

Construction Technology (AAS)

Catalog Effective Term: Fall 2025

Program Code: APCONT

Credential: Associate in Applied Science

High Demand Occupation, High Wage Occupation

This Associate of Applied Science degree provides students with a hands-on pathway for entering the construction industry. Courses are carefully selected to align with the specific skill sets required for a variety of construction tasks, including framing, finishes, mechanical systems, and advanced masonry. Students will gain experience with production processes, advanced construction techniques, and the interpretation and application of building codes. This program helps students prepare to sit for the Michigan State Builder's License Exam.

Upon completion of this degree, students will earn three credentials:

- Construction Technology I Certificate (CTCON1)
- Construction Technology II Advanced Certificate (CVCON2)
- Associate of Applied Science in Construction Technology (APCONT)

Program Admission Requirements

An Academic Math level of 3 is required for CON 204, 205, 230, 235, 240, 255, 260, and 270.

Minimum Credits Required for the Program: 61

+ Full-Time Students

First Semester		Credits
CON 108	Introduction to Construction Technology	2
ENG 111	Composition I	4
MTH 157	Technical Mathematics	3
CMG 130	Construction Site Safety and OSHA Regulations	3
Soc. Sci. Elective(s)		3
Credits		15
Second Semester		
CON 104	Construction Framing I	3
CMG 180	Application of Construction Materials	3
CON 235	Construction - Building Codes and Prints	3
Arts/Human. Elective(s)		3
Speech/Comp. Elective(s)		3
Credits		15
Third Semester		
CON 105	Construction Framing II	3
CON 204	Construction Finishes - Interior	3
CON 205	Construction Finishes - Exterior	3
CON 255	Construction Concrete and Masonry	3

<u>Nat. Sci. Elective(s).</u>	3
Credits	15
Fourth Semester	
<u>CMG 225</u> Construction Builders License	4
<u>CON 230</u> Construction Production	3
<u>CON 240</u> Construction - Advanced Finishes and Techniques	3
<u>CON 260</u> Construction Remodeling	3
<u>CON 270</u> Construction Mechanicals	3
Credits	16
Total Credits	61

+ Part-Time Students

First Semester	Credits
<u>CON 108</u> Introduction to Construction Technology	2
<u>MTH 157</u> Technical Mathematics	3
<u>Soc. Sci. Elective(s).</u>	3
Credits	8
Second Semester	
<u>CON 104</u> Construction Framing I	3
<u>CMG 130</u> Construction Site Safety and OSHA Regulations	3

PROGRAM PROPOSAL FORM

- ☐ **Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- ☐ **Final Approval** – Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name: Division and Department: Type of Award: Effective Year (new programs are always effective in the Fall term): Initiator:	<u>Construction Technology</u> <u>Advanced Technologies and Public Service Careers</u> ☐ AA ☐ AS ☒ AAS ☐ Cert. ☐ Adv. Cert. ☐ Post-Assoc. Cert. ☐ Cert. of Comp. <u>Fall 2025</u> <u>Matthew Hagood</u>	Program Code: CIP Code: <u>52.2001</u>
Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.	Embedded Certificates: The program consists of two embedded certificates that students can earn as they work through the program. Both of these certificates are already offered here at WCC: • Construction Technology I (CTCON1) • Construction Technology II (CVCON2) Purpose and Goals The Construction Technology Associate of Applied Science Degree is designed to provide students with the technical knowledge and hands-on skills necessary to excel in the construction field. The program's goals include: • Preparing students for careers in residential, commercial, and industrial construction through practical training. • Developing competencies in construction framing, finishes, production, and mechanics. • Equipping students with knowledge of construction codes, licensing, and startup processes. Projected Enrollment Figures: • First Year Enrollment: 20-25 students. • Growth Potential: 30-40 students within three years as industry demand increases for skilled talent in construction. Connection to Other WCC Programs: • Strong alignment with WCC's existing Advanced Technologies and Skilled Trades programs, allowing the integration of courses covering	

	site safety and technical math (e.g., CMG 130 and MTH 157). • Opportunities for students to transition into related fields like HVACR, welding, and advanced manufacturing. Accreditation/Professional Connections: • The program content meets OSHA standards for safety training. • Focus on compliance with local and national building codes. • Collaboration with construction trade organizations to enhance job placement and internship opportunities. Special Features: • Hands-On Learning: Courses such as Construction Framing (CON 104, CON 105), Advanced Finishes and Techniques (CON 240), and many others, provide practical experience. • Comprehensive Coverage: The program covers interior and exterior finishes, construction mechanics, advanced masonry and remodeling techniques. • Industry-Ready Curriculum: Emphasis on licensing, contracts, and codes ensures students are prepared for regulatory and operational aspects of construction. • Elective Flexibility: Students can select Arts/Humanities, Speech/Communication, Natural Sciences, and Social Sciences electives to tailor their education to personal and professional goals. • Capstone Skills: Advanced courses in concrete and masonry (CON 255), remodeling (CON 260), and mechanical systems (CON 270) prepare students for specialized roles.
Need Need for the program with evidence to support the stated need.	The construction industry is considered to have a “bright outlook” according to the Department of Labor. For Construction Laborers, southeast Michigan is above the national average, at \$48.5k annually – with a 2-year degree the earning potential is even higher. Lightcast analytics has tracked a 5-8% yearly increase in open construction positions on average over the past five years. This program is intended to help address the critical workforce shortages and skills gaps in the construction industry. The employment outlook identifies construction-related skilled trades as key areas for job growth and investment. These programs at Washtenaw Community College offer stackable credentials, enabling students to enter the workforce quickly while providing pathways for further education and career advancement.
Curriculum List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list. Associate degree programs must provide a semester by semester program layout.	See attached spreadsheet

