

School of Business & Justice Studies

Construction Management Program

... “Preserving the past building the future!” ...

INFORMATION TO THE PUBLIC

May 2012
(Updated June 2019)

I. Objectives of the Construction Management (CM) Program at Utica College

A. Construction Management Program Mission:

The program's mission: *Prepare future generations of "Construction Professionals."*

B. Construction Management Program Operational Goals and Program-Level Student Learning Outcomes:

The program's goals provide the specific focus/effort necessary for the program's mission and vision to become a reality. In essence, produce a quality graduate sought by industry.

The CM program assessment utilizes eight (8) program operational goals (POGs) and twenty (20) program-level student learning outcomes (PLSLOs) – listed below. The POGs are set internally by the CM unit in collaboration with industry and the Utica College (UC) administration. The PLSLOs are adopted from ACCE Document 103, section 3.1.5, Student Learning Outcomes.

Using the college's Annual Program Goal Report (see section V. of this document) the assessment results are documented and submitted to the college during the fall semester of each academic year.

Program Operational Goals (POGs) 5-Yr

The CM program's eight (8) five-yr. goals are taken from the program's strategic plan.

1. Achieve a program student enrollment of 175 by 2022
2. Maintain program curriculum alignment with the needs of industry
3. Maintain state of the art facilities and equipment
4. Maintain accreditation by the American Council for Construction Education (ACCE)
5. Achieve a graduate employment placement rate of 80% within three (3) months of graduation.
6. Sustain a proactive relationship with the administration and admissions
7. Increase industry financial support/participation in the program
8. Become a Construction Management nucleus for the Northeast U.S.

Program-Level Student Learning Outcomes (PLSLOs)

These goals are from the 20 Student Learning Outcomes (SLOs) prescribed by ACCE, the program's accrediting authority.

- PLSLO #1: Create written communications appropriate to the construction discipline.
- PLSLO #2: Create oral presentations appropriate to the construction discipline.
- PLSLO #3: Create a construction project safety plan.
- PLSLO #4: Create construction project cost estimates.
- PLSLO #5: Create construction project schedules.
- PLSLO #6: Analyze professional decisions based on ethical principles.
- PLSLO #7: Analyze construction documents for planning and management of construction processes.
- PLSLO #8: Analyze methods, materials, and equipment to construct projects.
- PLSLO #9: Apply construction management skills as a member of a multi disciplinary team.
- PLSLO #10: Apply electronic-based technology to manage the construction process.
- PLSLO #11: Apply basic surveying techniques for construction layout and control.
- PLSLO #12: Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
- PLSLO #13: Understand risk management.
- PLSLO #14: Understand construction accounting and cost control.
- PLSLO #15: Understand construction quality assurance and control.
- PLSLO #16: Understand construction project control processes.
- PLSLO #17: Understand the legal implications of contract, common, and regulatory law to manage a construction project.
- PLSLO #18: Understand the basic principles of sustainable construction.
- PLSLO #19: Understand the basic principles of structural behavior.
- PLSLO #20: Understand the basic principles of mechanical, electrical and piping systems.

II. Program Admission Requirements

There are no specific admission requirements for the Construction Management Program beyond those for admission to Utica College. Program information regarding admission is available at www.utica.edu/cm

III. Program Quality Improvement Plan (Reference ACCE Document 103, Standard IX):

The CM Program Quality Improvement Plan is available at the office of the School of Business and Justice Studies.

IV. Program Assessment Measures:

Program Level Student Learning Outcomes Assessment

Assessment of the PLSLO's is done directly and indirectly. The metric(s) for this assessment is/are contained in the Annual Program Goal Report form. The methodology is described below.

Direct Method: Direct measures consist of tests, homework, projects, presentations, assignments, etc. Using these tools, specific questions, diagrams/drawings, spreadsheets, written work, oral presentations, are employed to assess the level of achievement regarding the specific learning outcome. These outcomes are stated in the course syllabus and are further aligned to the specific course and its content through the program's "curriculum map."

Indirect Method: Indirect assessment is achieved through the administration of an anonymous questionnaire. This questionnaire solicits the students' opinion regarding their level of learning/understanding as it pertains to the specific SLO(s) being evaluated as part of the course. This questionnaire is provided to each student at the conclusion of each course.

