

# Western Carolina University, Undergraduate Construction Management Program Public Information

## **Strategic Plan:**

### **Our Mission:**

To employ a construction industry focus to improve lives by educating students to be industry-ready leaders and by providing thought leadership to enhance industry, economic and community development through academic programs, educational outreach, and research.

### **Our Vision:**

To be a national model for construction industry education and research.

### **Our Core Values and Guiding Principles:**

- Excellence in scholarship, teaching, and learning
- Passion for organizational effectiveness
- Focus on sustainable organizational models
- Responsible stewardship of resources
- Free and open exchange of ideas
- Environmental sustainability
- Collaboration with and respect for our communities
- Cultural diversity and equal opportunity.

### **Our Goals:**

- To provide continually improving and advancing curricula that prepare students to be leaders in the construction industry
- To support close student participation with the construction industry through opportunities such as student organizations, community outreach, student competitions, and internships
- To provide service and outreach to the construction industry at the local, regional, and national levels
- To provide faculty opportunities for continued professional growth.

### **Initiatives:**

1. Maintain and gradually increase admissions standards.
2. Maintain and gradually increase graduation standards.
3. Continue to strengthen curricula of all programs.
4. Develop a BSE specialty that aligns with the current CM major.
5. Develop a resident construction management graduate program.
6. Support collaboration in research, teaching and service within the department and across all units of the Kimmel School.

7. Work to schedule and assign faculty workloads so that there is more flexibility for faculty members to undertake new initiatives.
8. Enhance and deliver support for externally funded grants, including development opportunities related to effective writing and successful grant applications.
9. Make better use of students' laptops to extend learning opportunities.
10. Enhance available research equipment and instrumentation.
11. Examine ways to reconfigure existing space to better accommodate emerging needs.
12. Continue to develop and extend articulation agreements with community colleges.
13. Collaborate with community colleges in recruiting students into construction-related programs that align with the construction management program at WCU.
14. Strengthen the Construction Management Industry Advisory Committee.
15. Engage industry partners and advisory committee members in classroom activities.
16. Refine the process for managing capstone projects to support increasing numbers of students.
17. Establish strategic relationships with Industry partners to increase unrestricted gifts and donated equipment for classrooms and labs.
18. Encourage and support faculty in bringing international scholars to our campus.
19. Continue to encourage faculty to bring faculty from other institutions to campus to deliver addresses and exchange ideas.

## **Admissions:**

Admission to the undergraduate Construction Management program is based upon the same requirements as admission to Western Carolina University. For complete guidelines, and to apply, you can find the necessary links here:

<https://www.wcu.edu/apply/undergraduate-admissions/index.aspx>

Admissions standards and procedures are summarized below:

### **Admission Standards and Procedures:**

The university is open to all qualified students without regard to race, sex, color, national origin, religion, age, sexual orientation, or disability.

**First-Year Students.** Admission to Western Carolina University and placement into courses and programs are based upon a variety of factors including courses taken, rank in class, SAT or ACT scores, and grade point average. The university reserves the right to require any conditions deemed necessary to help ensure success. Applications also are considered for admission from prospective students who have achieved high school graduation equivalency by means of tests of General Education Development (GED).

**Entrance Examinations.** Freshman applicants must take the SAT or the American College Test (ACT). The achievement test in subject-matter fields is not required. For the SAT, application forms and information concerning the test fee, dates, and centers may be obtained from the College Board, P.O. Box 592, Princeton, New Jersey 08541. Information and application for the ACT may be obtained from The American College Test National Office, P.O. Box 168, Iowa City, Iowa 52243, and from high school guidance counselors. Students who elect to take only the ACT must take The Writing Test. Applicants must request that their scores be sent to the Office of Admission, Western Carolina University, Cullowhee, North Carolina 28723. College code for the SAT is 5897 and the ACT code is 3172.

**Secondary School Preparation.** The quality and content of the applicant's high school program are important. A good background in English, mathematics, foreign language, social studies, and natural sciences is required.

