

Construction Management Program Strategic Planning

Preamble

The following plan was developed in accordance with the ACCE Standards and Criteria for Accreditation

Document 102: Preparation of the Self-Evaluation Study (Extract)

- A Strategic Action Plan for the Educational Unit

Document 103: Standards and Criteria for Accreditation (Extract)

9.2. EDUCATIONAL UNIT STRATEGIC PLAN

9.2.1. The Educational Unit shall have a comprehensive Strategic Plan that describes the systematic and sustained effort to enable the Degree Program to fulfill its mission.

9.2.2. The Strategic Plan shall review the internal status of the Degree Program resources as well as the external factors that influence the operation of the Degree Program.

9.2.3. The Strategic Plan shall be updated periodically and represent the collective input from all of the Degree Program constituencies.

Definitions for the Report

The “Educational Unit” is the Construction Management Program (CM)

The “Degree Program” is the Bachelors of Science in Construction Management

During the special session for strategic planning held on March 25, 2022, key stakeholders representing faculty, staff, Construction Management Professional Advisory Board (CMPAB), and students participated in the developing the basis of the strategic plan, which was reviewed and discussed within the context of the following topical areas: curriculum, resources, role of the PAB, placement, outreach, faculty, technology, students/graduates, and role of the administration. The discussion results of the nine aforementioned topical areas were then developed as “additional strategies” in Section 7.

Note: More specific “Tactics” were developed related to each of these Strategies as needed for overall program improvement.

The draft plan, crafted by the program coordinator with information sourced from the planning activity, was then reviewed by all stakeholders who participated in the planning session. Upon final review by the Dean of the School of Engineering, Computing, and Construction Management (SECCM), the plan was “*published*” to the CM web page for the viewing public.

STRATEGIC PLAN

The Construction Management Program Strategic Plan was developed by an inclusive process which included participation from a wide range of interested partners to include students, faculty, staff, school leadership, advisory board members, and alumni. The overall *aim* of the plan is to provide a means by which the program success can be systematically evaluated and improved.

The *purpose* of the strategic plan is to provide a structured and well-defined explanation of the priorities and current initiatives of the Construction Management Program at Roger Williams University. To that end, the underlying methodology is designed to assist in the allocation and direction of resources of the program within School of Engineering, Computing, and Construction Management (SECCM). The current vision, mission, and program goals have been established or reaffirmed by the strategic planning committee and program leadership.

Vision

The vision of the CM program is to “ensure that students are prepared to succeed as well-rounded leaders in the field of Construction Management in a rapidly changing world”

Mission Statement

“Advance the body of construction knowledge through instruction, research and service, and through resourceful graduates who possess the moral foundation and technical skills to lead the profession.” The overarching evaluation, as to the assessment of the program within the strategic plan, will be whether or not it is accomplishing its stated mission.

Assessment of the program objectives and outcomes is done on an annual basis and reported in the annual Program Assessment Report (PAR). During the annual assessment meeting, action items are identified when one or more of the measurement metrics is not met. Action items are then discussed in subsequent program meetings to ensure they are being addressed and/or corrected.

The Strategic Plan for the educational unit includes the following key elements:

- Program objectives
- Program learning outcomes (PLO)
- SWOT Analysis
- Internal Status of Program Resources
- External Factors Influencing the Operations of the Program
- Goals
- Additional Strategies

1.0 Program Objectives

Faculty and Staff:

Recruit and retain exceptional and diverse faculty and staff to support program, school, and university objectives.

Educational:

Graduate students who:

- Demonstrate exemplary cutting-edge technical knowledge and skills.
- Value the concept of life-long learning and continue to grow intellectually while keeping informed of new concepts and developments in the construction process.
- Are recognized as regional, national, and international construction industry leaders.
- Always display the highest standards of ethical conduct.

Service:

Advance the construction management profession by becoming actively involved in professional associations and societies, serving in professional and community volunteer positions, and acting as a role model for future generations of constructors.

Alumni:

Grow and maintain an engaged network of alumni to support and advance program mission and goals.

