

Annual Summary Report of Achievement of Student Learning Outcomes and Degree Program Objectives

As prescribed in Section 8.5.1 and 9.4.1 of ACCE Document 103, *Standards and Criteria for the Accreditation of Construction Education Programs*

ACCE Form A-17



2023 2024	Academic Year	Degree Level	Bachelor's	Program Name	Construction Management	Institution Name	Pennsylvania College of Technology
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Student Learning Outcome		Method of Assessment		Current Evaluation of Results	Resulting Corrective Actions	Last Reported Evaluation of Results	Follow-up of the impact of actions taken		Description of any revisions made to Degree Program assessment tools
SLO #	SLO Description						Date of Follow-up		
#1	Create written communication appropriate to the construction discipline	Concrete Quality Control & Resolution (Assignment Part 1)	Direct	Meeting target	None required	Meeting target	None		No adjustments made.
		Excavation Project (Estimate Proposal Letter)	Direct	Meeting target	None required	Meeting target	None		Changed previous estimate project that this assignment was based off.
#2	Create oral presentations appropriate to the construction discipline	Tool Box Talk Presentation	Direct	Meeting target	None required	Meeting target	None		Require better props and aids. Presenting to other peers or courses conflict due to schedules.
		Project Development Final Project	Direct	Meeting target	None required	Meeting target	None		Smaller class size allowed for more student/group-teacher interaction.
#3	Create a construction project safety plan.	Site Specific Safety Plan	Direct	Meeting target	None required	Meeting target	None		Students assumed the role of a General Contractor and were allowed to utilize the group project general safety plans.
		Job-Hazard Analysis	Direct	Meeting target	None required	Meeting target	None		Less attention was focused on the form and more on the content.
#4	Create construction project cost estimates.	Excavation Project (Estimate Pricing)	Direct	Meeting target	None required	Meeting target	None		Changed the previous estimate project that this assignment was based off. Utilized a new excavation project that progressed through a series of processes. The pricing portion was utilized for this outcome.
		Pre-Engineered Metal Building Quantity Take-Off and Labor Erection Estimates	Direct	Meeting target	None required	Meeting target	None		A new assignment was created and tailored to meet the new senior project being utilized for the current year. An estimating template was also provided.
#5	Create construction project schedules.	Create a Construction Project Schedule	Direct	Meeting target	None required	Meeting target	None		No adjustments made.
		Create a Construction Project Schedule Utilizing MS Project (Gantt Chart and Precedence Diagram with Activity on the Node (AON))	Direct	Meeting target	None required	Meeting target	None		Reviewed previous instructor's project. Aspects were taken from the project to create an entirely new assignment that addresses the student learning outcomes.
#6	Analyze professional decisions based on ethical principles.	Ethics Case Study Analysis and Response	Direct	Meeting target	None required	Meeting target	None		No adjustments made.
		Ethics in Construction	Direct	Meeting target	None required	Meeting target	None		No adjustments made.
#7	Analyze methods, materials, and equipment used to construct projects.	HVAC Exam	Direct	Meeting target	None required	Meeting target	None		Emphasized the importance of completing and understanding all text and workbook assignments.
		Jobsite Layout, Control, Site Logistics, & Temporary Structures	Direct	Meeting target	None required	Meeting target	None		Additional lectures and open forum discussions occurred to elaborate further on some of the more challenging aspects of the project.
#8	Apply electronic-based technology to manage the construction process.	Utilizing Bluebeam Revu, Create As-Built Documents	Direct	Meeting target	None required	Meeting target	None		Change the case scenario / example to scale back the size of the project to be more manageable.
		Net Zero Solar Panel Installation Project Approach	Direct	Meeting target	None required	Meeting target	None		New assessment.
#9	Apply basic surveying techniques for construction layout and control.	Building Layout "L" Shaped with Chains	Direct	Meeting target	None required	Meeting target	None		Reviewed previous instructor's project. Positive aspects were noted from the project to create an entirely new assignment that addresses the student learning outcome.
		Remote Elevation Measurement with Total Station	Direct	Meeting target	None required	Meeting target	None		Reviewed previous instructor's project. Positive aspects were noted from the project to create an entirely new assignment that addresses the student learning outcome.
#10	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.	Quiz 3	Direct	Meeting target	None required	Meeting target	None		Provided a review lecture regarding delivery methods prior to the quiz.
		Project Development Final Project	Direct	Meeting target	None required	Meeting target	None		Smaller class size allowed for more student/group-teacher interaction.
#11	Understand construction accounting and cost control.	Construction Accounting & Cost Control	Direct	Meeting target	None required	Meeting target	None		Directed students to look up available cost control software for discussion in-class before handing out the assessment.
		Quiz 1	Direct	Meeting target	None required	Meeting target	None		Assessment was changed to a quiz of accounting and cost control.
#12	Understand construction quality assurance and control.	Concrete Quality Control & Resolution (Assignment Part 2 & Part 3)	Direct	Meeting target	None required	Meeting target	None		No changes were made to the assignment for this period.
		Understanding Construction Quality Assurance and Control	Direct	Meeting target	None required	Meeting target	None		Answer key was updated.
#13	Understand construction project control processes.	BCM 350 Berwick Concession Stand Submittal Assignment	Direct	Meeting target	None required	Meeting target	None		Added part 2 to the assignment.
		Quiz 2	Direct	Meeting target	None required	Meeting target	None		New assessment created.
#14	Understand the legal implications of contract, common, and regulatory law to manage a construction project.	Exam 3	Direct	Meeting target	None required	Meeting target	None		Added additional examples and outside resources during lectures from recent projects.
		Qualifying Supplier / Subcontractor Proposals	Direct	Meeting target	None required	Meeting target	None		Invested more time prior to executing the assignment to expose the students to other examples of subcontracts and purchase orders. Discussed vocabulary and how this affects the agreement terms and parties involved.
#15	Understand the basic principles of sustainable construction.	Electrical Research Paper and Presentation	Direct	Meeting target	None required	Meeting target	None		In addition to this instrument, additional exams/quizzes referenced topics such as LEED, sustainable construction products (MEP driven), and energy efficiency.
		Final Exam - Sustainable Construction	Direct	Meeting target	None required	Meeting target	None		Emphasized heavily on the 6 principals of LEED in the course lecture.
#16	Understand the basic principles of structural behavior.	Quiz 2 / Question 2	Direct	Meeting target	None required	Meeting target	None		Continued to emphasize the process of identifying the problem, stating what is known, and determining what is necessary to solve the problem. Confirm one is answering the question asked and that the answer makes logical sense.
		Quiz / Question 3	Direct	Meeting target	None required	Meeting target	None		Emphasized the process of identifying the problem, stating what is known, and determining what is necessary to solve the problem. Review the answer. Confirm proper units. Confirm one is answering the question asked.
#17	Understand the basic principles of HVAC, electrical and plumbing systems.	ICT Quiz	Direct	Meeting target	None required	Meeting target	None		Emphasized the importance of completing and understanding all text and workbook assignments.
		HVAC Exam	Direct	Meeting target	None required	Meeting target	None		Additional time taken to explain the importance of completing and understanding all text and workbook assignments.