Program Operational Goals Assessment

Assessment of the program's eight (8) operational goals is accomplished through a measurable quantitative metric. Two (2) POGs (minimum) are assessed annually; all eight (8) are assessed over a four (4) year period.

Closing the Loop

In addition to the aforementioned assessment procedures the program incorporates the following documents to obtain feedback from students, alumni, and industry. The gathered data is evaluated annually by the program and IAC QIP sub-committee. This information serves to close the loop beyond the curriculum level that is derived from the assessment of the PLSLO/SLO's

- Student opinionnaire course/faculty evaluations
- CMG 465 Experiential Learning - Intern Evaluation
- CMG 475 Senior Seminar (capstone course) summary evaluation
- Exit interview
- Post-graduate survey
- Employer survey

Student opinionnaire course/faculty evaluations

The institution at each semester's closing administers the student course/faculty evaluations. Students enrolled in the individual courses complete the forms (on-line) and submit them to the institution. The institution tabulates the results and returns the data to the appropriate faculty member

CMG 465 - Experiential Learning - Intern evaluation

At the completion of the Experiential Learning, CMG 465, the sponsoring company's intern supervisor completes an *intern evaluation*. The sponsoring company forwards the completed form to the course's faculty of record. Presently this course is a summer term only, thus the data collected is annual.

CMG 475 Senior Seminar (capstone course) evaluation

The capstone course, CMG 475, taken in the final semester before graduation, is a culmination of the student's entire academic experience. A comprehensive capstone project evaluates a student's competence regarding knowledge and skill sets required by his or her specific field of study – estimating, scheduling, safety, administration, equipment, job costing, cash flow, and communication skills. It also assesses the student's level of achievement regarding the institution's general educational objectives. Construction industry professionals working with the faculty develops the project and conduct the capstone project evaluation.

Exit interview

The program director conducts the exit interview with graduating seniors. The interview contains questions about the quality of the students' educational experience and the adequacy of this experience in terms of career preparation.

Post-graduate Survey

Program graduates are to complete this survey on their one-year (1 yr.) anniversary after graduation. The survey consists of a rating scale and reflective questions designed to elicit from the graduate an assessment of his/her preparation for the real world provided by the construction management program.

Employer Survey

Employers assess their hires from the program regarding job performance and submit this evaluation, at the end of year one (1). The program utilizes its internal resources and those of the institution's alumni relations to maintain contact with its graduates. The use of this assessment approach allows the program to track its graduates both short and long term.

V. Information Obtained from Assessment Measures and Actions Taken as a Result of Assessment Data Collected

Please note: Regarding nomenclature, the CM Unit has adopted the ACCE term “Student Learning Outcome” (SLO) to describe student learning achievement. Whereas Utica College uses the term Student Learning Goal in the same context. Assessment results are documented and submitted to the college at the start of the fall semester of each academic year using the college’s Annual Program Goal Report. Consequently the following report references the Utica College adopted term of Student Learning Goal.

Annual Program Goals Report

Program name: Construction Management

Completed by: David M. Dubbelde and Dimitar Todorov

Date submitted: May 2019

Definitions

Student learning goals are the measurable learning/knowledge expectations for all students graduating from your program which are located on your curriculum map. They are the key knowledge and skills your program graduates should possess. Please note that the CM Program employs the term Program-Level Student Learning Outcomes (PLSLO) for consistency with the American Council for Construction Education (ACCE) requirements, the CM Program's external accrediting body.

Operational goals address the functioning of the program. These goals set by and for a program, usually during the 5-year program review process. Operational goals may also be set during review by an external accreditor or between program reviews.

Strategy refers to what your department is doing to reach the goal.

The **assessment method(s)** is the process(es) that will be used to determine whether or not the strategy has been effective in achieving the goal.

Assessment results are the "findings" generated by your assessment method that determine whether or not your strategy has been effective (and/or effectively implemented) in achieving (or helping achieve) the stated program goal.

Summary Comments is where faculty reactions to the identified assessment results are listed and described briefly.

Academic Year is where comments or actions regarding course content and/or assessment approach for the following academic year are noted.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #1: Create written communications appropriate to the construction discipline.

Strategy: Integrate writing assignments into course content. Examples include – class projects, written papers, log/journal entries, and reports.

Direct Assessment and Metric:

CMG 221 Methods and Materials I: Class paper on a construction topic; English composition test.

