

# Construction Trades Technology

College of Rural and Community Development  
Interior-Aleutians Campus  
(907) 474-5439  
[www.uaf.edu/iac/](http://www.uaf.edu/iac/)

## Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 38.5 credits; for Degree: 75 credits

The construction trades technology program is designed to prepare students to work in the construction industry. The program prepares students for employment in areas where there is a projected shortage of skilled workers and for potential entry into an apprenticeship program.

This program provides students with fundamental knowledge of the construction industry as well as hands-on training. It teaches skills needed by Alaskan employers. Students completing the certificate program will have completed the first-year of the A.A.S. degree program. Graduates of the A.A.S. degree program may pursue opportunities with employers as they acquire a higher level of construction trade skills.

A strong desire to work in the construction trades industry is important. Students must be willing to work collaboratively with industry employees in construction trades in their local area in order to fulfill the practicum components of courses.

## Certificate Program

1. Complete the general university requirements (page 76).
2. Complete the certificate requirements. (See page 78. As part of the certificate requirement, complete 3 credits each in the communication and human relations requirements.)
3. Complete 3 credits from one of the following computation courses:  
CTT 106—Construction Mathematics (3)  
or TTCH 131—Maintenance Mathematics (3)..... 3
4. Complete the following program (major) requirements:  
CTT 100—Construction Technology Core (5)  
or CTT 101—Basic Construction Safety (1)  
and CTT 102—Introduction to Hand and Power Tools (1)  
and CTT 103—Introduction to Blueprint Reading (1)  
and CTT 104—Basic Communication and Employability Skills (2) ..... 5  
CTT 110—Residential Carpentry - Level One (8.5)  
or CTT 111—Materials and Tools Used in the Trade (2.5)  
and CTT 112—Floor Systems, Wall and Ceiling Framing (2)  
and CTT 113—Roof Framing and Windows and Exterior Doors (2)  
and CTT 114—Introduction to Concrete Materials and Forms (2)..... 8.5  
CTT 115—Residential Carpentry - Level Two (12)  
or CTT 116—Reading Plans and Site Layout –One (2)  
and CTT 117—Exterior Finish and Moisture Protection (2)  
and CTT 118—Roofing, Stairs, and Metal Studs Applications (3)  
and CTT 119—Drywall and Interior Finish Applications (5)..... 12  
CTT 199—Student Practicum I..... 3  
HLTH 122—First Aid and CPR..... 1
4. Minimum credits required .....38.5

## Major—A.A.S. Degree

1. Complete the general university requirements (page 76).
2. Complete the A.A.S. degree requirements (See page 78. As part of the degree requirements, complete CTT 106 or TTCH 131 for the computation requirement.)
3. Complete the following construction trades technology certificate program requirements:  
CTT 100—Construction Technology Core (5)  
or CTT 101—Basic Construction Safety (1)  
and CTT 102—Introduction to Hand and Power Tools (1)  
and CTT 103—Introduction to Blueprint Reading (1)  
and CTT 104—Basic Communication and Employability Skills (2) ..... 5  
CTT 110—Residential Carpentry - Level One (8.5)  
or CTT 111—Materials and Tools Used in the Trade (2.5)  
and CTT 112—Floor Systems, Wall and Ceiling Framing (2)  
and CTT 113—Roof Framing and Windows and Exterior Doors (2)  
and CTT 114—Introduction to Concrete Materials and Forms (2)..... 8.5  
CTT 115—Residential Carpentry - Level Two (12)  
or CTT 116—Reading Plans and Site Layout –One (2)  
and CTT 117—Exterior Finish and Moisture Protection (2)  
and CTT 118—Roofing, Stairs, and Metal Studs Applications (3)  
and CTT 119—Drywall and Interior Finish Applications (5)..... 12  
CTT 199—Student Practicum I..... 3  
HLTH 122—First Aid and CPR..... 1
4. Complete the following program (major) requirements:  
CTT 170—Residential Electrical - Level One (9)  
or CTT 171—Electrical Safety and Electric Theory (2)  
and CTT 172—Alternating Current, Electrical Test Equipment, and the NEC (2)  
and CTT 173—Raceways, Boxes, and Fittings, and Hand Bending (2.5)  
and CTT 174—Boxes, Fittings, Conductors, Terminations, and Splices (2.5) ..... 9  
CTT 175—Residential Electrical - Level Two (8)  
or CTT 176—Electrical Blueprint Reading, Wiring Devices, and Raceway, Box, and Fitting Fill (2)  
and CTT 177—Wiring: Commercial and Residential, and Grounding (2)  
and CTT 178—Circuit Breakers, Fuses, and Electric Services (2)  
and CTT 179—Lighting Fixtures and Related components (2) ..... 8  
CTT 150—Plumbing - Level One (4)  
or CTT 151—Introduction to Plumbing Tools and Plumbing Drawings (1)  
and CTT 152—Introduction to Plumbing Math (1)  
and CTT 153—Plastic and Copper Pipe and Fittings (1)  
and CTT 154—Fixtures, Faucets, and Venting Systems (1)..... 4  
CTT 155—Plumbing - Level Two (8)  
or CTT 156—Intermediate Math and Reading Commercial Drawings (2)  
and CTT 157—Installing and Testing DWV Piping and Other Drains (2)  
and CTT 158—Valves, Faucets, and Fixtures: Installation and Testing (3)  
and CTT 159—Fuel Gas Systems (1) ..... 8  
CTT 299—Student Practicum II ..... 1.5
5. Minimum credits required .....75

\*Student must earn a C grade or better in each course.

**Note:** Page numbers refer to the UAF 2005-2006 academic catalog, which can be viewed online at [www.uaf.edu/catalog/](http://www.uaf.edu/catalog/).