Budget Specify program costs in the following areas, per academic year: <i>This cost has been historically budgeted in the general fund.</i>		START-UP COSTS	ONGOING COSTS
	Faculty	\$	\$ 132,013.00
	Training/Travel		
	Materials/Resources		25,000.00
	Facilities/Equipment		
	Other		
	TOTALS:	\$	\$ 157,013.00
Program Description for Catalog and Web site	This AAS degree provides students with a hands-on pathway for entering the construction industry. Courses are carefully selected to align with the specific skill sets required for a variety of construction tasks, including framing, finishes, mechanical systems, and advanced masonry. Students will gain experience with production processes, advanced construction techniques, and the interpretation and application of building codes. This program helps students prepare to sit for the Michigan State Builder's License exam.		
Program Information	Accreditation/Licensure - Advisors - Advisory Committee - Admission requirements – A math level of 3 or MTH 257 or higher is required for CON 204, 205, 230, 235, 240, 255, 260, and 270. Articulation agreements - Continuing eligibility requirements -		

Assessment plan: Construction Technology concentration

Program outcomes to be assessed	Assessment tool	When assessment will take place	Courses/other populations	Number students to be assessed
1. Sketch the floor plans, elevations, and sections needed to construct residential structures. Embedded OC#3	Outcome-related portfolio project	Fall 2026	CON 235 (submitted for reactivation)	All students
2. Pour and finish concrete projects used in light frame construction. (embedded OC #2)	Lab projects	Fall 2026	CON 255 (submitted for reactivation)	All students
3. Sequence necessary steps in home construction. (embedded OC #1)	Written departmental exam	Fall 2026	CON 230	All students

4. Demonstrate safe and effective techniques for successful residential or light frame remodels. (embedded OC #3)	Outcome-related lab project	Fall 2026	CON 260 (submitted for reactivation)	All students
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Scoring and analysis plan:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally-developed rubric, external evaluation, other). Attach the rubric.

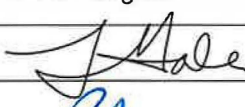
Outcomes 1, 2, and 4: Departmentally-developed rubric
Outcome 3: Answer key

2. Indicate the standard of success to be used for this assessment.

80% of students will score 80% or higher.

3. Indicate who will score and analyze the data.

Departmental faculty

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair/Area Director	Brian Martindale	Brian Martindale /s/	02/10/2025
Dean	Eva Samulski	Eva Samulski /s/	Feb. 9, 2025
Please return completed form to the Office of Curriculum and Assessment (SC 257) or by email to curriculum.assessment@wccnet.edu. Once reviewed by the appropriate faculty committees, we will secure the signature of the VPI and President.			
Curriculum Committee Chair	Randy Van Wagnen	R Van Wagnen	Feb 28, 2025
Assessment Committee Chair	Jessica Hale		3/12/25
Executive Vice President for Instruction	Dr. Brandon Tucker		3/13/25
☐ Approved for Development ☒ Final Approval	Dr. Rose B. Bellanca		3/25/25
President			4/22/2025
Board Approval			

Construction Technology (AAS)

First Semester		Credits
CON 108	Introduction to Construction Technology	2
ENG 111	Composition I	4
MTH 157	Technical Math	3
CMG 130	Construction Site Safety and OSHA Regulations	3
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	Credits	15
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CON 204	Construction Finishes - Interior	3
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CON 255	Construction Concrete and Masonry	3
Nat. Sci. Elective(s)		3
	Credits	15
Fourth Semester		
CMG 225	Construction Builders License	4
CON 230	Construction Production	3
		3
CON 240	Construction - Advanced Finishes and Techniques	
CON 260	Construction Remodeling	3
CON 270	Construction Mechanicals	3
	Credits	16
	Total Credits	61

Students who follow this degree will earn the following:

Current Construction Technology I Certificate (CTCON1) - (CON 104, CON 105, CON 108, CON 204, CON 205, CON 255)

Current Construction Technology II Certificate (CVCON2) - (CMG 225, CON 230, CON 235, CON 240, CON 260, CON 270)

Associate of Applied Science in Construction Technology