

Program Review

Executive Summary

Residential Building Construction: Concrete Science

Majors Reviewed:

- *Concrete Science (SS), A.A.S*

AY2021-22



Pennsylvania
College of Technology
A Penn State Affiliate

As a relatively new program, the Concrete Science Technology (SS) program's first cohort started in Fall 2018. Residing within the Residential Building Construction department, it is a highly specialized program designed to utilize a hybrid model of delivery.

As a stand-alone, two-year associate degree, in alignment with the associate degree in Building Construction Technology (CB), as well as the bachelor of science degree in Residential Construction Technology & Management (BRM), in a two-plus-two format, this program produces students that are highly sought after and prepared for a variety of positions within the concrete industry. These include quality control technicians, batch/plant production managers, and admixture technicians serving residential home construction, commercial building, and civil construction such as bridge/highway development. Even though the Bureau of Labor Statistics does not designate *concrete technician* as a specific occupation, it has become evident that concrete jobs should be considered as *high priority* occupations, as the demand for local, regional, and national concrete science experts continues to grow.

Over the last five academic years, the program has seen steady growth and outperformed initial expectations, producing graduates that command initial salaries that are much higher than national averages. This is due in large part to the faculty, who are dedicated to the program's success. In addition to being highly motivated to share their knowledge, they seek out additional funding from industry to provide co-curricular opportunities for their students.

This was evident in Spring 2022 when they raised funds from industry and sought a grant from the President's office to cover travel and admission costs for a large group of students to participate in World of Concrete. World of Concrete is one of the nation's largest trade shows, positioning itself as the *one stop leader* providing "knowledge, equipment, and networking" to the concrete industry. The faculty also proactively sought out additional certifications and licenses at reduced rates to enhance the student's credibility.

To continue this early record of accomplishment, the faculty will:

- introduce the program to more high schools and community colleges to increase enrollment;
- assess the courses being offered annually for relevance and applicability to the program goals;
- implement a five-year plan to keep course-level assessment on-track and up to date;
- seek input from alumni and the revitalized advisory board to ensure direct connections to trade and membership-based organizations and current technology;
- continue to seek out and attend industry-related training to remain in step with current building science and new materials developed during the previous year;
- conduct an annual review in pursuit of increased dual enrollment within the program; and
- pursue increased marketing specifically targeted toward non-traditional prospective students.