Metric: Graded assignment & English test class average = 80% or greater.

CMG 447 Project Management & Safety: Semester project – written company manual.

Metric: Project’s grammar/composition score class average = 80% or greater.

Indirect Assessment and Metric:

CMG 221 and CMG 447: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 221:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

CMG 447:	Direct Assessment:	90% - Standard Met
	Indirect Assessment:	96% - Standard Met

Summary Comments:

CMG 221: To be reviewed at the end of the Fall 2019 semester.

CMG 447: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #1. There were no notable comments.

2019-2020 academic year:

CMG 221: SLO #1 will be assessed during the Fall 2019 semester.

CMG 447: There will be no changes to the course content and assessment approach for SLO #1.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #2: Create oral presentations appropriate to the construction discipline.

Strategy: Class assignments requiring the student to prepare and then present orally information prescribed by the assignment.

Direct Assessment and Metric:

CMG 332 Estimating II: Participation in the Team Presentation to a panel of industry professionals using PowerPoint or similar presentation software.

Metric: The class average of the graded presentation = 80% or greater.

CMG 475 Senior Seminar: Individual presentation of the semester project using PowerPoint or similar presentation software.

Metric: The class average of the graded semester project = 80% or greater.

Indirect Assessment and Metric:

CMG 332 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 332:	Direct Assessment:	77% - Standard Not Met
	Indirect Assessments:	67% - Standard Not Met

CMG 475:

Direct Assessment:	93% - Standard Met
Indirect Assessment:	90% - Standard Met

Summary Comments:

CMG 332: One team demonstrated low performance due to a team member not participating in the group project. This rating impacted the overall class average in a negative way.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #2. There were no notable comments.

2019-2020 academic year:

CMG 332: Our review determined no changes warranted at this time. There will be no changes to the course content and assessment approach for SLO #2.

CMG 475: There will be no changes to the course content and assessment approach for SLO #2.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #3: Create a construction project safety plan.

Strategy: Students are to prepare/write a corporate safety plan with reference to a project safety plan as part of a semester project.

Direct Assessment and Metric:

CMG 447 Project Management & Safety: Student completion of safety plan as part of semester project/paper.

Metric: The class average of the graded assignments = 80% or greater.

CMG 475 Senior Seminar: Student completion of safety plan as part of semester project.

Metric: The class average of the graded assignments = 80% or greater.

Indirect Assessment and Metric:

CMG 447 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 447:	Direct Assessment:	73% - Standard Not Met
	Indirect Assessments:	83% - Standard Met

CMG 475:

Direct Assessment:	88% - Standard Met
Indirect Assessment:	88% - Standard Met

Summary Comments:

CMG 447: One student scored a 23% on the assignment. This impacted the class average in a negative way.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #3. There were no notable comments.

2019-2020 academic year:

CMG 447: Our review determined no changes warranted at this time. There will be no changes to the course content and assessment approach for SLO #3.

CMG 475: There will be no changes to the course content and assessment approach for SLO #3.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #4: Create construction cost estimates.

Strategy: Provide students with a set of working drawings from which they are to extract the data necessary to create an organized construction estimate regarding quantities and cost.

Direct Assessment and Metric:

CMG 332 Estimating II: Student completion of the estimating semester project.

Metric: The project’s written portion graded class average = 80% or greater.

CMG 475 Senior Seminar: Student completion of the estimate portion of the semester project.

Metric: The class average of the graded project = 80% or greater.

Indirect Assessment and Metric:

CMG 332 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 332:	Direct Assessment:	80% - Standard Met
	Indirect Assessments:	65% - Standard Not Met

CMG 475:	Direct Assessment:	87% - Standard Met
	Indirect Assessment:	93% - Standard Met

Summary Comments:

CMG 332: Indirect assessment results indicated two students reporting low confidence in their ability to create an estimate which impacted the class average. Team member scores in other areas indicated that personality issues among team members contributed to limited or non-participation on the term project.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #4. There were no notable comments.

2019-2020 academic year:

CMG 332: Our review determined no changes warranted at this time. There will be no changes to the course content and assessment approach for SLO #4.

CMG 475: There will be no changes to the course content and assessment approach for SLO #4.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #5: Create construction project schedules.

