DRAFTING TECHNOLOGY

College of Rural and Community Development
Community and Technical College
907-455-2845
www.ctc.uaf.edu/programs/drafting/

Certificate; A.A.S. Degree
Minimum Requirements for Certificate: 33 – 34 credits; for Degree: 60 – 63 credits

The drafting technology programs combine focused training in computer-aided drafting with a well-rounded exposure to the professions, trades and materials common to construction in Alaska. Courses combine technical CAD training with the vocabulary and knowledge needed to communicate with future employers in the architectural, engineering and construction fields. Students develop skills in mathematics, drawing and multi-functional CAD techniques. Students are instructed in traditional drawing techniques, CAD, and building information modeling technologies, giving them the knowledge and flexibility to work traditionally and with the most recent drafting technologies. Required courses cover many aspects of design and construction, including building materials, codes, and civil, mechanical, electrical and structural technologies. Qualified students have the opportunity to work side-by-side with professionals from the architectural and engineering community in internships, gaining valuable on-the-job experience.

Students entering the certificate program are expected to have computer skills equivalent to CIOS F150.

Certificate Program
1. Complete the general university requirements (page 95).
2. Complete the certificate requirements (page 97).
3. Complete the following certificate requirements:
   DRT F101—Introduction to Drafting .............................................. 3
   DRT F121—Construction Documents and Drawings ........................ 3
   DRT F170—Beginning CAD .......................................................... 3
   DRT F210—Intermediate CAD ..................................................... 3
   DRT F270—Advanced CAD .......................................................... 3
4. Complete one of the following concentrations:
   a. Architectural Drafting
      CM F102—Methods of Building Construction ............................. 3
      CM F123—Codes and Standards .......................................... 3
      DRT F140—Architectural Drafting .................................... 3

   b. Civil Drafting
      CM F102—Methods of Building Construction ............................. 3
      CM F213—Civil Technology .................................................... 4
      DRT F150—Civil Drafting .................................................. 3

   c. Information Technology
      CITS F203—Information Technology Support Fundamentals .................. 4
      CITS F204—Introduction to Network Support and Administration 3
      CITS F261—Computer and Network Security ............................. 3

d. Mechanical and Electrical Drafting
   CM F102—Methods of Building Construction ............................ 3
   CM F142—Mechanical and Electrical Technology ...................... 4
   DRT F155—Mechanical and Electrical Drafting ............................. 3

e. Process Technology
   PRT F101—Introduction to Process Technology .......................... 3
   PRT F110—Introduction to Occupational Safety, Health and Environmental Awareness .......................... 3
   PRT F117—Drafting for Technicians ....................................... 3

f. Structural Drafting
   CM F102—Methods of Building Construction ............................ 3
   CM F231—Structural Technology ........................................... 4
   DRT F145—Structural Drafting .................................................. 3

5. Minimum credits required .................................................. 33 – 34

Note: DRT F160 Drafting Internship may be substituted for concentration-specific DRT courses with program approval.

Major – A.A.S. Degree
1. Complete the general university requirements (page 95).
2. Complete the A.A.S. degree requirements (page 99).
3. Complete the following program (major) requirements:*
   DRT F101—Introduction to Drafting .............................................. 3
   DRT F140—Architectural Drafting ............................................. 3
   DRT F150—Civil Drafting .............................................................. 3
   DRT F170—Beginning CAD ........................................................ 3
   DRT F210—Intermediate CAD ..................................................... 3
   DRT F270—Advanced CAD ......................................................... 3
   DRT F145—Structural Drafting .................................................... 3
   DRT F155—Mechanical and Electrical Drafting............................. 3
   CM F102—Means and Methods of Building Construction ............ 3
   CM F123—Codes and Standards .......................................... 3
   CM F142—Mechanical and Electrical Technology ...................... 4
   CM F213—Civil Technology .................................................... 4
   CM F231—Structural Technology ............................................. 4

4. Complete 3 – 6 credits from the following electives:
   DRT F121—Construction Documents and Drawings ..................... 3
   DRT F260—Drafting Internship .................................................. 3
   CM F201—Construction Project Management ............................. 3
   ES F101—Introduction to Engineering** ................................ 3

5. Minimum credits required .................................................. 60 – 63

* Students must earn a C grade (2.0) or better in each course
** This elective requires additional math prerequisites.
All degrees (e.g. Certificate, A.A., A.A.S., A.S., etc) require additional courses. Refer to specific degree and program requirements.

Certificate Requirements

COMMUNICATION (2-3)
Complete one of the following:
ENGL F111X .................................................. (3)  
ABUS F170 .................................................. (3)  
ABUS F271 .................................................. (3)  
ENGL F211X .................................................. (3)  
ENGL F212 .................................................. (3)  
ENGL F213X .................................................. (3)  
COMM F131X .................................................. (3)  
COMM F141X .................................................. (3)  
DEVS F104 .................................................. (1 – 3)  
DEVS F105 .................................................. (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)
Complete one of the following:
Any course at the F100-level or above in mathematical sciences (computer science, math or statistics) ........................................ (3)  
ABUS F155 .................................................. (3)  
DEVN F105 .................................................. (3)  
ECF F117 .................................................. (3)  
HLTH F116 .................................................. (3)  
HUMS F117 .................................................. (3)  
PRT F155 .................................................. (3)  
TTCF F131 .................................................. (3)  

Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (2 – 3)

HUMAN RELATIONS (2-3)
Complete one of the following:
ANTH F100X/SOC F100X .................................................. (3)  
ABUS F154 .................................................. (3)  
ANL F287 .................................................. (3)  
ECF F245 .................................................. (3)  
ED/PSY F245 .................................................. (3)  
HLTH F106 .................................................. (3)  
HUMS F120 .................................................. (3)  
RHS F110 .................................................. (1)  
AND RHS F115 .................................................. (2)  

Other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content. (2 – 3)

MAJOR SPECIALTY CREDITS (minimum) .................. 21

Minimum credits for required certificate .................. 30

Associate of Applied Science Requirements

COMMUNICATION (9)
ENGL F111X .................................................. (3)  

Complete one of the following:
ABUS F271 .................................................. (3)  
ENGL F211X .................................................. (3)  
ENGL F212 .................................................. (3)  
ENGL F213X .................................................. (3)  

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

Complete one of the following:
COMM F131X .................................................. (3)  
COMM F141X .................................................. (3)  

COMPUTATION (3)
Complete one of the following:
Any course at the F100-level or above in mathematical sciences (computer science, math or statistics) ........................................ (3)  
ABUS F155 .................................................. (3)  
DEVN F105 .................................................. (3)  
ECF F117 .................................................. (3)  
HLTH F116 .................................................. (3)  
HUMS F117 .................................................. (3)  
PRT F155 .................................................. (3)  
TTCF F131 .................................................. (3)  

Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (3)

HUMAN RELATIONS (2-3)
Complete one of the following:
ANTH F100X/SOC F100X .................................................. (3)  
ABUS F154 .................................................. (3)  
ANL F287 .................................................. (3)  
ECF F245 .................................................. (3)  
ED/PSY F245 .................................................. (3)  
HLTH F106 .................................................. (3)  
HUMS F120 .................................................. (3)  
RHS F110 .................................................. (1)  
AND RHS F115 .................................................. (2)  

Other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content. (3)

MAJOR SPECIALTY CREDITS (minimum) .................. 30

Minimum credits required for degree .................. 60