**Standard Admission.** Each applicant is evaluated on the basis of individual strengths and weaknesses for placement into the regular course sequence. Priority is given to those applicants who have demonstrated a strong potential for success in the academic programs at WCU. Factors that are used in the evaluation process include the following:

- Courses selected by the student in high school and the grades achieved in those courses. A strong college preparatory curriculum is recommended. All students who are admitted must meet the Minimum Course Requirements

(MCR) of The University of North Carolina system. Special attention may be given to work completed during the senior year.

- Scores achieved on either the SAT or the American College Test (ACT).
- Academic performance in college dual enrollment courses or on placement examinations. Applicants should submit official college records and examination results as soon as they are available.
- Priority consideration for admission will be given to applications completed by March 1 for the fall term.

**Admission to the Academic Success Program.** Students whose high school records and test scores do not qualify them for standard admission but who show potential for successful college work may be considered for admission to the university's Academic Success Program (ASP). Students admitted into the ASP still must meet all Minimum Course Requirements (MCR) prior to enrollment into the regular fall term. An applicant's high school records and ACT or SAT scores will be the primary information used to determine admission. The applicant must demonstrate the aptitude and motivation necessary to be able to successfully complete summer coursework and between twelve and sixteen semester hours of college course work in the first semester of enrollment.

The ASP program features additional tutoring and small, clustered classes that are designed to ease the transition from high school to college. Freshmen admitted to the ASP program are required to begin their program during the summer term when they will be provided with special assistance.

**Transfer Students.** Applicants must have official transcripts, with statements of honorable dismissal, submitted by all institutions formerly attended. The applicant must meet first-year admission requirements and submit an official high school transcript with SAT or ACT test results, unless the application meets exception criteria. Transfer applications and required documentation should be submitted by June 1 for fall admission, and by April 15 for summer terms. The deadline for spring is Nov. 15.

Admission decisions primarily will be based upon a transfer student's academic performance in college. Applicants should have earned a minimum higher education grade point average (GPA) of 2.00 (C average) on all work attempted; however, a minimum 2.00 does not ensure admission to the university or to a specific program of study. Applicants who are ineligible to return to the last institution attended for any reason cannot qualify for admission.

Students transferring from any unaccredited institution, if admitted, may be placed on academic probation and may be permitted to validate transfer credits by attaining satisfactory grades at Western Carolina University or successfully completing validation examinations.

The academic records of transfer students will be evaluated by the Office of the Registrar, the Advising Center and the department head of the student's major. University policies on transfer of undergraduate credit are explained in the section of this catalog on academic regulations. See complete admission requirements at <http://catalog.wcu.edu/content.php?catoid=31&navoid=673> for additional information.

**Internal Transfers.** WCU students in good standing can change their major or add academic programs. A student who decides to declare or change a major must complete the declaration process in order to be assigned a new adviser in the appropriate department and to change the official records of the university. The student secures the declaration form from the present adviser or department head and completes the procedure by following the instructions on the form. The new program of study should appear on the next transcript that is issued after the completed form has been submitted to the registrar.

### Student Achievement:

- The Construction Management Department awarded three scholarships for the 2016-2017 academic year.
- The WCU student team placed 6<sup>th</sup> out of 35 teams in the NAHB Residential Construction National Competition in Las Vegas in 2014. This represented the third time the WCU team placed in the top ten.
- The WCU team student team placed 4<sup>th</sup> in the AGC Civil construction competition in Atlanta, Georgia in 2014.
- The WCU Heavy Civil team placed 2<sup>nd</sup> in the AGC Civil construction competition in Atlanta, Georgia in 2017.