Strategy: A comprehensive semester project and homework assignments comprised of major construction project outcomes (estimating, scheduling, site logistics, etc.) are used to evaluate a student’s overall project management competency.

Direct Assessment and Metric:

CMG 437 Planning & Scheduling: Homework assignments.

Metric: The class average of the graded scheduling problems = 80% or greater.

CMG 475 Senior Seminar: Student completion of the scheduling portion of the semester project.

Metric: The class average of the graded scheduling portion of the semester project = 80% or greater.

Indirect Assessment and Metric:

CMG 437 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 437:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

CMG 475:

Direct Assessment:	92% - Standard Met
Indirect Assessment:	92% - Standard Met

Summary Comments:

CMG 437: To be reviewed at the end of the Fall 2019 semester.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #5. There were no notable comments.

2019-2020 academic year:

CMG 437: SLO #5 will be assessed during the Fall 2019 semester.

CMG 475: There will be no changes to the course content and assessment approach for SLO #5.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #6: Analyze professional decisions based on ethical principles.

Strategy: Course content that includes ethics concepts, discussions and case studies, followed up by tests/examinations and papers that evaluate the student’s understanding of professional decisions based on ethical principles.

Direct Assessment and Metric:

CMG 332 Estimating II: Complete a course exam.

Metric: The class average of graded exam questions pertaining to ethics = 80% or greater.

CMG 447 Project Management & Safety: Complete a course paper.

Metric: The class average of graded paper pertaining to ethics = 80% or greater.

Indirect Assessment and Metric:

CMG 332 and CMG 447: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 332:	Direct Assessment:	96% - Standard Met
	Indirect Assessments:	80% - Standard Met

CMG 447:	Direct Assessment:	90% - Standard Met
	Indirect Assessment:	89% - Standard Met

Summary Comments:

CMG 332: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #6. There were no notable comments.

CMG 447: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #6. There were no notable comments.

2019-2020 academic year:

CMG 332: There will be no changes to the course content and assessment approach for SLO #6.

CMG 447: There will be no changes to the course content and assessment approach for SLO #6.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #7: Analyze construction documents for planning and management of construction processes.

Strategy: Course content that includes analysis of construction documents for planning and management of construction processes, followed up by homework assignments and papers that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 225 Documents & Specifications: Complete a homework assignment.

Metric: The class average of graded homework assignment pertaining to analysis of construction documents = 80% or greater.

CMG 447 Project Management & Safety: Complete a course paper.

Metric: The class average of graded paper pertaining to analysis of construction documents = 80% or greater.

Indirect Assessment and Metric:

CMG 225 and CMG 447: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 225:	Direct Assessment:	100% - Standard Met
	Indirect Assessments:	71% - Standard Not Met

CMG 447:	Direct Assessment:	67% - Standard Not Met
	Indirect Assessment:	89% - Standard Met

Summary Comments:

CMG 225: More practical problems with ProCore project management software to increase student confidence.

CMG 447: The classroom instruction to emphasize the concept of using a time line schedule as an effective management tool.

2019-2020 academic year:

CMG 225: There will be more practical problems with ProCore.

CMG 447: There will be expanded emphasis the concept of using a time line schedule.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #8: Analyze methods, materials, and equipment to construct projects.

Strategy: Course content that includes analysis of methods, materials and equipment to construct projects, followed up by tests/examinations and projects that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 222 Methods & Materials II: Complete a course exam.

Metric: The class average of graded exam questions pertaining to analysis of methods, materials and equipment = 80% or greater.

CMG 345 Site Planning & Equipment: Complete a project assignment.

Metric: The class average of the graded project assignment pertaining to analysis of methods, materials and equipment = 80% or greater.

Indirect Assessment and Metric:

CMG 222 and CMG 345: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 222:	Direct Assessment:	68% - Standard Not Met
	Indirect Assessments:	88% - Standard Met

CMG 345:	Direct Assessment:	95% - Standard Met
	Indirect Assessment:	65% - Standard Not Met

Summary Comments:

CMG 222: The CM faculty recommended more examples and classroom discussion. The instructor concurred.

CMG 345: This is a new course for the instructor. The course will be improved by developing more effective classroom examples and assignments.

2019-2020 academic year:

CMG 222: There will be more practical examples and classroom discussion.

CMG 345: There will be more classroom examples and assignments.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #9: Apply construction management skills as a member of a multi-disciplinary team.

