

Summary

This document provides a narrative of how Credit for Prior Learning (CPL) is assessed for the Construction Management (CM) Online Program. Due to the extensive variety of trade designations, industry experiences, and positions that can be held within the industry, along with the wide range of topics covered within the CM curriculum, the CPL process is different based on individual circumstance. The following information summarizes each of the applications for how CPL is awarded.

Full Program Admission:

Since the CM Online program has specific admission parameters based on industry experience, students applying for the online Construction Management Program must meet a minimum criteria in order to be fully admitted into the program. Full admission awards 10 credits towards their degree by providing advanced placement for CN107, CN110, CN156, and CN158. Applicants must submit a Supplemental Application Form, a Resume, 3 Reference Forms, and any transcripts, certifications or documentation from prior education or training which are then reviewed by program faculty.

If the faculty member(s) does not believe the documentation provided is sufficient to prove they have earned all of the credits for full admission, the student is offered a 0 credit Bridge Course and associated PLA exam for each of the courses they do not have experiential background in. Once successfully completing the Bridge and PLA as required, they can be fully admitted.

A <u>supporting rubric for online program student applications</u> is used to determine the admission.

Courses beyond Program Admission

For all courses that a student believes they have met or exceeded the competencies in based on their prior education and/or work training, they may choose to "challenge" specific courses by one of the following methods. It is important to note that it is up to the student to reach out to the program faculty if they intend on seeking CPL for specific courses based on their previous education and/or training.

Option 1: Portfolio

In most situations, students who believe they have previously met all of the competencies of a particular course will have to submit a portfolio of prior work and/or training completed. The portfolio will be structured according to the specific requirements and objectives of the class, but in general will consist of:

- Title sheet
- Table of contents
- A summary of the portfolio contents which indicates the course that is being submitted for CPL, and the course objectives.

- An individual statement section on each Course Objective which explains the previous work performed/knowledge gained and how that met or exceeded the stated objective.
- Backup documentation aligned with each of the statements sections.

ACTION: Faculty will evaluate the portfolios to determine if the competencies have been met, and if so will check the "Portfolio" box on the CPL form and maintain their portfolio for record keeping.

Option 2: Exam

For some courses, faculty may offer a cumulative exam if the student believes they have met or exceeded the minimum requirements for the course based on previously completed educational or training opportunities.

ACTION: A generic passing score of 80% or higher will earn the student CPL for that course, and the faculty will check the "Exam" box on the CPL form.

Option 3: Other

Union Training: In situations where a student received union training for a specific trade, the faculty have the ability to write a CPL for courses related to the subject matter taught through the union training. The training centers have specific curriculum which is not accessible by non-union members, but the faculty may be able to review the syllabi and write in which course they have earned CPL for. In these cases, on the CPL form, faculty will check the "Other" box, and provide a note about what union training the student completed (e.g. Carpentry, Electrician, Pipe Fitter, etc.). This note and their union status provided through their application documentation will be sufficient evidence of prior education.

Certifications: In situations where students have earned previous certifications, faculty may determine which course fits for CPL based on their discretion, as pertinent. It is important to note that not all certifications will earn them CPL, so this will be reviewed accordingly.

Special Note: Any student who earns an OSHA 30 card from a different training program or institution earns CPL for CN455 which is consistent with the traditional inperson CM program.

Other: If there are any other means of documentation that may be provided outside of what has been previously stated, the faculty will review accordingly to determine if the student has met all of the objectives of a particular course.

ACTION: If the student has any of the previously stated items, the faculty will check the "Other" box with a note about what item(s) the student provided for record keeping documentation.

CM Course Objectives

CN107 Construction Documents

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Interpret construction plans and specifications as part of the contract documents.
- CO2 Identify symbols, abbreviations and other common design conventions.
- CO3 Demonstrate ability to navigate specification and design documents.
- CO4 Differentiate between information provided in the project construction manual and technical specifications.

CN110 Construction Processes

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Discuss and practice safe use of standard construction tools and equipment
- CO2 Present an assigned safety topic from the OSHA 1926 Construction Regulations
- CO3 Design, estimate and fabricate a final project made of wood

CN152 Codes and Inspections

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Interpret building codes and various forms of other health and safety regulations.
- CO2 Manage a wide range of resources.
- CO3 Cultivate pre-construction relationships with key agencies in the due diligence process.
- CO4 Defend the role of codes in the development of public welfare through the construction industry.
- CO5 Determine code compliance given a complete set of construction plans and specifications.

CN156 Construction Systems and Methods

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Classify general building and architectural systems, and terminology
- CO2 Demonstrate various forms of framing layout and construction calculations
- CO3 Coordinate trade sequencing while adapting to changes in work.
- CO4 Develop and implement a job-site management plan

CO5 – Explain fundamental OSHA regulations.