### Dean's List Students:

	Academic Year 2014/2015		Academic Year 2015/2016		Academic Year 2016/2017		Academic Year 2017/2018	
Fall	Dean's List	% enrolled students	Dean's List	% enrolled students	Dean's List	% enrolled students	Dean's List	% enrolled students
Freshmen	4	14 %	1	7 %	2	7 %	1	3 %
Sophomores	5	17 %	6	15 %	4	27 %	3	10 %
Juniors	2	7 %	8	29 %	10	31 %	9	33 %
Seniors	8	18 %	14	25 %	19	30 %	21	35 %
<b>Semester Totals</b>	<b>19</b>	<b>14 %</b>	<b>29</b>	<b>21 %</b>	<b>35</b>	<b>26 %</b>	<b>34</b>	<b>22 %</b>

	Academic Year 2014/2015		Academic Year 2015/2016		Academic Year 2016/2017		Academic Year 2017/2018	
<b>Spring</b>	Dean's List	% enrolled students	Dean's List	% enrolled students	Dean's List	% enrolled students	Dean's List	% enrolled students
Freshmen	1	8 %	1	13 %	0	0 %	Current Semester	
Sophomores	5	13 %	1	7 %	4	11 %		
Juniors	5	16 %	11	31 %	5	31 %		
Seniors	11	22 %	10	16 %	12	18 %		
<b>Semester Totals</b>	<b>22</b>	<b>16 %</b>	<b>23</b>	<b>19 %</b>	<b>21</b>	<b>16 %</b>		

## Graduates and Placement Data

Number of Graduates:

Academic Year	Baccalaureate	Masters
2011/2012	48	22
2012/2013	32	4
2013/2014	23	16
2014/2015	19	23
2015/2016	24	15
2016/2017	34	9
Fall 2017	16	7

Placement Data

Placement Data for undergraduate students for academic year 2016/2017, most graduate students are employed.

Employment type	# graduates
Architecture or Engineering	1
Construction Management or Firm	4
General Contractor	16
Design, Development, or Specialty	3
Other	7
Government Agency	3
<b>Total</b>	<b>34</b>

Expected starting salary is between \$40,000 - 60,000+ for graduating seniors.

# Academic Quality Plan

## A. Assessment Plan

### 1. Provide a copy of the construction educational program's Assessment Plan that at a minimum includes:

#### a) *Mission Statement of the Construction Educational Program.*

The mission of Construction Management (CM) Program at Western Carolina University (WCU) is to employ a construction industry focus to improve lives by educating students to be industry-ready leaders and by providing thought leadership to enhance industry, economic and community development through academic programs, educational outreach, and research. The CM program is engaged in continuous quality improvement, in alignment with its mission, the mission of the University, and the mission of the University of North Carolina system. In alignment with the University, the CM program contributes to WCU's Strategic Plan (*2020 Vision: Focusing Our Future*), and the WCU Quality Enhancement Plan (QEP). Additionally, the CM program provides significant support for WCU's designation as a Carnegie Foundation Community Engaged University.

The core values and guiding principles of the CM program are:

- Excellence in scholarship, teaching, and learning
- Passion for organizational effectiveness
- Focus of sustainable organizational models
- Responsible stewardship of resources
- Free and open exchange of ideas
- Environmental sustainability
- Collaboration with and respect for our communities
- Cultural diversity and equal opportunity

Based upon the intentions enumerated above, the CM program has established Goals and Objectives, supported by a number of assessment activities to evaluate current performance and assess improvement initiatives.

The current Program Goals are:

- Goal 1: To provide continually improving and advancing curricula that prepare students to be leaders in the construction industry.**
- Goal 2: To support close student participation with the construction industry through opportunities such as student organizations, community outreach, student competitions, and internships.**
- Goal 3: To provide service and outreach to the construction industry at the local, regional, and national levels.**
- Goal 5: To provide faculty opportunities for continued professional growth.**

**b) Educational Program Objectives.**

The current Program Objectives are:

- Students will be provided with a well-recognized, industry-aligned program.
- Our students will express a high level of satisfaction with the program and with faculty support for the student learning process.
- Our students will be able to demonstrate a high level of competence with respect to the construction industry (i.e., will be industry ready).
- Our students will be well prepared to be professionals, and to be leaders in the construction industry.
- Our program supports students in finding industry-related employment.
- Our students will be closely engaged with the construction industry.
- Our faculty provide scholarship and service to the construction industry, community and students.
- Our faculty effectively support the mission of the Department, Kimmel School, and University.
- Our students and faculty will provide service and outreach to the construction industry.