Strategy: Course content that includes a lab exercise and a multi-disciplinary team project where students apply construction management skills as a member of a team, followed up by presentation/lab exercise that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 233 Surveying: Complete a lab exercise.

Metric: The class average of the graded lab exercise = 80% or greater.

CMG 336 Mechanical & Electrical Systems: Complete a multi-disciplinary project assignment.

Metric: The class average of the graded multi-disciplinary project assignment = 80% or greater.

Indirect Assessment and Metric:

CMG 233 and CMG 336: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 233:	Direct Assessment:	88% - Standard Met
	Indirect Assessments:	94% - Standard Met

CMG 336:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessment:	To be assessed fall 2019

Summary Comments:

CMG 233: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #9. There were no notable comments.

CMG 336: To be reviewed at the end of the Fall 2019 semester.

2019-2020 academic year:

CMG 233: There will be no changes to the course content and assessment approach for SLO #9.

CMG 336: SLO #9 will be assessed during the Fall 2019 semester.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #10: Apply electronic based technology to manage the construction processes.

Strategy: Course content that includes the application of electronic based technology to manage the construction processes, followed up by presentation/exams that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 117 Graphics & Computer Apps: Create a door schedule in a BIM.

Metric: The class average of the graded door schedule component = 80% or greater.

CMG 417 REVIT for the CM: Create parameters to manage quantity, cost and installation time in a BIM.

Metric: The class average of graded test component = 80% or greater.

CMG 475 Senior Seminar: Complete a semester project using estimating and scheduling software for designated project components.

Metric: The class average of the graded estimating and scheduling project components = 80% or greater.

Indirect Assessment and Metric:

CMG 117, CMG 417 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 117:	Direct Assessment:	87% - Standard Met
	Indirect Assessments:	96% - Standard Met

CMG 417:	Direct Assessment:	83% - Standard Met
	Indirect Assessments:	92% - Standard Met

CMG 475:	Direct Assessment:	92% - Standard Met
	Indirect Assessments:	94% - Standard Met

Summary Comments:

CMG 117, CMG 417 and CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #10. There were no notable comments.

2019-2020 academic year:

CMG 117, CMG 417 and CMG 475: There will be no changes to the course content and assessment approach for SLO #10.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #11: Apply basic surveying techniques for construction layout.

Strategy: Engage students with classroom problems and field exercises regarding the implementation of surveying approaches necessary for construction layout.

Direct Assessment and Metric:

CMG 233 Surveying: Complete two distinct class field/lab exercises consisting of surveying techniques.

Metric: The class average of the two graded class field/lab exercises = 80% or greater.

Indirect Assessment and Metric:

CMG 233: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 233: Direct Assessment: 100% - Standard Met

 Indirect Assessments: 96% - Standard Met

Summary Comments:

CMG 233: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #11. There were no notable comments.

2019-2020 academic year:

CMG 233: There will be no changes to the course content and assessment approach for SLO #11.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #12: Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction processes.

Strategy: Course content that includes different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction processes, followed up by tests/examinations and project completion that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 225 Documents & Specifications: Complete a course exam.

Metric: The class average of graded exam questions pertaining to methods of project delivery and the roles and responsibilities of constituencies involved in the design and construction processes = 80% or greater.

CMG 475 Senior Seminar: Complete a semester project.

Metric: The class average of graded semester project pertaining to methods of project delivery and the roles and responsibilities of constituencies involved in the design and construction processes = 80% or greater

Indirect Assessment and Metric:

CMG 225 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 225:	Direct Assessment:	91% - Standard Met
	Indirect Assessments:	79% - Standard Not Met

CMG 475:	Direct Assessment:	93% - Standard Met
	Indirect Assessments:	90% - Standard Met

Summary Comments:

CMG 225: This is a new course for the instructor. Although the standard for indirect assessment (80%) is not met, the response value from the student survey (79%) is close to the standard and does not warrant any course delivery changes.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #12. There were no notable comments.

2019-2020 academic year:

CMG 225: There will be no changes to the course content and assessment approach for SLO #12.

CMG 475: There will be no changes to the course content and assessment approach for SLO #12.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #13: Understand construction risk management.

Strategy: Course content that includes construction risk management, followed up by tests/examinations and project completion that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 447 Planning & Scheduling: Complete a course exam.

