 | College Survey | .5 | CONSYSTM 2240 | Const. Mat. & Methods I | 3 |
| | CONSYSTM 1100 | Dept Survey | .5 | CONSYSTM 2210 | Graphic Presentation | 2 |
| | MATH 1148 | College Algebra | 4 | GE: WIL | Choose from GE options | 3 |
| | CONSYSTM 2205 | Intro to Construction Management | 3 | PHYSICS 1200 | Mechanics, Kinetics, Fluids, Waves | 5 |
| | GE: SBS AEDECON 2001 | Prin. of Food & Res. Econ. | 3 | ENR 3000 & 3001 | Soil Science | 4 |
| | GE: Hist. & Cultural | Choose from GE options | 3 | | | |
| | GENED 1201 | GE Launch Seminar | 1 | | | |
| | Total: | | 15 | | Total: | 17 |
| Sophomore Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks | Course/Requirement | Course Name | Hours | Course/Requirement | Course Name | Hours |
| -Complete three science courses by the end of this year -Begin to consider an internship location Hours: 65 | CONSYSTM 2241 | Const. Mat. & Methods II | 3 | GE: Theme Choice #1 ^b | Choose from GE options | 3 |
| | GE: Lit, Vis and Perf Arts | Choose from GE options | 3 | AEDECON 2005 ^a | Data Analysis for Agribus. | 3 |
| | CONSYSTM 2310 | Electrical & Light. Systems | 3 | CONSYSTM 2345 | Mech. Systems for Bldgs. | 3 |
| | CONSYSTM 2305 | Prof. Development I | 2 | CONSYSTM 2440 | Constr. Survey & Site Dev. | 4 |
| | CONSYSTM 2220 | IT for Construction | 3 | CONSYSTM 2600 | Const. Safety & Health | 3 |
| | AGRCOMM 3130 | Oral Communication | 3 | | | |
| | Total: | | 17 | | Total: | 16 |
| Junior Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks | Course/Requirement | Course Name | Hours | Course/Requirement | Course Name | Hours |
| -Apply to graduate -Secure internship Hours: 99 | CONSYSTM 3450 | Estimating | 4 | CONSYSTM 3451 | Scheduling | 4 |
| | CONSYSTM 3545 | Structures for Const. I | 3 | CONSYSTM 3546 | Structures for Const. II | 3 |
| | GE: R, E, G, Div. | Choose from GE options | 3 | EARTHSCI 1121 & 1200 | The Dynamic Earth | 4 |
| | GE: Citizenship ^b | Choose from GE options | 4 | AEDECON 3170 ^a | Agribusiness Law | 3 |
| | AEDECON 2105 ^a | Managerial Records | 3 | Open Elective | | 1 |
| | Total: | | 17 | | Total: | 15 |
| Senior Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks | Course/Requirement | Course Name | Hours | Course/Requirement | Course Name | Hours |
| -Meet graduation requirements -Meet with a Career Services Advisor Hours: 99 | CONSYSTM 4641 | Const. Project Mgmt. | 2 | CSM 4900 | Capstone | 3 |
| | CONSYSTM 4642 | Const. Contracts/Docs | 3 | BUSML 3241 ^a | Entrepreneurial Marketing | 3 |
| | CONSYSTM 4605 | Prof Dev II | 1 | Open Elective | | 3 |
| | CONSYSTM 4660 | Heavy Const. Mgmt. | 3 | CONSYSTM 5670 ^a | Green Bldg. & Sust. Const. | 3 |
| | GE: Theme Choice #2 ^b | Choose from GE options | 3 | CONSYSTM 5680 ^a | Cont. Renov. & Demo. | 3 |
| | CONSYSTM 3191 | Internship | 2 | GENED 4001 | GE Reflection | 1 |
| | FAES 3191 | Internship | 0 | | | |
| | AEDECON 3101 ^a | Prin. of Agribus. Mgmt. | 3 | | | |
| Total: | | 17 | | Total: | 16 | |
| Total credit hours for Bachelor of Science in Construction Systems Management Degree: 130 | | | | | | |

^a One possible course from approved major requirement that has multiple options, as outlined in corresponding Degree Requirements document.

^b Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol on the Degree Requirements document.

4-Year Completion Checklist

B.S. in Construction Systems Management

| Freshman Year | Autumn Semester | | | Spring Semester | | |
|---|--|---|---------------------------|-----------------|--------|--|
| Benchmarks <input type="checkbox"/> Complete Math requirement <input type="checkbox"/> Complete at least one science <input type="checkbox"/> Complete GE WIL Hours: _____ | Course/Requirement FAES 1100 CONSYSM 1100 | ✓ | Course/Requirement | ✓ | Notes: | |
| Sophomore Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks <input type="checkbox"/> Complete three science courses by the end of this year <input type="checkbox"/> Begin to consider an internship location Hours: _____ | Course/Requirement | ✓ | Course/Requirement | ✓ | Notes: | |
| Junior Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks <input type="checkbox"/> Apply to graduate <input type="checkbox"/> Secure internship Hours: _____ | Course/Requirement | ✓ | Course/Requirement | ✓ | Notes: | |
| Senior Year | Autumn Semester | | | Spring Semester | | |
| Benchmarks <input type="checkbox"/> Meet graduation requirements <input type="checkbox"/> Meet with a Career Services Advisor Hours: _____ | Course/Requirement | ✓ | Course/Requirement | ✓ | Notes: | |
| Total credit hours for Bachelor of Science in Construction Systems Management Degree 130 | | | | | | |