**c) Learning Outcomes of the Construction Educational Program.**

Upon graduation, B.S. in Construction Management (CM) students will be able to:

1. *Create written communications appropriate to the construction discipline.*
2. *Create oral presentations appropriate to the construction discipline.*
3. *Create a construction project safety plan.*
4. *Create construction project cost estimates.*
5. *Create construction project schedules.*
6. *Analyze professional decisions based on ethical principles.*
7. *Analyze construction documents for planning and management of construction processes.*
8. *Analyze methods, materials, and equipment used to construct projects.*
9. *Apply construction management skills as a member of a multi-disciplinary team.*
10. *Apply electronic-based technology to manage the construction process.*
11. *Apply basic surveying techniques for construction layout and control.*
12. *Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.*
13. *Understand construction risk management.*
14. *Understand construction accounting and cost control.*
15. *Understand construction quality assurance and control.*
16. *Understand construction project control processes.*



17. Understand the legal implications of contract, common, and regulatory law to manage a construction project.
18. Understand the basic principles of sustainable construction.
19. Understand the basic principles of structural behavior.
20. Understand the basic principles of mechanical, electrical and piping systems.

**d) Performance Criteria to Measure the Achievement of the Outcomes/Objective.**

With respect to each of the objectives and outcomes listed, the Construction Management Department will seek continuous improvement performance. Performance is assessed in both formative and summative manners by exams and assignments during and at the conclusion of each course. Focus groups with students serve to gather suggestions for improvement, and faculty regularly meet to discuss steps that can be taken to improve performance.

Current performance criteria are listed in Section IX.B.1.f below.

**e) Description of assessment tools and assessment findings that are used to measure achievement of Construction Educational Program Educational Objectives and Learning Outcomes.**

The current assessment tools are:

<b>Assessment Tool (Activity)</b>
ACCE Accreditation
Senior Exit Surveys
Alumni Surveys
Construction Industry Advisory Board (CIAB)
Annual Faculty Activity
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process
Student Course Evaluations
Career Fair
Placement of Graduates
Student Activities
Service to the Construction Profession
Feedback from Employers on Students Completing Their Mandatory Internships

**f) Description of each assessment tool and how the data collected are used to measure achievement of Construction Educational Program Educational Objectives.**

<b>Assessment Tool (Activity)</b>	<b>Objective</b>	<b>Indicator of Excellence</b>
Assignments and exams	Learning outcomes 1-20	Percentage of students displaying indicated levels of proficiency.

<b>Assessment Tool (Activity)</b>	<b>Objective</b>	<b>Indicator of Excellence</b>
ACCE Accreditation	Students will be provided with a well-recognized, industry-aligned program.	Successful reaccreditation (2014). ACCE accreditation is currently offered for baccalaureate degree programs.
Senior Exit Surveys	Our students will express a high level of satisfaction with the program.	Completed surveys show that the majority of the seniors are satisfied with the program.
Alumni Surveys	Our students will be well prepared for the profession.	Completed surveys indicate alumni are well prepared.
Construction Industry Advisory Board (CIAB)	<ol style="list-style-type: none"> <li>1. Our program will be aligned with industry needs.</li> <li>2. Our students will be prepared to be leaders in the construction industry.</li> </ol>	Regular feedback from the Construction Industry Advisory Board on program direction and course content.
Annual Faculty Activity	<ol style="list-style-type: none"> <li>1. Our faculty members are able to effectively support student learning objectives.</li> <li>2. Our faculty members provide scholarship and service to the construction industry, community and students.</li> </ol>	Annual reviews include full faculty participation, and the results show that faculty members are continually seeking professional growth opportunities.
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process	Faculty members effectively support the mission of the Department, Kimmel School, and University.	Faculty performance is regularly reviewed to ensure support of departmental and university mission.
Student Course Evaluations	Students are satisfied with the level of faculty support for their learning process.	Scores for all faculty are regularly, at or above the institutional average.
Career Fair	Our program supports students in finding industry-related employment.	Number of construction companies participating in career fairs.
Placement of Graduates	Our program supports students in finding industry-related employment.	Number of graduates placed within 6 months of graduation (currently 100%)
Student Activities	Our students will be closely engaged with the construction industry.	Number of students participating in student clubs, and number of students participating in service learning activities.
Service to the Construction Profession	<ol style="list-style-type: none"> <li>1. Our students will be closely engaged with the construction industry.</li> <li>2. Our students and faculty will provide service and outreach to the construction industry.</li> </ol>	Number of service and outreach activities by faculty and students to regional construction constituents.

