

Minnesota State University-Mankato
College of Science, Engineering & Technology
Construction Management Department

QUALITY IMPROVEMENT PLAN (QIP)
FOR THE CONSTRUCTION MANAGEMENT DEGREE
PROGRAM

Organization

The Quality Improvement Plan (QIP) consists of Strategic Plan for the educational unit, the degree program assessment plan, and the assessment implementation plan for the degree program.

The educational unit is the Department of Construction Management. The degree program is Construction Management. Construction Management is the only degree program in the department.

Construction Management Program Strategic Plan

Scope:

The strategic plan is an overall plan for management of the program activities to the expected level of academic and professional quality. This is done with the available resources and the blend of full and part-time faculty and staff. The strategic plan is a work-in-progress and has been taken to coordinate the objectives and resources needed to accomplish the mission of this unique program. This plan is developed in 2015 and it represents the collective input from all of the degree program constituencies. This continuous improvement effort is in progress since the first strategic plan in 2007.

Overview:

Minnesota State University- Mankato

Mission

Minnesota State University, Mankato promotes learning through effective undergraduate and graduate teaching, scholarship, and research in service to the state, the region and the global community.

Vision

Minnesota State Mankato will be known as a university where people expect to go further than they thought possible by combining knowledge and the passion to achieve great things.

Our foundation for this vision is our heritage of both dedicated teaching and the direct application of knowledge to improve a diverse community and world. We will achieve it by actively nurturing the passion within students, faculty and staff to push beyond possibility on the way to realizing dreams.

Institutional Undergraduate Student Learning Outcomes

1. **Academic Achievement** - Students will demonstrate competence in specific areas of academic disciplines that will directly impact their career endeavors.

2. **Civic Engagement** - Students will demonstrate the awareness, knowledge, and skills to actively participate individually or collectively on issues of societal concern.
3. **Communication** - Students will demonstrate the ability to effectively communicate verbally, in writing, and through digital and/or visual media.
4. **Critical Thinking** - Students will demonstrate the ability to analyze situations and problems in order to identify and test solutions.
5. **Global Citizenship** - Students will demonstrate an awareness and knowledge of international cultures and societies.
6. **Multiculturalism/Diversity** - Students will demonstrate an awareness and knowledge of social, cultural and personal values of others.
7. **Self-Directed Learning** - Students will demonstrate the ability to autonomously acquire knowledge and develop skills.

College of Science, Engineering & Technology

Mission

As educational leaders in science, technology, engineering, and mathematics (STEM), our accessible faculty advances student scholarship through innovative teaching, research expertise, and the exploration of new technologies and ideas. We prepare our students for professional careers and advanced study, while connecting with local, regional and global communities.

Vision

We strive to provide a mentored educational experience to every student in our college, develop the most qualified engineers, scientists and STEM teachers, and establish our college as the preferred Master's degree provider in Minnesota.

Goals

1. **Solutions** – Seek solutions by promoting quantitative, technological and analytical solutions that focus on regional issues with global connections.
2. **Teaching** – Transform teaching and learning by encouraging advanced, engaging teaching methods, classrooms and laboratories guided by effective assessment of student learning.
3. **Exploration** – Explore and enrich new and existing programs and scholarly initiatives.
4. **Mentorship** – Model mentorship providing a mentored educational experience to every student in the college.

Construction Management Program

(The Educational Unit)

Introduction

A half a century ago, people working in construction recognized that there was a shortage of college-educated managerial people familiar with the "nuts and bolts" of their industry. Often, newly-hired construction "managers" brought management theories to their new roles, yet little knowledge of how to apply those theories to real-world construction situations. In the early 1970s, the Associated General Contractors of Minnesota decided it was time to rectify this situation. The AGC of MN's Board of Directors authorized establishment of a Higher Education Committee, which was asked to determine what should be done to fill the need for entry level managers whose training had been directed toward management methods relevant to the construction industry.

After a few years, a cooperative effort evolved between the AGC of MN and what was then Mankato State University, which resulted in the implementation of the Construction Management program under the sponsorship of the College of Business's Industrial Technical Studies Program and the AGC of MN. Construction-related courses were added to the college curricula specifically for the Construction Management Program. AGC supported the Program by donating equipment and funds and by providing guest lecturers, construction-related films, slides and library materials. Students enrolled in the Program were required to gain practical knowledge through classroom study, field experiences and an internship.

The goal of the new Program was to professionalize the construction industry. It is believed to be the first Program of its kind in Minnesota. Classes began in 1974. In 1976, 21 students were enrolled in the Program and two graduated. By 1978, the Program had 74 students enrolled. In 1995, the Construction Management Program moved from the College of Business to the College of Science, Engineering and Technology.