Metric: The class average of graded exam questions pertaining to construction risk management = 80% or greater.

CMG 475 Senior Seminar: Complete a semester project.

Metric: The class average of the graded semester project pertaining to construction risk management = 80% or greater.

Indirect Assessment and Metric:

CMG 447 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 447:	Direct Assessment:	84% - Standard Met
	Indirect Assessments:	85% - Standard Met

CMG 475:	Direct Assessment:	82% - Standard Met
	Indirect Assessments:	90% - Standard Met

Summary Comments:

CMG 447: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #13. There were no notable comments.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #13. There were no notable comments.

2019-2020 academic year:

CMG 447: There will be no changes to the course content and assessment approach for SLO #13.

CMG 475: There will be no changes to the course content and assessment approach for SLO #13.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #14: Understand construction accounting and cost control.

Strategy: Course content that includes construction accounting and cost control, followed up by tests/examinations that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 345 Site Planning & Equipment: Complete a course exam.

Metric: The class average of graded exam questions pertaining to construction accounting and cost control = 80% or greater.

CMG 423 Construction Finance: Complete a course exam.

Metric: The class average of the graded exam questions pertaining to construction accounting and cost control = 80% or greater.

Indirect Assessment and Metric:

CMG 345 and CMG 423: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 345:	Direct Assessment:	72% - Standard Not Met
	Indirect Assessments:	59% - Standard Not Met

CMG 423:	Direct Assessment:	70% - Standard Not Met
	Indirect Assessments:	90% - Standard Met

Summary Comments:

CMG 345: This is a new course for the instructor. The CM faculty recommended more classroom examples and assignments. The instructor concurred.

CMG 423: One student’s low performance affected the results form the direct assessment.

2019-2020 academic year:

CMG 345: A textbook change and more practical applications will be implemented.

CMG 423: There will be no changes to the course content and assessment approach for SLO #14.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #15: Understand construction quality assurance and control.

Strategy: Course content that includes construction quality assurance and control, followed up by tests/examinations and project completion that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 225 Documents & Specifications: Complete a course exam.

Metric: The class average of graded exam questions pertaining to construction quality assurance and control = 80% or greater.

CMG 475 Senior Seminar: Complete a semester project.

Metric: The class average of graded semester project pertaining to construction quality assurance and control = 80% or greater.

Indirect Assessment and Metric:

CMG 225 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 225:	Direct Assessment:	83% - Standard Met
	Indirect Assessments:	65% - Standard Not Met

CMG 475:	Direct Assessment:	93% - Standard Met
	Indirect Assessments:	90% - Standard Met

Summary Comments:

CMG 225: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #15. The CM faculty recommended more practical problems to increase student confidence. The instructor concurred.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #15. There were no notable comments.

2019-2020 academic year:

CMG 225: Introduce more practical problems to increase student confidence.

CMG 475: There will be no changes to the course content and assessment approach for SLO #15.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #16: Understand construction project control processes.

Strategy: Course content that includes construction project control processes, followed up by homework, tests, examinations and project completion that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 437 Planning & Scheduling: Course tests, homework assignments.

Metric: The class average of the graded homework and tests pertaining to construction project control processes = 80% or greater.

CMG 475 Senior Seminar: Student completion of the scheduling and project control portion of the semester project.

Metric: The class average of the graded construction project control portion of the semester project = 80% or greater.

Indirect Assessment and Metric:

CMG 437 and CMG 475: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 437:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

CMG 475:

Direct Assessment:	93% - Standard Met
Indirect Assessment:	93% - Standard Met

Summary Comments:

CMG 437: To be reviewed at the end of the Fall 2019 semester.

CMG 475: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #16. There were no notable comments.

2019-2020 academic year:

CMG 437: SLO #16 will be assessed during the Fall 2019 semester.

CMG 475: There will be no changes to the course content and assessment approach for SLO #16.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #17: Understand the legal implications of contract, common, and regulatory law to manage a construction project.

Strategy: Course content that includes the legal implications of contract, common, and regulatory law to manage a construction project, followed up by tests/examinations that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 225 Documents & Specifications: Complete a course exam.

Metric: The class average of graded exam questions pertaining to the legal implications of contract, common, and regulatory law to manage a construction project = 80% or greater.