<b>Assessment Tool (Activity)</b>	<b>Objective</b>	<b>Indicator of Excellence</b>
Feedback from Employers on Students Completing Their Mandatory Internships	Student will display appropriate progress toward professional competence.	Consistently positive evaluation of students by supervisors, based upon the student evaluation forms completed by internship supervisors.

## **B. Assessment Implementation Plan**

### **1. Provide the construction educational program's schedule for planning and assessment.**

Planning and assessment are ongoing in the Construction Management Department. Data are collected each semester, and the analysis takes place throughout each semester, and for the summative tools, at the end of each semester.

### **2. Provide results of the latest assessment cycle which includes:**

#### ***a) A description of the data collected during the most recent assessment cycle.***

Current class performance, student evaluations, rubrics were collected last semester. Annual Faculty Evaluations were completed at the end of the last academic year. Data were collected as described below.

#### ***b) Evaluation, analysis and actions related to specific assessment activity.***

### **AA-KS-CM-CM-BS-SLO-01: Written Communication**

Graduates will be able to **create** written communication appropriate to the construction discipline.

#### **Curricular and Co-Curricular Experiences**

CM 390-Environmental Issues in Construction, CM 483-Internship, CM 495-Professional Development Seminar.

#### **Data Source(s)**

Written assignments for CM 390, 496 (direct). Evaluation of written communication by internship supervisor for CM 483 (indirect).

#### **Measure(s)**

Rubric for CM 390, 496. Evaluation of student performance by internship supervisor for CM 483.

#### **Target(s)**

75% of students will perform at the "Good" or "Excellent" level.

#### **Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-02: Oral Communication**

Graduates will be able to **create** oral presentations appropriate to the construction discipline.

**Curricular and Co-Curricular Experiences**

CM 362-Planning and Scheduling, CM452-Construction Capstone Project.

**Data Source(s)**

Oral presentation assignments (Direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-03: Project Safety Plan**

Graduates will be able to **create** a construction project safety plan.

**Curricular and Co-Curricular Experiences**

CM 421-Human Factors and Safety, CM 452-Construction Capstone Project.

**Data Source(s)**

Written plans as part of projects (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-04: Project Cost Estimates**

Graduates will be able to **create** construction project cost estimates.

**Curricular and Co-Curricular Experiences**

Written estimate assignment in CM 342 (direct), estimate as part of capstone project in CM 452 (direct).

**Data Source(s)**

CM 342-Estimating II and Bidding, CM 452-Construction Capstone Project.

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Does not meet expectations

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**AA-KS-CM-CM-BS-SLO-05: Project Schedules**

Graduates will be able to **create** construction project schedules.

**Curricular and Co-Curricular Experiences**

CM 362-Planning and Scheduling, CM 452-Construction Capstone Project.

**Data Source(s)**

Written assignment in CM 362 (direct), project schedule as part of capstone project in CM 452 (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-06: Ethics**

Graduates will be able to **analyze** professional decisions based on ethical principles.

**Curricular and Co-Curricular Experiences**

CM 430-Construction Legal Aspects, CM 496-Professional Development Seminar.

**Data Source(s)**

Written Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-07: Construction Documents**

Graduates will be able to **analyze** construction documents for planning and management of construction processes.

**Curricular and Co-Curricular Experiences**

CM 452-Construction Capstone Project; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Planning portion of capstone project in CM 452 (direct), Exit, Alumni, and Employer surveys (indirect).

