INSTRUMENTATION TECHNOLOGY

College of Rural and Community Development
Community and Technical College
907-479-2436
www.ctc.uaf.edu/programs/inst/

Certificate

Minimum Requirements for Certificate: 32 credits

The instrumentation technology program will develop entry-level skills in industrial instrumentation. Courses combine the technical know-how, the use of state-of-the-art equipment and hands-on experience necessary for work in a variety of industrial instrumentation fields.

Students are taught the necessary objectives and skills sets required to take the entry-level Instrumentation, Systems and Automation Society certificate examination. This is a nationally recognized certification by industry partners; individuals holding this certification are sought after by industry partners to fill instrumentation technician positions worldwide.

As the process industries expand and automate, the need for qualified technicians increases. This need is currently being addressed by the Industrial Instrumentation & Controls Technology Alliance. CTC and the process technology program are active members of this national alliance.

Certificate Program

1. Complete the general university requirements (page 95).

2. Complete the certificate requirements (page 97).

3. Complete the following program requirements:
   ELT F101—Basic Electronics: DC Physics..4
   ELT F102—Basic Electronics: AC Physics..4
   ELT F246—Electronic Industrial Instrumentation 3
   PRT F140—Industrial Process Instrumentation I.............................3
   PRT F144—Industrial Process Instrumentation II 3
   PRT F240—Industrial Process Instrumentation III 3
   PRT F248—Valve Maintenance and Instrumentation.......................3

4. Minimum credits required 32
   * *Students must earn a C grade or better in each course.*

UNIVERSITY OF ALASKA FAIRBANKS
Office of Admissions and the Registrar • P.O. Box 757480 • Fairbanks, AK 99775-7480 • admissions@uaf.edu • www.uaf.edu
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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