

# PILE DRIVING, CERTIFICATE OF PROFICIENCY

Students must be currently working in a registered apprenticeship program in conjunction with the U.S. Department of Labor, Bureau of Apprenticeship and Training. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Pile Driving is the art of driving down piles with rigs that are large machines that resemble cranes. Work can include driving concrete and metal piling as part of a foundation system, or driving wood and concrete piling to support docks and bridges. Pile Drivers can also be found on offshore oil rigs and as commercial divers in underwater construction. The apprenticeship certificate recognizes student attaining journey level status at the completion of the technical studies.

**Program contact:** Learn more

Financial Assistance funds cannot be applied towards this program.

**This certificate will be automatically awarded when the certificate requirements are completed. If you do not want to receive the certificate, please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.**

Learn more about how certificate credits apply to the related degree.

## Program Admission Requirements

- High School Diploma/GED
- Intent-to-hire agreement with participating contractor

## Other Information

- Participant must be working in an apprenticeship in conjunction with the U.S. Department of Labor, Bureau of Apprenticeship and Training.

## Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Communicate verbally, nonverbally and in writing with the construction team that includes members of other trades, contractor and government agencies.
2. Work independently and in a team environment to accomplish the job in a timely and professional manner.
3. Recognize, analyze and apply critical thinking to resolve issues as they arise, minimize waste and improve productivity.
4. Use appropriate personal protective equipment and fall protection to ensure a safe and environmentally sensitive work environment in accordance with OSHA and other federal, state, local and contractor's standards and policies.
5. Exhibit pride of craftsmanship, reliability, commitment to the organization and take opportunities to upgrade skills.
6. Apply basic math concepts and operations and blueprint reading to accurately determine layout in order to fabricate and install various construction tasks that minimize waste.
7. Be certified in OSHA, CPR/First Aid, Scaffold, fall protection and MSDS.

8. Use cranes, vibrating hammers and drilling rigs to drive and secure various types of piling to develop foundations for bridges and commercial buildings.
9. Use appropriate equipment, sheeting and lagging in order to build permanent and temporary retaining walls for a variety of construction projects.
10. Setup and use crane(s) to support the equipment and drive various types of piling.
11. Be certified in rigging and welding.

MATH-1140, MATH-1141, MATH-1200, MATH-1270, and MATH-1280 can no longer count towards fulfilling the college-level mathematics requirement. These courses were re-classified as developmental mathematics by the state of Ohio in 2016. Tri-C established a 5-year transitioning window for students who had completed these courses prior to 2016 to apply them towards meeting graduation requirements, which expired in Summer 2021. It is highly recommended to see a counselor to determine the appropriate math required for your current major.

## Suggested Semester Sequence

First Semester		Credit Hours
ATCT-1301	Introduction to Carpentry	2
ATCT-1310	Carpentry Safety	2
ATMW-1340	Introduction to Pile Driving	2
ATMW-1450	Heavy Rigging	2
ATMW-1490	Millwright Pile Driver Weld I	2
ATPD-1330	Print Reading for Pile Driving	2
Credit Hours		12
Second Semester		
ATMW-2230	Millwright Pile Driver Weld II	2
ATPD-1310	Technical Measurements, Hand & Power Tool Use in Pile Driving	2
ATPD-1370	Pile Driving on Land and Water	2
ATPD-2020	Pile Driving Technologies	2
ATPD-2220	False Work and Heavy Timber	2
ATPD-2370	Advanced Pile Driving on Land	2
ATPD-2380	Advanced Pile Driving on Water	2
Credit Hours		14
Summer Completion		
ATMW-2520	Millwright Pile Driver Weld III <sup>1</sup>	2
ATPD-2700	Millwright-Pile Driver Weld IV <sup>1</sup>	2
ATPD-2710	Millwright-Pile Driver Weld V <sup>1</sup>	2
Credit Hours		6
Total Credit Hours		32

<sup>1</sup> Consecutively scheduled courses.