

# 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 construction industry expectations as well as hands-on training. It responds to the skills targeted 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 86).
2. Complete the certificate requirements. (See page 88. 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 F106—Construction Mathematics (3)  
 or TTCH F131—Mathematics for the Trades (3).....3

4. Complete the following program (major) requirements:  
 CTT F100—Construction Technology Core (5)  
 or CTT F101—Basic Construction Safety (1)  
 and CTT F102—Introduction to Hand and Power Tools (1)  
 and CTT F103—Introduction to Blueprint Reading (1)  
 and CTT F104—Basic Communication and Employability Skills (2) .....5  
 CTT F110—Residential Carpentry — Level One (8.5)  
 or CTT F111—Materials and Tools Used in the Trade (2.5)  
 and CTT F112—Floor Systems, Wall and Ceiling Framing (2)  
 and CTT F113—Roof Framing, Windows and Exterior Doors (2)  
 and CTT F114—Introduction to Concrete Materials and Forms (2) .....8.5  
 CTT F115—Residential Carpentry — Level Two (12)  
 or CTT F116—Reading Plans and Site Layout — Level One (2)  
 and CTT F117—Exterior Finish and Moisture Protection (2)  
 and CTT F118—Roofing, Stairs and Metal Studs Applications (3)  
 and CTT F119—Drywall and Interior Finish Applications (5) .....12  
 CTT F199—Student Practicum I.....3  
 HLTH F122—First Aid and CPR.....1
5. Minimum credits required .....38.5

### Major — A.A.S. Degree

1. Complete the general university requirements (page 86).
2. Complete the A.A.S. degree requirements (See page 90. As part of the degree requirements, complete CTT F106 or TTCH F131 for the computation requirement.)
3. Complete the following construction trades technology certificate program requirements:  
 CTT F100—Construction Technology Core (5)  
 or CTT F101—Basic Construction Safety (1)  
 and CTT F102—Introduction to Hand and Power Tools (1)  
 and CTT F103—Introduction to Blueprint Reading (1)  
 and CTT F104—Basic Communication and Employability Skills (2) .....5  
 CTT F110—Residential Carpentry — Level One (8.5)  
 or CTT F111—Materials and Tools Used in the Trade (2.5)  
 and CTT F112—Floor Systems, Wall and Ceiling Framing (2)  
 and CTT F113—Roof Framing, Windows and Exterior Doors (2)  
 and CTT F114—Introduction to Concrete Materials and Forms (2) .....8.5  
 CTT F115—Residential Carpentry — Level Two (12)  
 or CTT F116—Reading Plans and Site Layout — Level One (2)  
 and CTT F117—Exterior Finish and Moisture Protection (2)  
 and CTT F118—Roofing, Stairs and Metal Studs Applications (3)  
 and CTT F119—Drywall and Interior Finish Applications (5) .....12  
 CTT F199—Student Practicum I.....3  
 HLTH F122—First Aid and CPR.....1

4. Complete the following program (major) requirements:\*
- CTT F150—Plumbing — Level One (4)
    - or CTT F151—Introduction to Plumbing Tools and Plumbing Drawings (1)
    - and CTT F152—Introduction to Plumbing Math (1)
    - and CTT F153—Plastic and Copper Pipe and Fittings (1)
    - and CTT F154—Fixtures, Faucets, and Venting Systems (1) .....4
  - CTT F155—Plumbing — Level Two (8)
    - or CTT F156—Intermediate Math and Reading Commercial Drawings (2)
    - and CTT F157—Installing and Testing DWV Piping and Other Drains (2)
    - and CTT F158—Valves, Faucets and Fixtures: Installation and Testing (3)
    - and CTT F159—Fuel Gas Systems (1) .....8
  - CTT F170—Residential Electrical — Level One (9)
    - or CTT F171—Electrical Safety and Electric Theory (2)
    - and CTT F172—Alternating Current, Electrical Test Equipment and the NEC (2)
    - and CTT F173—Raceways, Boxes, Fittings and Hand Bending (2.5)
    - and CTT F174—Boxes, Fittings, Conductors, Terminations and Splices (2.5) .....9
  - CTT F175—Residential Electrical — Level Two (8)
    - or CTT F176—Electrical Blueprint Reading, Wiring Devices, and Raceway, Box and Fitting Fill (2)
    - and CTT F177—Wiring: Commercial and Residential, and Grounding (2)
    - and CTT F178—Circuit Breakers, Fuses and Electric Services (2)
    - and CTT F179—Lighting Fixtures and Related Components (2) .....8
  - CTT F299—Student Practicum II .....1.5
5. Minimum credits required .....75
- \* Student must earn a C grade or better in each course.

