# **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.

b. Civil Drafting

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		
	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	

CM F213—Civil Technology ......4 DRT F150—Civil Drafting......3

c.		
	Information Technology CITS F203—Information Technology Support Fundamentals	
	3 CITS F261—Computer and Network Security	
ı	. Mechanical and Electrical Drafting	
a.	CM F102—Methods of Building Construction	4
	DRI F155—Mechanical and Electrical Drafting	3
e.	Process Technology PRT F101—Introduction to Process Technology PRT F110—Introduction to Occupational Safety, Health and Environmental Awareness PRT F117—Drafting for Technicians	3
f	Structural Drafting	
1.	CM F102—Methods of Building Construction	4
5. Not	Minimum credits required32 e: DRT F160 Drafting Internship may be substituted for concentration- DRT courses with program approval.	3 – 34 -specific
Ma	jor – A.A.S. Degree	
1.	Complete the general university requirements (page 95).	
2.	Complete the A.A.S. degree requirements (page 99).	
2. 3.	Complete the following program (major) requirements:*	
Э.	DRT F101—Introduction to Drafting	3
	DRT F140—Architectural Drafting	
	8	3
	DRT F150—Civil Drafting	3 3
	DRT F150—Civil Drafting DRT F170—Beginning CAD	3
	DRT F170—Beginning CAD DRT F210—Intermediate CAD	3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD	3 3 3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting	3 3 3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting	3 3 3 3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction	3 3 3 3 3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards	3 3 3 3 3
	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards  CM F142—Mechanical and Electrical Technology  CM F213—Civil Technology	3 3 3 3 3 3
4	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards  CM F142—Mechanical and Electrical Technology  CM F213—Civil Technology  CM F231—Structural Technology	3 3 3 3 3 3
4.	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards  CM F142—Mechanical and Electrical Technology  CM F213—Civil Technology  CM F231—Structural Technology  Complete 3 – 6 credits from the following electives:  DRT F121—Construction Documents and Drawings  DRT F260—Drafting Internship	3 3 3 3 3 3 4 4
4.	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards  CM F124—Mechanical and Electrical Technology  CM F213—Civil Technology  CM F231—Structural Technology  Complete 3 – 6 credits from the following electives:  DRT F121—Construction Documents and Drawings  DRT F260—Drafting Internship  CM F201—Construction Project Management	3 3 3 3 3 3 4 4
<b>4</b> . <b>5</b> .	DRT F170—Beginning CAD  DRT F210—Intermediate CAD  DRT F270—Advanced CAD  DRT F145—Structural Drafting  DRT F155—Mechanical and Electrical Drafting  CM F102—Means and Methods of Building Construction  CM F123—Codes and Standards  CM F142—Mechanical and Electrical Technology  CM F213—Civil Technology  CM F231—Structural Technology  Complete 3 – 6 credits from the following electives:  DRT F121—Construction Documents and Drawings  DRT F260—Drafting Internship	3 3 3 3 3 3 4 4 4



All degrees (e.g. Certificate, A.A., A.A.S., A.S., etc) require additional courses. Refer to specific degree and program requirements.

## **Associate of Applied Science Certificate Requirements** Requirements **COMMUNICATION (2-3)** Complete one of the following: **COMMUNICATION (9)** ENGL F111X.....(3) \_ ABUS F170 ......(3) \_\_ ENGL F111X.....(3) — ABUS F271 .....(3) \_\_ Complete one of the following: ENGL F211X.....(3) ABUS F271 .....(3) ENGL F212.....(3) ENGL F211X....(3) ENGL F213X.....(3) ENGL F212 .....(3) COMM F131X.....(3) ENGL F213X....(3) COMM F141X.....(3) \* ENGL F212 does not fulfill the second half of the written commu-DEVS F104.....(1 – 3) nication requirement for the bachelor's degree. DEVS F105.....(3) **—** Other program-approved discipline-based communication course or discipline-based courses with embedded Complete one of the following: communication content. (2-3)COMM F131X.....(3) \* ENGL F212 does not fulfill the second half of the written commu-COMM F141X.....(3) nication requirement for the bachelor's degree. **COMPUTATION (3) COMPUTATION (2-3)** Complete one of the following: Complete one of the following: Any course at the F100-level or above in mathematical sciences Any course at the F100-level or above in mathematical sciences (computer science, math or statistics).....(3) (computer science, math or statistics).....(3) ABUS F155 .....(3) ABUS F155 ......(3) **-**DEVM F105.....(3) DEVM F105.....(3) -ECE F117.....(3) ECE F117.....(3) **–** HLTH F116 .....(3) HLTH F116 ......(3) -HUMS F117.....(3) HUMS F117.....(3) -PRT F155.....(3) PRT F155.....(3) -TTCH F131 .....(3) -TTCH F131 .....(3) **–** Other program-approved discipline-based computa-Other program-approved discipline-based computation course or discipline-based courses with embedded tion course or discipline-based courses with embedded computation content. (2 - 3)computation content. **HUMAN RELATIONS (2-3) HUMAN RELATIONS (2-3)**

# Complete one of the following:

human relations content. (2-3)

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 rela-		
tions course or discipline-based courses with embedded		

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

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

## 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 rela-	

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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