Degree Program Objectives		Assessment Tool		Evaluation of Results			Action Items		
DPO #	DPO Description	Method of Assessment	Direct or Indirect	Past Cycle Results	Last Reported Evaluation of the Results	Current Evaluation of the Results	Resulting Corrective Actions	Start Date	Description of revisions
#1	Provide students with technical knowledge and management skills necessary for entering management positions in all sectors of the construction industry.	AIC CAC Level 1 Exam Results and Graduate Survey	Direct	Meeting Objective	Objective Met	Objective Met	None		

#2	Exceed the national average with graduating seniors taking the annual American Institute of Constructors (AIC) Associate Constructor (AC) Level 1 Examination.	AIC CAC Exam	Direct	Meeting Objective	Objective Met	Objective Met	None		
#3	Attain and maintain accreditation by the American Council for Construction Education (ACCE).	Accreditation	Direct	Meeting Objective	Objective Met	Objective Met	None		
#4	Increase institutional resources to improve facilities and technical support for the Construction Management program.	Donations and Investments in Program	Direct	Meeting Objective	Objective Met	Objective Met	None		
#5	Enhance faculty professional and technical development in the field of construction management.	Credentials maintained, Faculty Supported in Development	Direct	Meeting Objective	Objective Met	Objective Met	None		
#6	Improve program participation with construction organizations and the industry.	Direct Measure and	Direct	Meeting Objective	Objective Met	Objective Met	None		

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**Guidelines for using the Form A-17**

This file is protected to ensure the format is consistent with all submittals. You can select all locked and unlocked cells, format row (includes hide and unhide rows), insert hyperlinks, and sort.

All of the cells that are not highlighted in light blue will be protected. You can click on all cells but will only be able to change the light blue cells.

The data to be entered in the header have been named. You can go to the named cell by clicking the Range Name drop-down menu.

Click on the "Year" cell. (B4) Select the appropriate academic year.

Click on the "Degree Level." (E4) Select the appropriate Degree Level.

Click on the "Program Name" (G4). Find the name of your Program in the drop-down menu. If you have an "other" name, inform ACCE HQ and we will revise this form for your Program.

Below is the list of common Degree Program names in ACCE that are in the drop down menu.

- Architectural Technologies
- Building Construction
- Building Construction Science
- Commercial Construction Management
- Construction
- Construction Management
- Construction Management and Technology
- Construction Management Technology
- Construction Project Management
- Construction Science
- Construction Science and Management
- Construction Science and Management
- Construction Systems Management
- Construction Technology
- Construction Technology and Management

Click on the "Institution Name" (I4). Enter your Institution's name as you want it to appear on the ACCE Website.

Review the sample information on Line #8. You may hide this row in your final submission.

The 17 SLOs for the BS Program are listed on the BS Degree worksheet. The 13 SLOs for the AAS Programs is located on the AAS Degree worksheet. The 10 SLOs for the MS Program is located on the MS Degree Worksheet.

We have a total of 20 line items set up for SLOs. This is for Programs that have set up additional SLOs in their curriculum. If you need more rows, please contact ACCE HQ.

There are 20 line items set up for the Degree Program Objectives.