

WELDING AND MATERIALS
TECHNOLOGY

College of Rural and Community Development
Community and Technical College
907-455-2932
www.ctc.uaf.edu/programs/weld/

Welding is an important industrial skill with applications in agriculture, mining, transportation, aviation, oil and gas, and construction. Training ranges from welding basics to advanced pipe and metal plate fabrication.
Classes are small to offer hands-on training and maximum interaction between the student and instructor. Students may request credit by examination for any WMT class. Advanced students may work toward American Welding Society certification or pursue advanced projects. Contact the department for details.

The following courses are part of the welding and materials technology program:
WMT F101—Introduction to Welding.....3
WMT F102—Intermediate Welding.....3
WMT F103—Welding I3
WMT F105—Welding II.....3
WMT F106—Heat Treating/Metal Finishing/Knife Making I3
WMT F117—Oxy-Acetylene Welding and Cutting3
WMT F130—Shielded Metal Arc Welding (SMAW)..... 1 - 3
WMT F150—Gas Tungsten Arc Welding (GTAW)..... 1 - 3
WMT F160—Gas Metal Arc Weld Alum (GMAW) 1 - 3
WMT F170—Military Training Welding I.....3
WMT F206—Heat Treating/Metal Finishing/Knife Making II3
WMT F210—Uphill Pipe Welding3
WMT F241—Gas Tungsten Arc and Gas Metal Arc Welding.....3
WMT F270—Military Training Welding II.....3
WMT F280—Military Training Welding III3
WMT F290—Welding Proficiency Maintenance3
* Students must earn a C grade or better in each course.

Certificate Requirements

Communication 2 – 3 Credits

Complete one of the following:

- ENGL F111X—Introduction to Academic Writing.....(3)
- ABUS F170—Business English.....(3)
- ABUS F271—Business Communications(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing*(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences(3)
- COMM F131X—Fundamentals of Oral Communication: Group Context(3)
- COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)
or successful completion of competency test
- DEVS F104—University Communications..... (1 – 3)
- DEVS F105—Intensive Reading Development(3)
- Other program-approved discipline-based communication course or
discipline-based courses with embedded communication content..... (2 – 3)

* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

Computation 2 – 3 Credits

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences
(computer science, math or statistics).(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care(3)
- HUMS F117—Math Skills for Human Services.....(3)
- TTCH F131—Mathematics for the Trades(3)
- Other program-approved discipline-based computation course or
discipline-based courses with embedded computation content. (2 – 3)

Human Relations 2 – 3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture(s)(3)
- ABUS F154—Human Relations(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s)(3)
- ECE F107—Child Development II: Preschool and Primary Years (s)(3)
- ED/PSY F245—Child Development (s)(3)
- HLTH F106—Human Behavior in Health Care (s).....(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND
RHS F115—Issues of Personal Development(2)
- Other program-approved discipline-based human relations or
discipline-based courses with embedded human relations content. (2 – 3)

Major specialty at least 21 Credits

Electives to total 30 Credits

Associate of Applied Science Requirements

Written Communication 6 Credits

- ENGL F111X—Introduction to Academic Writing.....(3)

Complete one of the following:

- ABUS F271—Business Communications(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing*(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences(3)

* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

Oral Communication 3 Credits

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context(3)
- COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)
or successful completion of competency test

Computation 3 Credits

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences
(computer science, math or statistics).(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care(3)
- HUMS F117—Math Skills for Human Services.....(3)
- TTCH F131—Mathematics for the Trades(3)
- Other program-approved discipline-based computation course or
discipline-based courses with embedded computation content. (3)

Human Relations 3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (s)(3)
- ABUS F154—Human Relations(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s)(3)
- ECE F107—Child Development II: Preschool and Primary Years (s)(3)
- ED/PSY F245—Childhood Development (s)(3)
- HLTH F106—Human Behavior in Health Care (s)(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND
RHS F115—Issues of Personal Development(2)
- Other program-approved discipline-based human relations course or
discipline-based courses with embedded human relations content. (3)

Major specialty at least 30 Credits

Electives to total 60 Credits

Minimum credits required for degree 60 Credits