CMG 423 Construction Finance: Complete a course exam.

Metric: The class average of graded exam questions pertaining to the legal implications of contract, common, and regulatory law to manage a construction project = 80% or greater.

Indirect Assessment and Metric:

CMG 225 and CMG 423: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 225:	Direct Assessment:	93% - Standard Met
	Indirect Assessments:	61% - Standard Not Met

CMG 423:	Direct Assessment:	88% - Standard Met
	Indirect Assessments:	90% - Standard Met

Summary Comments:

CMG 225: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #17. The CM faculty recommended more practical problems/examples to increase student confidence. The instructor concurred.

CMG 423: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #17. There were no notable comments.

2019-2020 academic year:

CMG 225: Introduce more practical problems to increase student confidence.

CMG 423: There will be no changes to the course content and assessment approach for SLO #17.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #18: Understand the basic principles of sustainable construction.

Strategy: Course content that presents sustainability concepts and implementation, followed up by tests/examinations that evaluate student understanding of the role of sustainability in construction.

Direct Assessment and Metric:

CMG 103 Introduction to Construction Management: Complete a course exam.

Metric: The class average of the graded exam component on sustainability = 80% or greater.

CMG 336 Mechanical & Electrical Systems: Complete a final exam.

Metric: The class average of the graded final exam component on sustainability = 80% or greater.

Indirect Assessment and Metric:

CMG 103 and CMG 336: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 103:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

CMG 336:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

Summary Comments:

CMG 103: To be reviewed at the end of the Fall 2019 semester.

CMG 336: To be reviewed at the end of the Fall 2019 semester.

2019-2020 academic year:

CMG 103: SLO #18 will be assessed during the Fall 2019 semester.

CMG 336: SLO #18 will be assessed during the Fall 2019 semester.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #19: Understand the basic principles of structural behavior.

Strategy: Course content that presents the principles of structural behavior, followed up by tests/examinations that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 222 Methods & Materials II: Complete a course exam.

Metric: The class average of graded exam questions regarding structural behavior = 80% or greater.

CMG 337 Statics & Strengths of Materials: Complete a course exam.

Metric: The class average of graded exam questions regarding structural behavior = 80% or greater.

Indirect Assessment and Metric:

CMG 222 and CMG 337: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 222:	Direct Assessment:	82% - Standard Met
	Indirect Assessments:	88% - Standard Met

CMG 337:	Direct Assessment:	81% - Standard Met
	Indirect Assessment:	88% - Standard Met

Summary Comments:

CMG 222: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #19. There were no notable comments.

CMG 337: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #19. There were no notable comments.

2019-2020 academic year:

CMG 222: There will be no changes to the course content and assessment approach for SLO #19.

CMG 337: There will be no changes to the course content and assessment approach for SLO #19.

Construction Management Student Learning Outcome Assessment Summary & Actions

PLSLO/ACCE SLO #20: Understand the basic principles of mechanical, electrical, and piping systems.

Strategy: Course content that presents the basic principles of mechanical, electrical, and piping systems, followed up by tests/examinations that evaluate the student’s understanding.

Direct Assessment and Metric:

CMG 336 Mechanical & Electrical Systems: Complete a final exam.

Metric: The class average of graded exam questions regarding the basic principles of mechanical, electrical, and piping systems = 80% or greater.

CMG 417 REVIT for the CM: Complete a course exam.

Metric: The class average of graded exam questions regarding the basic principles of mechanical, electrical, and piping systems = 80% or greater.

Indirect Assessment and Metric:

CMG 336 and CMG 417: Student feedback.

Metric: The average of the measured response value received = 80% or greater.

Results:

CMG 336:	Direct Assessment:	To be assessed fall 2019
	Indirect Assessments:	To be assessed fall 2019

CMG 417:

Direct Assessment:	91% - Standard Met
Indirect Assessment:	90% - Standard Met

Summary Comments:

CMG 336: To be reviewed at the end of the Fall 2019 semester.

CMG 417: The CM faculty reviewed and discussed the results from the direct and indirect assessment of SLO #20. There were no notable comments.

2019-2020 academic year:

CMG 336: SLO #20 will be assessed during the Fall 2019 semester.

CMG 417: There will be no changes to the course content and assessment approach for SLO #20.

Construction Management Operational Goal Assessment Summary & Actions

Operational Goal #2: Maintain program curriculum alignment with the needs of industry.

