

QUALITY IMPROVEMENT PLAN

Bachelor of Science in Construction Management
Department of Construction Management
School of the Built Environment
College of Technology, Architecture and Applied Engineering
Bowling Green State University
Spring 2021

1.0 Program Vision

The Department of Construction Management offers a transformative educational experience for students who seek to improve the quality of the built environment via innovation, entrepreneurship, and creation of exemplary places, structures and systems.

2.0 Program Mission Statement

The CM degree program mission is to provide a high quality education and inspire students so that each graduate is prepared for a life-long career of professional excellence and meaningful service to the construction industry.

3.0 Program Strategic Plan

The purpose of this strategic plan is to outline the systematic and sustained efforts needed to enable the degree program to fulfil its mission.

3.1 Goals to Achieve Program Mission

The following goals are intended to guide the direction of the construction management program in meeting its mission. The construction management program will aim to:

- A. Recruit and retain outstanding faculty to provide a curriculum that is solid in both theoretical and practical knowledge.
- B. Continue industry review of the curriculum and course content through the Industry Advisory Board.
- C. Expand undergraduate enrollment by 20% by Fall 2025.
- D. Encourage students to participate in construction related competitions to expand their experiential learning.
- E. Sponsor lectures by outstanding industry leaders for students.
- F. Grow the membership of the Student Construction Management Association (SCMA) to include over 75 percent of undergraduate construction management students.
- G. Increase and maintain the program student pass rate of the American Institute of Constructor's exam above the national average.
- H. Continue to place 100% of students within 9 months of graduation.
- I. Develop a new state of the art facility to support the construction management program.
- J. Continue fundraising efforts relative to CMAP to support the construction management program.
- K. Enhance the effectiveness of the program faculty by encouraging and supporting professional development in technical areas as well as teaching.
- L. Earn national awards of excellence for the program and program faculty.

3.2 Review of Resources and External Factors

The status of the degree program shall be reviewed annually by the faculty and administration during the first department meeting of each academic year. Available resources and support, as well as external factors affecting the program shall be considered.

The status of the degree program shall be reviewed annually by the Industry Advisory Board. Available resources and support, as well as external factors affecting the program shall be considered.

3.3 Updating of the Strategic Plan

The strategic plan shall be reviewed and updated annually. Input from the faculty, administration, Industry Advisory Board, and the students through the SCMA will be considered during the review and updating of the strategic plan.

4.0 Program Assessment Plan

The intent of the assessment plan is to create the framework to provide evidence of the program's effectiveness in preparing construction practitioners.

4.1 Program Mission Statement

As stated in Section 2.0, the mission statement is:

The CM degree program mission is to provide a high quality education and inspire students so that each graduate is prepared for a life-long career of professional excellence and meaningful service to the construction industry.

4.2 Degree Program Objectives

In order to meet its mission and goals as outlined in the strategic plan, the construction management program will produce graduates that shall 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 multidisciplinary 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 plumbing systems.

Since these are the same as the Student Learning Outcomes that are assessed, the assessment of the SLOs functions as the assessment of the Program Objectives.

4.3 Program Learning Outcomes

The program learning outcomes are the same as the American Council for Construction Education (ACCE) Student Learning Outcomes.

Upon graduation from the BGSU Construction Management Program, a graduate shall 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 multidisciplinary 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 plumbing systems.

4.4 Assessment Tools

Each SLO from section 4.3 will be evaluated with at least one direct and one indirect assessment tool. It is anticipated that after a few cycles of assessing and evaluating, these assessment tools will remain the same from year to year.

The direct assessment tool will be a whole or part of an assignment or examination that is part of a course grade. If a group project is used, group member involvement will be assessed.

The indirect measure will be a student exit survey (given to graduating seniors) and a course self-assessment survey (completed by faculty for each course taught during the semester). Each SLO will be measured on a 1 – 5 scale.

4.5 Performance Criteria

The minimum performance criteria for each direct assessment shall be 70% of the students attaining a 70%.

The minimum performance criteria for each indirect assessment shall be a 3.0 on a 1 to 5 scale.

4.6 Evaluation Methodology

Individual faculty will collect and analyze the data for the direct assessment measures they are assigned, every semester. If a particular SLO falls below the performance criteria, the faculty member will recommend an action to improve student performance, or if the performance criteria is met, the faculty member will recommend ways to ensure continued compliance.

Recommending a lowering of the performance threshold is not acceptable. Data and recommendations will be forwarded to the Program Coordinator every semester, who will lead a discussion of the SLO evaluations at the annual year-end SLO review meeting in May.

The School Director will collect and analyze the indirect senior exit surveys and the course self-assessment surveys to be discussed at the annual year-end SLO review meeting in May.

The compiled direct and indirect assessment analysis (reports) will be sent to the faculty and the Industry Advisory Board every semester. Recommendations (if any) will be compiled by the School Director and approved at the first Fall semester faculty meeting.

4.7 Review of Assessment Plan

The assessment plan shall be reviewed annually by the faculty during the first Fall semester faculty meeting. Appropriateness of the objectives, outcomes, assessment tools, performance criteria, and evaluation methodology shall all be examined by the faculty and School Director.

4.8 Updating of the Assessment Plan

The assessment plan shall be reviewed and updated annually. Input from the faculty, administration, Industry Advisory Board, and the students through the SCMA will be considered during the review and updating of the assessment plan, especially the formulation of the student learning outcomes (SLOs).

5.0 Assessment Implementation Plan

This assessment implementation plan is intended to ensure that the program is making progress on achieving its mission, objectives, and learning outcomes.

5.1 Assessment Cycle

Direct and indirect assessment tools will be administered each year for each SLO. The data will be collected for each SLO by the assigned faculty member. All SLO assessments will be discussed at the first Fall faculty meeting of each academic year.

5.2 Analysis of Data Collected

The analysis of the SLO assessment data will be conducted by the Program Coordinator and the School Director when compiling the data from each faculty member. Discussion and evaluation of the analysis will occur by the faculty and the School Director at the first Fall faculty meeting of each academic year.

5.3 Changes Implemented

Changes implemented by the BGSU Construction Management program faculty will be recorded and kept by the Program Coordinator and the School Director.

5.4 Documentation of Results, Analysis, and Changes Implemented

Results of the assessment tools, analysis of the data, and changes implemented as a result of the assessment evaluation will be compiled by the program coordinator and the School Director, and placed on the construction management program website as part of the ACCE Public Disclosures document. A summary of actions taken for poor performance will be kept for at least 5 years.

5.5 Review of Assessment Implementation Plan

The assessment implementation plan and appropriateness of the process shall be reviewed annually by the faculty and the School Director during the first Fall faculty meeting of each Academic year.

5.6 Updating of the Assessment Plan

The assessment plan shall be reviewed and updated annually. Input from the faculty, administration, Industry Advisory Board, and the students through the SCMA will be considered during the review and updating of the assessment plan, especially the appropriateness of the direct assessment tools being used.