In 2011 the Construction Management program became fully accredited by the American Council for Construction Education (ACCE). The Council is recognized across North America as the accrediting agency for post-secondary construction education.

The construction management program is under the construction management department which is one of ten departments in the College of Science, Engineering, and Technology.

Mission Statement

The mission of the Construction Management program is to advance world-class project management for the built environment through effective teaching, research, and service.

Program Goals

The Construction Management program will provide quality undergraduate and graduate programs that foster student learning through a wide variety of instructional applications. This will be accomplished by the following goals:

1. **Curriculum:** Offer globally competitive, technologically current programs that are recognized and respected for preparing students to enter the workforce.
 - A. Execution;
 - Providing a blend of management and technical classes in the program of study which align with the industry needs
 - Offering the classes in different instructional delivery methods which include face to face, hybrid, and online format
 - Utilizing opportunities to learn and use the current advanced technology in the construction industry
 - Providing international opportunities to explore the required knowledge and skills in the global construction industry
 - Partnering with other educational and professional entities to offer competitive learning opportunities
 - B. Resources Needed;
 - Availability of faculty positions to hire qualified knowledgeable full and part time faculty members
 - Availability of funding and capacity to support the required level of technology
 - Availability of study abroad and/or exchanged students program opportunities
 - C. Performance Criteria;
 - The ability to offer the expected number and types of required classes will be assessed
 - The number and the quality of software packages including the hardware units available to students will be assessed
 - Number of students who would benefit from the international opportunities will be assessed
 - The ability to have different partnership agreements with educational and professional entities will be assessed
2. **Advising:** Provide effective academic and career advising to foster a commitment to life-long learning.
 - A. Execution;
 - Collaborating with the college advising center to support student needs
 - Assigning the appropriate number of advisees to the different full time faculty in the program
 - Creating the effective and efficient tools to facilitate the advising effort at the program level
 - B. Resources Needed;

- The college advising center support
 - Faculty time commitment to students advising effort in the program
- C. Performance Criteria;
- The ability to have the appropriate faculty advising load to achieve a successful learning experience for students will be assessed
 - The students' satisfaction rate of their advising experience will be assessed
3. **Student Activity:** Involve students in industry-sponsored events to facilitate students' professional development prior to graduation.
- A. Execution;
- Enhancing the student chapter Construction Management Student Association (CMSA) activities that would create networking opportunities and develop the professional and managerial soft skills to be successful in the construction industry
 - Participating in construction related student competitions
 - Enhancing the extra-curricular activities
- B. Resources Needed;
- A faculty advisor to support the students chapter
 - The industry professional and financial support to provide these opportunities
 - An active student chapter organization
- C. Performance Criteria;
- The ability to have at least one event each semester for students to support their professional development will be assessed
 - The appropriate number of students in teams to participate in competitions will be assessed The availability of the appropriate funding capacity will be assessed
4. **Faculty Development:** Provide opportunities that enhance professional growth, provide expertise to industry and government partners and promote active learning for faculty and students.
- A. Execution;
- Encouraging and providing opportunities to faculty to acquire the appropriate continuing & professional training and certification
 - Providing continuing & professional education opportunities to professionals in the industry to improve their skills.
- B. Resources Needed;
- Allocating time and grants to faculty
- C. Performance Criteria;
- Number of professional training events will be assessed
 - Total amount of funding allocated to these training events will be assessed

5. **External Support:** Maintain a stable and effective Advisory Board to provide industry perspective and financial support to faculty and to grant students scholarships and job opportunities.
 - A. Execution;
 - Hosting and promoting industry advisory board (IAB) meetings
 - Collaborating with the IAB members in the different committees to provide the appropriate curriculum, program development, sponsorship, and financial support opportunities
 - B. Resources Needed;
 - An adequate number of advisory board members
 - Professional and Funding capacity by the IAB members
 - C. Performance Criteria;
 - The ability to have more than one collaboration event with IAB members each academic year will be assessed
 - Total amount of financial support to faculty development activities will be assessed
 - Total number of awarded scholarships and the dollar amount of funding awarded will be assessed

6. **Assessment & Planning:** Implement planning and assessment methods that anticipate program needs to maximize available resources in support of our mission and goals.
 - A. Execution;
 - Developing a Program Quality Strategic Plan
 - Developing Program Assessment Plan
 - Developing Quality Assessment Implementation Plan
 - B. Resources Needed;
 - Program and faculty commitment to the continues improvement efforts and reports
 - Developing tools and mechanism to collect the supporting data from the different stakeholders
 - C. Performance Criteria;
 - Developing performance assessment implementation reports that align with the program strategic plan, the university policies and the accreditation requirements