Strategy: Follow guidelines/procedures outlined in the Program’s QIP.

Direct Assessment and Metric: Analysis of program feedback data collected by the procedures outlined in the programs QIP, and the documentation of any actions impacting the curriculum that are implemented as a result of the feedback assessment.

Results: The CM program met with its Industry Advisory Committee subpanel on Curriculum and reviewed the program feedback data collected by the procedures outlined in the programs QIP. The panel proposed and the CM program adopted the addition of ECN 241 and MAT 112 (Statistics classes) as a major elective (students pick one of the two courses).

Summary Comments: None at this time.

2019-2020 academic year: None at this time.

Construction Management Operational Goal Assessment Summary & Actions

Operational Goal #3: Maintain state of the art facilities and equipment.

Strategy: Continue earnest dialogue with the IAC and administration regarding facilities.

Direct Assessment and Metric: Track progress of improvement of CM facilities through IAC discussion via recorded meeting minutes, progress of design documents, project funding, etc.

Results: Materials Lab Configuration – Dr. Dubbelde and Randy met at CSArch’s office with Randall DeFranco, project architect for the CM building. Resulting decision is that materials lab space needs to remain flexible. Further discussed how space can be used to support curriculum and program to include the following: Demonstrations, Survey classes (currently held there), Storage of equipment (surveying, work benches, batteries), Mini trade shows with manufacturers, Lunch and learns, Using it as micro-space for small projects, Student designed build projects, SCA meetings, Static displays.

Summary Comments: Involve trades and provide static displays.

2019-2020 academic year: Discuss details for static displays with IAC.

Construction Management Operational Goal Assessment Summary & Actions

Operational Goal #5: Achieve a graduate employment rate of 80% within three (3) months of graduation.

Strategy: Connect students to industry via summer job opportunities, program internship requirements, and industry networking prospects.

Direct Assessment and Metric: Collecting feedback via the completion of “student graduate data/information sheets,” and periodic program follow-up to stay connected with its graduates.

Metric: Achieve a graduate employment rate of 80% within three (3) months of graduation.

Results: The program achieved 100% graduate employment rate within 3 months of graduation – Goal Met.

Summary Comments: The program since its return has achieved a consistent placement rate of 100% within 3 months of graduation.

2019-2020 academic year: The program will continue its efforts regarding industry networking opportunities, career fairs, summer internships, etc.

VI. Student Achievement:

A. Student employment (May 2019)

Job Title	Sector	No. of Graduates
Project Mgr./Asst PM	Commercial	3
Project Mgr./Asst PM	Real Estate Development	1
Super/Asst Superintendent	Commercial	4
Super/Asst Superintendent	Mechanical	1
Commercial Super/Asst Superintendent	Excavation/Paving	1
Estimator/Asst Estimator	Commercial	3
Field/Project Engineer	Commercial	3
Total		16

B. Scholarships

Endowed

Walter A. Cragolin Memorial Scholarship

Full-time, matriculated, undergraduate Utica College student majoring in Construction Management. Awards based on academic merit, future promise and financial need.

Gustave J. & Teresa Rose DeTraglia, Sr. Scholarship

Financial assistance awards shall be made to Oneida County residents who demonstrate academic merit and financial need, and who are enrolled in either the Construction Management or Education program at Utica College. If no students meet this criterion, then awards should be made to students showing financial need.

Thomas Proctor Eldred, Sr. Memorial Scholarship

The income from the fund shall be awarded to students from New York State with demonstrated financial need that is majoring in the Construction Management Program.

Charles and Connie Gaetano Scholarship

Full-time students majoring in Construction Management. Recipient(s) must demonstrate academic merit and financial need.

John Quackenbush Scholarship

Financial assistance awards shall be made to a full-time student from Central New York who is majoring in Construction Management. The student must demonstrate academic merit and financial need and show initiative, a strong desire to learn, and possess those traits, which will make him/her an asset both

to his/her profession and community.

General Institutional Scholarship

A student majoring in Construction Management is eligible to apply for any institutional scholarship not specifically designated to another program/entity.

C. Data to Support Qualitative Claims by the Program

The data utilized in the assessment process along with source material obtained from stakeholders, graduates, and employees is available at the office of the School of Business and Justice Studies, Utica College.