Students:

Recruit and retain a committed, qualified, passionate and diverse body of students.

Culture:

Embrace a culture of professionalism, innovation, collaboration, and tolerance.

Branding:

Maintain a reputation within the local, national and international communities as a leading academic provider of construction education.

Facilities and Resources:

Maintain convenient, well equipped, and state-of-the-art facilities and resources to support learning and research.

2.0 Program Learning Outcomes (*adopted from the ACCE SLO's*)

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.

The program objectives and program outcomes are central to the assessment of the program in terms of meeting expectations and goals. Results of each are available in the annual program assessment report which is published to the program webpage (<https://www.rwu.edu/academics/schools-and-colleges/seccm/construction-management/about-construction-management>).

In addition, the program assessment plan can be accessed at the following location: <https://www.rwu.edu/sites/default/files/downloads/seccm/cm/seccm-assessment-plan-cm.pdf>

3.0 Swot Analysis

The strengths, weaknesses, opportunities, and threats (SWOT) of the program were identified via a survey distributed to senior construction management students (n = 32; 82% return). The summary findings indicate the most common responses from the survey participants:

- *Strengths*
 - Job placement services
 - Faculty passion and accessibility
 - Methods and material classes
 - Variety of elective courses
- *Weaknesses*
 - Insufficient number of full-time faculty --- too many courses taught by adjuncts
 - Relatively small number of field interactions via jobsite tours
 - Limited number of CM electives
 - Computer applications needs to be reinforced after first year
- *Opportunities*
 - More elective courses for new industry topics
 - Site visits to connect the classroom to the field

- Additional technology courses
- Student competitions
- Expanded connections to alumni
- *Threats*
 - Competition with regional programs (Wentworth, CCSU, WPI, etc.)
 - Lack of involvement in clubs and competition teams
 - Small number of slots in/sections of elective courses
 - Weak math skills
 - New technologies that are not being taught

4.0 Internal Status of Program Resources

Resources crucial to the success of the program have been categorized as either *physical* (people, places, things), *financial* (money), and *academic* (support for new coursework, initiatives, programs, and/or activities). Analysis and discussion have indicated the following status:

- Physical
 - Classrooms spaces meet the needs of the program both for the present and near future. Some of the spaces in the “*old engineering building*”, that have been used by the Program in the past for a wide range of courses, are being re-purposed for other academic programs. In the future many of the CM courses may be taught in other academic spaces around campus
 - Instructional laboratory spaces meet the current needs of the program but lack capacity for significant expansion
 - Research spaces available on the 2nd floor of the SECCM labs building are assigned after request to the Dean; these requests are reviewed annually
 - Each full-time faculty has dedicated office space
- Financial
 - The financial status of the program is good with support from the school in a wide range of areas. Additional support from non-recurring funds has helped closed some minor funding gaps for things such as student travel, conference participation, and competitions but needs to be improved
- Academic
 - All faculty are encouraged to pursue their own research agenda and to develop new courses to augment the list of CM electives
 - The relatively small number of full-time faculty hinders some initiatives related to new electives, club advising, and competition team coaching

5.0 External Factors Influencing the Operations of the Program

External factors that were identified as having an influence on the operations and success of the program are:

- Competition with other programs in ASC Region 1
- Shrinking pool of high school graduates
- Rising costs for program activities funded by non-recurring funds

- Retention of faculty is very high
- Gender diversity of faculty is very good with 40%+ female
- Demand from the construction sector for our students

6.0 Goals

The following goals have been established to provide a means of assessment of overall quality of the program. Goals for the program are classified as follows: (1) degree program goals, (2) educational/academic goals, and (3) partner goals. The goals have been further broken down into shorter-term (1-2 years out) and longer-term (3-5 years out) groups.