**Measure(s)**

Rubric for CM 452. Surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-08: Methods, Materials, and Equipment**

Graduates will be able to **analyze** methods, materials, and equipment used to construct projects.

**Curricular and Co-Curricular Experiences**

CM 212-Construction Materials and Methods II, CM 332- Site Planning, CM 375-Mechanical and Electrical Systems.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics for CM 212-Construction Materials and Methods II, CM 332- Site Planning, and CM 375-Mechanical and Electrical Systems.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-09: Teamwork**

Graduates will be able to **apply** construction management skills as a member of a multi-disciplinary team.

**Curricular and Co-Curricular Experiences**

CM 212-Construction Materials and Methods II, CM 332- Site Planning, CM 375-Mechanical and Electrical Systems.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics for CM 212-Construction Materials and Methods II, CM 332- Site Planning, and CM 375-Mechanical and Electrical Systems.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-10: Application of Electronic Technology**

Graduates will be able to **apply** electronic-based technology to manage the construction process.

**Curricular and Co-Curricular Experiences**

CM 142-Construction Graphics, CM 342-Estimating II and Bidding, CM 431-Project Management.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-11: Surveying**

Graduates will be able to **apply** basic surveying techniques for construction layout and control.

**Curricular and Co-Curricular Experiences**

CM 222-Construction Surveying and Layout; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-12: Project Delivery**

Graduates will be able to **understand** different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

**Curricular and Co-Curricular Experiences**

CM 424-Facilities Management, CM 431-Project Management.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-13: Risk Management**

Graduates will be able to **understand** construction risk management.

**Curricular and Co-Curricular Experiences**

CM 424-Facilities Management, CM 430-Construction Legal Aspects.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-14: Accounting and Cost Control**

Graduates will be able to **understand** construction accounting and cost control.

**Curricular and Co-Curricular Experiences**

CM 402-Construction Financial Management; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and Surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-15: Quality Control**

Graduates will be able to **understand** construction quality assurance and control.

**Curricular and Co-Curricular Experiences**

CM 431-Project Management; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and Surveys.

**Target(s)**



75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-16: Project Control Processes**

Graduates will be able to **understand** construction project control processes.

**Curricular and Co-Curricular Experiences**

CM 362-Planning and Scheduling, CM 402-Construction Financial Management.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Year (academic year)

**Finding Status:** Does not meet expectations

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**AA-KS-CM-CM-BS-SLO-17: Legal Implications**

Graduates will be able to **understand** the legal implications of contract, common, and regulatory law to manage a construction project.

**Curricular and Co-Curricular Experiences**

CM 430-Construction Legal Aspects; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and Surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Not assessed this cycle

**Finding Status:** Does not meet expectations

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**AA-KS-CM-CM-BS-SLO-18: Sustainable Construction**

Graduates will be able to **understand** the basic principles of sustainable construction.

**Curricular and Co-Curricular Experiences**

CM 390-Environmental Issues in Construction; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and Surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Not assessed this cycle

**Finding Status:** Does not meet expectations

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**AA-KS-CM-CM-BS-SLO-19: Structural Behavior**

Graduates will be able to **understand** the basic principles of structural behavior.

**Curricular and Co-Curricular Experiences**

CM 212-Construction materials and Methods II, CM 232-Statics and Strength of Materials.

**Data Source(s)**

Assignments (direct).

**Measure(s)**

Rubrics.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

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**AA-KS-CM-CM-BS-SLO-20: Mechanical, Electrical, and Piping Systems**

Graduates will be able to **understand** the basic principles of mechanical, electrical and piping systems.

**Curricular and Co-Curricular Experiences**

CM 375-Mechanical and Electrical Systems; Exit, Alumni and Employer Surveys.

**Data Source(s)**

Assignments (direct) and Surveys (indirect).

**Measure(s)**

Rubrics and Surveys.

**Target(s)**

75% of students will perform at the “Good” or “Excellent” level.

**Time Period:** Semester

**Finding Status:** Meets expectation

**Updated 4/2018**