CN158 Concrete and Masonry

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Classify concrete and masonry systems and terminology
- CO2 Demonstrate various forms of foundation and structural layout and construction calculations
- CO3 Demonstrate installation sequencing for concrete and masonry systems
- CO4 Explain various health and safety regulations regarding concrete and masonry systems

CN251 Construction Field Operations

Course Objectives:

Upon completion of this course, students will be able to:

- CO1 Interpret construction project management documents.
- CO2 Create construction project management documents.
- CO3 Produce construction schedules using Microsoft Project.
- CO4 Characterize soft skills through the completion of case studies.

CN254 Survey and Layout

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Calculate and document angles, distances and elevations.
- CO2 Interpret and write technical report.
- CO3 Create a basic site plan.
- CO4 Perform takeoffs and estimates of sitework operations.
- CO5 Classify terms relating to land and legal descriptions.

CN272 Introduction to Construction Design

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO 1 Identify generally accepted construction design terms.
- CO 2 Produce conceptual and schematic building models utilizing 3D Modeling Software
- CO 3 Produce technical construction drawings utilizing 3D Modeling software
- CO 4 Explain construction design processes

CN278 Mechanical, Electrical and Plumbing Systems

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Read and interpret MEP Plans and Specifications.
- CO2 Explain the basic functions of various MEP systems and equipment.
- CO3 Differentiate between typical roles and responsibilities of MEP contractors.
- CO4 Discuss general coordination challenges involving MEP systems.
- CO5 Evaluate essential processes and components of power generation and distribution systems with regard to energy consumption and sustainability.

CN283 Construction Estimating

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Demonstrate quantity take-off techniques and strategies for a variety of construction components
- CO2 Determine soft cost variables associated with construction projects.
- CO3 Analyze construction costs in preparation for budget development and the bid process.
- CO4 Compare and contrast the relationship between the estimating and budgeting processes.

CN353 Soils and Structures

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Classify soil types and effects on structures.
- CO2 Create and analyze soil test reports.
- CO3 Determine appropriate foundation systems for soil type.
- CO4 Prepare and interpret technical reports.

CN357 Legal Aspects of Construction

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Interpret construction contract documents, requirements, and procedures.
- CO2 Accurately compare the differences in contracting methods and execution of those methods.
- CO3 Assess risk and legal liability associated with discrepancies on a construction project.
- CO4 Write basic construction scopes of work.
- CO5 Evaluate ethical challenges in managerial decision-making.

CN369 Construction Economics and Standard Practices

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Discuss economic factors affecting the construction industry and explain common construction economic terminology.
- CO2 Build and adjust construction schedules
- CO3 Calculate and apply indirect cost methods.
- CO4 Develop pay applications based upon percentage complete
- CO5 Apply change management practices to construction documents and processes.

CN372 Advanced Design

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Compare and Contrast Building Information Modeling (BIM) and Virtual Design in Construction (VDC) and their uses in the construction industry.
- CO2 Discuss the stages of design from conceptual to as-built.
- CO3 Prepare Schematic designs based on owner requirements using 3D modeling software.
- CO4 Demonstrate animation techniques using a variety of design software.

CN445 Property Development

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Summarize the steps in the property development process.
- CO2 Interpret market research for property development planning.
- CO3 Analyze varying site locations and conditions for optimal land use.
- CO4 Summarize various regulations associated with property development.
- CO5 Create and interpret financial documents and predict financial outcomes of potential development projects.
- CO6 Create and justify feasibility studies.
- CO7 Prepare executive and technical documents using appropriate writing styles.

CN450 Project Control

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Explain and identify pre-construction services.
- CO2 Discuss the construction manager's role in pre-construction services.
- CO3 Create phasing and logistics plans.

- CO4 Explain how relationships affect construction.
- CO5 Describe the complete scheduling process.
- CO6 Explain the impact of value engineering and lean practices on a construction project.

CN455 Construction Safety

Course Objectives:

Upon completion of this course, students will be able to:

- CO1: Recognize OSHA's Focus Four Hazards in the workplace (fall, caughtin or between, struck-by and electrocution in construction), and provide responses to mitigate the hazards
- CO2: Interpret hazard identification, avoidance, control and prevention.
- CO3: Recognize employer requirements to protect workers from hazards.
- CO4: Conduct hazard assessment and task analysis using case studies.

CN459 Construction Management

Course Objectives:

Upon successful completion of this course, students will be able to:

- CO1 Create a personal budget, discuss various tax strategies and design a personal financial plan.
- CO2 Formulate comprehensive pre-construction plan as part of an Academic Service Learning (ASL) project.
- CO2.1 Implement (when feasible) construction plan as part of an Academic Service Learning (ASL) project.
- CO3 Summarize Academic Service Learning (ASL) project processes and outcomes.