

# APPLIED INDUSTRIAL TECHNOLOGY (CARPENTRY), ASSOCIATE OF APPLIED SCIENCE



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. Carpentry is the art and trade of cutting, working, and joining timber. Carpenters work with both structural materials in framing, as well as items such as doors, windows, and staircases. The apprenticeship certificate recognizes student attaining journey level status at the completion of the technical studies. Apprentices may apply technical studies together with general education coursework toward the Associate of Applied Science degree with a concentration in Carpentry.

**Program contact:** Learn more

**This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), 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:

- Communicate verbally, nonverbally and in writing with the construction team that includes members of other trades, contractor and government agencies.
- Work independently and in a team environment to accomplish the job in a timely and professional manner.
- Recognize, analyze and apply critical thinking to resolve issues as they arise, minimize waste and improve productivity.

- 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.
- Exhibit pride of craftsmanship, reliability, commitment to the organization and take opportunities to upgrade skills.
- 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.
- Be certified in OSHA, CPR/First Aid, Scaffold, fall protection and MSDS.
- Fabricate and install interior/exterior walls, stairs, doors, windows, roof components, flooring and exterior finish in order to build a residential home that meets customer specifications.
- Fabricate, install and disassemble various concrete forms, frames and systems using appropriate crane and rigging hardware for bridges and commercial building according to customer specifications.
- Fabricate walls, stairs, ceiling grids and install studs, drywall, ceilings, door, and windows to meet a commercial client's specifications.

## Suggested Semester Sequence

First Semester		Credit Hours
ATCT-1301	Introduction to Carpentry	2
ATCT-1320	Introduction to Hand and Power Tools	2
ATCT-1351	Metal Studs and Dry Walls	2
ATCT-1381	Wood Framing	2
CNST-1281	Construction Engineering Orientation	3
Any Approved Ohio Transfer 36 Mathematics course		3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
<b>Credit Hours</b>		<b>17</b>
Second Semester		Credit Hours
ATCT-1310	Carpentry Safety	2
ATCT-1331	Concrete Footers and Walls	2
ATCT-1370	Layout	2
ATCT-2361	Suspended Ceilings	2
ATCT-xxxx	Any ATCT elective course	2
Communication requirement		3
Select one of the following:		3
IT-1090	Computer Applications	
IT-109H	Honors Computer Applications	
<b>Credit Hours</b>		<b>16</b>
Third Semester		Credit Hours
ATCT-1491	Residential Steel Framing	2
ATCT-1610	Interior Finish	2
ATCT-2341	Concrete Specialities	2
ATCT-2370	Interior Systems Layout	2
CNST-1290	Construction Print Reading	2
Arts & Humanities requirement		3
Social & Behavioral Science requirement		3
<b>Credit Hours</b>		<b>16</b>

**Fourth Semester**

AIT-2990	Contracting in a Diverse World	3
ATCT-1390	Welding for Carpentry	2
ATCT-2560	Interior Systems III	2
CNST-1510	Green Building & Sustainability I	3
CNST-2131	Construction Methods and Materials	3
<b>Credit Hours</b>		<b>13</b>
<b>Total Credit Hours</b>		<b>62</b>

**Recommended ATCT Electives**

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
ATCT-1710	Stairs Layout	2
ATCT-2330	Trade Show	2
ATCT-2500	Exterior Finish	2
ATCT-2511	Concrete Columns and Decks	2
ATCT-2520	Stairs Installation	2
ATCT-2540	Roof Framing III	2

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.