

# 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 93).
2. Complete the certificate requirements (page 95).
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:
  - Architectural Drafting**
    - CM F102—Methods of Building Construction.....3
    - CM F123—Codes and Standards.....3
    - DRT F140—Architectural Drafting.....3

### Civil Drafting

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

### Information Technology

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

### 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

### 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

### 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 93).
2. Complete the A.A.S. degree requirements (page 97).
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 F160—Drafting Internship.....3 – 6
  - DRT F121—Construction Documents and Drawings.....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)	_____
DEVM F105.....	(3)	_____
ECE F117 .....	(3)	_____
HLTH F116 .....	(3)	_____
HUMS F117.....	(3)	_____
PRT F155.....	(3)	_____
TTCH 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)	_____
ECE 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)	_____
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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)	_____
DEVM F105.....	(3)	_____
ECE F117 .....	(3)	_____
HLTH F116 .....	(3)	_____
HUMS F117.....	(3)	_____
PRT F155.....	(3)	_____
TTCH 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)	_____
ECE 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**



**UNIVERSITY OF ALASKA FAIRBANKS**

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