



CSU

Washkewicz College
of Engineering

Civil Engineering Department

Construction Management

Partnership Program



Cleveland State University has long been recognized as a leading institution in providing quality education and meeting the demands of the evolving job market. As the construction industry continues to experience significant growth and demand for skilled professionals, there is an urgent need to establish a comprehensive Construction Management degree program. We will create a program that combines academic excellence with practical industry experience, producing graduates who are well-equipped to succeed in this thriving sector.



- According to a survey conducted by the Associated General Contractors of America (AGC), 80% of construction companies in the United States reported difficulties in filling both salaried and hourly craft positions in 2021.
- The AGC's Workforce Survey revealed that nearly two-thirds of construction firms reported longer project completion times due to the labor shortage, and 36% had to turn down projects altogether.
- According to the American Society of Civil Engineers (ASCE), the United States faces a significant shortage of civil engineers. Their 2021 Infrastructure Report Card gave the country's infrastructure a grade of C-, emphasizing the need for more civil engineers to address the aging infrastructure and growing population demands.

As industry continues to move towards integration of the design and construction fields through innovative delivery methods, graduates with cross-disciplinary educational backgrounds are becoming more valuable to employers.



By investing in the development of the Construction Management degree program at Cleveland State University, we will



Address Industry Demand: Meeting the growing demand for skilled construction management professionals by producing graduates who are equipped with the necessary knowledge and practical skills.



Support Economic Growth of the Region: Providing a pipeline of highly qualified professionals who can contribute to the local and regional construction industry.



The Construction Management Partnership Program (CMPP) will serve as the primary support organization in the Washkewicz College of Engineering at CSU. This organization will provide students with a comprehensive understanding of the principles, techniques, and best practices involved in managing construction projects.



Features of CMPP

- ☑ A four-year degree - Bachelor of Science in Construction Management (BSCM)
- ☑ Mandatory Co-Op performing with vertical construction, specialty contractors, and heavy/highway construction.
- ☑ Partner with two-year associate degree programs at:
 - Cuyahoga Community College
 - Lakeland Community College
 - Lorain County Community College
- ☑ Implement Micro-credentials (Continuing education credits)
- ☑ Implementation of a Master of Science in Engineering Systems and Project Management



Students will have the opportunity to engage in hands-on learning experiences through compensated internships, and industry collaborations that enable students to bridge the gap between academia and the professional world.



- ☑ The curriculum will cover a wide range of subjects, including:
 - Project Planning
 - Design
 - Cost Estimation
 - Scheduling
 - Risk Management
 - Quality Control
 - Supply Chain Technology
 - Sustainability
 - Equipment Selection
 - Emerging Means and Methods



Development of the CMPP will incorporate

1. Recruitment: The pipeline to talent begins by creating awareness of engineering and construction management with high school students. CSU will expand summer programming through the Fenn Academy to highlight the benefits and rewarding careers in construction management.

2. Collaboration with Cleveland Metropolitan School District (CMSD): Embracing and increasing diversity within the construction industry is a priority. CSU's partnership with CMSD students, many of whom will be first-generation college students, is increasingly important as a means of building equity in our city and the region.

3. Curriculum Development: Updating courses by integrating emerging trends identified through industry partners and aligning our program with national standards.

4. Faculty and Staff Recruitment: Hiring experienced faculty members with industry expertise and dedicated support staff to ensure the program's success.

5. Infrastructure and Technology Upgrades: Investing in state-of-the-art facilities, construction management software (BIM), and equipment to provide students with relevant hands-on training opportunities.

6. Industry Partnerships: Student collaborations with leading construction companies and industry organizations that provide co-op positions, guest lectures, and real-world project opportunities for students.

7. Marketing and Outreach: Promotion of the program through targeted marketing campaigns, recruitment events, and industry conferences to attract prospective students and industry support.



Graduates with the BSCM degree will



1. Develop construction project objectives that include the delineation of scope, budget, and schedule; ensure quality and safety on a construction project by gathering relevant field data, and conducting appropriate analysis that informs project control.
2. Set performance metrics to maximize resource efficiency through judicious procurement and management of labor, materials, and equipment.
3. Implement and complete construction activities through coordination and control of scheduling, contracting, estimating and cost control.
4. Demonstrate leadership skills, team building, and professional ethics.
5. Be competent in the use of digital technologies including building information modeling (BIM), information technology, data analytics, and artificial intelligence.
6. Develop effective communication skills (both orally and in writing), protocols, and mechanisms for resolving conflicts associated with the construction process; appreciate the importance of community involvement and industry connection.



Partnering with Construction Employers Association (CEA)

In answering this critical need for talent, Cleveland State University and the CEA have proposed a partnership to develop the Construction Management Degree. The university is ready to initiate the program in the Fall of 2024 with a department chair from Civil Engineering and current faculty in place.

An initial investment from the community of \$200,000 will allow for marketing the program to potential students, dedicating educational space and provide scholarship support to students pursuing a Construction Management degree. Members of CEA are invited to contribute at a financial level commensurate with their capacity to do so.



Partnership Opportunities & Benefits



For other opportunities to support the program, please contact the advancement director for the Washkewicz College of Engineering at 216-687-3954.



\$10,000 – Stakeholder

All donors at this level will have a seat on the CMPP Advisory Council, which meets semi-annually and advises the Dean, Department Chair and Faculty on curriculum, recruitment, industry trends, scholarships, and other pertinent initiatives.

A Dean's reception will be held annually to meet with stakeholders, major donors, college and university leadership for networking and college updates.

Stakeholders have priority access to recruit for internships, co-ops and permanent positions by having a designated day on campus to market and meet with students.



\$5,000 – Leadership Circle

All donors at this level will have a seat on the CMPP Advisory Council, which meets semi-annually and advises the Dean, Department Chair and Faculty on curriculum, recruitment, industry trends, scholarships, and other pertinent initiatives.

Donors at this level receive semi-annual updates from the College and an invitation to the Dean's reception.



\$2,500 – Collaborator

Donors at this level receive semi-annual updates from the College and an invitation to the Dean's reception.



\$1,000 - Friend

Friends are listed in various College publications throughout the year.



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