Construction Science and Management

120 credit hours total

YEAR 1

FALL

***MATH 150 (3)**
Plane Trigonometry
KSC-3

***ECON 110 (3)**
Principles of Macroeconomics
KSC-5

DEN 160 (1)
Engineering Orientation

***ENGL 100 (3)**
Expository Writing I
KSC-1

***Elective (3)**
Arts and Humanities
KSC-6

CNS 010 (0)
New Student First-Year Workshop 1
PR/CO: DEN 160

(13 credit hours)

SPRING

***PHYS 113 (4)**
General Physics I
KSC-4
PR: MATH 150 ≥C

CNS 220 (2)
Construction Materials
PR/CO: ARE 010 or CNS 010 DEN 160

CE 212 (3)
Elementary Surveying Engineering
PR: MATH 150 ≥C

***ENGL 200 (3)**
Expository Writing II
KSC-1
PR: ENGL 100 ≥C

***COMM 106 (3)**
Public Speaking
KSC-2

CNS 012 (0)
New Student First-Year Workshop 2
PR/CO: DEN 160

(15 credit hours)

YEAR 2

FALL

CNS 200 (2)
Computer Applications in Engineering and Construction
PR: DEN 160, MATH 150, SO standing

CNS 210 (1)
Graphic Communication I
PR/CO: DEN 160, CNS 220

CNS 231 (3)
Statics A
PR: MATH 150, PHYS 113 both ≥C

ACCTG 231 (3)
Introduction to Managerial Accounting

MANGT 220 (3)
Principles of Management

***Elective (3)**
Social and Behavioral Sciences
KSC-5

(15 credit hours)

SPRING

CNS 241 (3)
Strength of Material and Analysis
PR: CNS 231 ≥C

CNS 242 (1)
Strength of Materials Lab
PR/CO: CNS 241

CNS 321 (3)
Graphic Communications II
PR: CNS 210, 220 both ≥C, PR/CO: ARE 010 and 012 or CNS 010 and 012

CNS 330 (3)
Site Construction
PR: CE 212, CNS 200, 210, 220, ENGL 200, PHYS 113 all ≥C

MANGT 230 (3)
Business Law I

***Elective (3)**
Arts and Humanities
KSC-6

(16 credit hours)

YEAR 3

FALL

CNS 310 (2)
Introduction to Building Information Modeling
PR: CNS 200, 321 both ≥C

CNS 325 (3)
Construction Documents
PR: CNS 321 ≥C

CNS 440 (3)
Construction Methods and Equipment
PR: CNS 321, 330, COMM 106, ACCTG 231 all ≥C
PR/CO: CNS 241

CNS 524 (3)
Steel and Timber Construction
PR: CNS 241 ≥C

CNS 535 (3)
Electrical and Lighting
PR: CNS 321 ≥C

CNS 550 (2)
Construction Safety
PR/CO: CNS 535, 440

(16 credit hours)

SPRING

CNS 542 (1)
Ethics and Professional Standards
PR/CO: CNS 440 ≥C

CNS 641 (3)
Construction Estimating
PR: CNS 325, 440 both ≥C
CO: CNS 645 ≥C
PR/CO: CNS 642

CNS 642 (3)
Construction Management
PR: CNS 440 ≥C

CNS 645 (3)
Construction Scheduling and Cost Control
PR: CNS 325, 440 ≥C
CO: CNS 641
PR/CO: CNS 642

ENGL 417 (3)
Written Communication for the Workplace
PR: ENGL 200

***Elective (3)**
Institutional
KSC-7

(16 credit hours)

YEAR 4

FALL

CNS 510 (2)
Technology for Management of the Construction Process
PR: CNS 310, 641, 642, 645 all ≥C

CNS 534 (3)
Heating and Air Conditioning
PR: CNS 321 ≥C

CNS 536 (3)
Water Supply and Plumbing
PR: CNS 321 ≥C

CNS 643 (3)
Preconstruction Services/Design Build
PR: CNS 641, 642, 645 ≥C

CNS 646 (2)
Construction Financial Management
PR: CNS 641, 642, 645 ≥C

▲Elective (2)
Professional

(15 credit hours)

SPRING

CNS 528 (3)
Concrete and Masonry Construction
PR: CNS 241 ≥C

CNS 660 (3)
Construction Operations
PR: CNS 542, 641, 642 645 all ≥C
PR/CO: CNS 510, 550, 643, 646

MANGT 530 (3)
Labor Relations and Negotiations
PR: MANGT 220 ≥C

▲Elective (2)
Professional

***Elective (3)**
Institutional
KSC-7

(14 credit hours)

KANSAS STATE UNIVERSITY | Carl R. Ice College of Engineering

KEY

- = Prerequisite for another course
- PR = Prerequisite requirement
- PR/CO = Concurrent or prerequisite requirement
- * = K-State Core (KSC) course
- ▲ = See department approved electives
- ● = Only offered in the semester shown

Degree map is for advising purposes only. Students are responsible for complying with University Catalog requirements.

Construction Science and Management Curriculum Notes

A letter grade of C or better is required for all prerequisite courses prior to taking subsequent departmental and non-departmental prefix courses. A letter grade of C or better is required for all graded departmental prefix courses applied to the degree program.

MATH 220 Analytical Geometry and Calculus I may substitute for MATH 150.

Professional Electives

Professional electives are to be selected from current approved departmental lists. More information can be found at **are-cns.k-state.edu/undergrad/cns** .

K-State Core

The K-State Core (KSC) is the university's version of the systemwide general education framework established by the Kansas Board of Regents.

KSC requirement 1 – English (6 hours)
KSC requirement 2 – Communications (3 hours)
KSC requirement 3 – Math and Statistics (3 hours)
KSC requirement 4 – Natural and Physical Sciences (4-5 hours
KSC requirement 5* – Social and Behavioral Sciences (6 hours)
KSC requirement 6* – Arts and Humanities (6 hours)
KSC requirement 7 – Institutional Electives (6 hours)

To view course lists for each requirement, visit **k-state.edu/general-education** .

**Requires two courses from two subject areas.*