6.1 Degree Program

Goal	Description	How Measured
6.1.1 Short Term	Identify and hire one new full-time faculty	Full time faculty numbers
“	Continue to identify and develop new adjunct faculty as needed for a wide range of courses	Expanded adjunct faculty pool
“	Reduce class sizes to be commensurate with University averages	Registrars report
“	Increase diversity of the CM student body in terms of gender, country of origin, BIPOC	Admissions dept. report
6.1.2 Long Term	Improve outreach to alumni	Alumni office report, social media interactions, SECCM newsletter
“	Identify fund raising initiatives that would provide longer term solutions to program financial needs	Balance of non-recurring funds
“	Identify and hire new full-time faculty to support growth of the program	Increase in full time faculty
“	Restart graduate education that may include certificates, degree program, support classes for programs outside of SECCM, hybrid delivery	University approval
“	Build a new CM research lab dedicated to program research	Facilities dept. project
“	Widen focus of job opportunities for graduates in terms of location, types of contractors, internships	Career services report

6.2 Educational/Academic

Goal	Description	How Measured
6.2.1 Short Term	Develop new CNST elective courses to broaden the choices for the students while meeting the changing needs of the industry	University catalog listings
“	Continue to improve existing courses to keep current with industry needs and accreditation currency requirements	PLOM Program Learning Outcome Mentor reports
“	Incorporate more technologies such as VR/MR/AR into our courses	CAR's
“	Increase student participation in competitions and clubs by 10%	Club reports

6.2.2 Long Term	Enhance our position in CM program rankings on a national scale to fall consistently within the top ten	Ranking analysis reports
“	Reduce the section sizes for our courses	Registrar report
“	Expand program specialty tracks	University catalog listings

6.3 Partner

Goal	Description	How Measured
6.3.1 Short Term	Augment support of the program in terms of philanthropy, guest speakers, adjunct faculty, jobsite tours, and curricular review	CMPAB reports
“	Enhance the involvement of alumni in our program	Alumni office reports
“	Increase the emphasis of developing the soft skills and social awareness of our students	Presentations and discussions in a wide range of courses
“	Increase jobsite tour opportunities	CAR's
6.3.2 Long Term	Nationally recognized faculty group	
“	Increase size of the faculty body	# of current vs. future faculty #'s
“	Increase student body diversity by 10%	University reports

Goals Assessment: Goals will be assessed on an annual basis to determine if they have been met or the level of progress that has been achieved via two mechanisms: (1) during the CM faculty's annual program assessment meeting and (2) by the CMPAB at its annual meeting. Additionally, data may be collected from other members of the CM program community.

7.0 Additional Strategies

The following strategies will be adopted and/or implemented as part of the overall program improvement process:

- Strategy #1 –Review, revise, and update the curriculum to keep current with AEC developments and the currency requirements of the accreditation standards and identify ways we can make RWU CM distinctive from our competition.
- Strategy #2 –Acquire additional resources to support the growth of the program
- Strategy #3 – Expand the participation of the CMPAB in areas that include but are not limited to: curricular review, guest speakers, capstone mentors, fundraising, alumni outreach, and identification of adjunct instructors.
- Strategy #4 –Identify additional opportunities for students throughout the career development process
- Strategy #5 –Increase outreach efforts to the CM alumni base through a variety of social media platforms and consider creation of CM Alumni regional chapters
- Strategy #6 –Identify, hire, and develop full and part-time faculty
- Strategy #7 – Upgrade teaching and laboratory facilities to include appropriate new technologies that include...
- Strategy #8 –Focus on increasing the diversity of the program through collaboration on admissions efforts and student support
- Strategy #9 – Work with the SECCM leadership to support the growth and improvement of the program

8.0 Program Review

It is the intent of the educational unit to review and revise (as determined) the Strategic Plan at an interval of no longer than every five (5) years. Strategic Plan reviews are to be inclusive of all degree program constituencies to include but not limited to the following:

1. Educational unit faculty
2. CMPAB
3. Industry employers not represented on the advisory board
4. SECCM leadership including the Dean and Associate Dean
5. Students (generally limited to graduating seniors)
6. Alumni not members of the CMPAB

Note: In some instances, an annual review may be necessary, as there may be fluctuations in the internal and external factors that may be influencing the program.