

# DRAFTING TECHNOLOGY (DRT)

## Community and Technical College

Drafting & Design Technology Program (<https://www.ctc.uaf.edu/programs/drafting-design-technology/>)  
907-455-2800

### DRT F101 Introduction to Drafting

3 Credits

Offered As Demand Warrants

Introduction to basic drafting skills necessary to communicate in the building, construction, design and process technology industries for freshman-level students and for certificate or associate degree-seeking students. Limited manual drafting techniques are used to gain basic skills and to contrast the speed and accuracy to that of computer-aided drafting (CAD).

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F121 Construction Documents and Drawings

3 Credits

Offered As Demand Warrants

Reading and interpretation of construction documents for residential, light commercial and heavy commercial structures using conventional symbols and representation.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F140 Architectural Drafting

3 Credits

Offered As Demand Warrants

Architectural drafting principles including site plans, foundations, floor plans, elevations, architectural sections, framing plans, area plans and graphic standards.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F145 Structural Drafting

3 Credits

Offered As Demand Warrants

Introduces technical skills needed by structural drafters and technicians to work with structural engineers. Includes office practices, staff relationships, and structural drawing production. Develops computer-aided drafting skills in symbols, conventions, dimensioning systems, sheet organizations, code analysis and research methods for steel, wood, and reinforced concrete buildings.

**Prerequisites:** DRT F170 or permission of program coordinator.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F150 Civil Drafting

3 Credits

Offered As Demand Warrants

Civil drafting principles including plotting traverse and surveys by bearing and distance, latitudes and departures, topographic drawings and maps, contours and elevations, profiles and highway curves, cross-section drawings and grading plans.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F155 Mechanical and Electrical Drafting

3 Credits

Offered As Demand Warrants

Introduces technical analysis, theory, code requirements, and CAD techniques to produce construction drawings for mechanical and electrical building systems. Includes drafting conventions, drawing symbols, terminology, and research methods for residential and commercial building systems and equipment.

**Prerequisites:** DRT F170 or permission of program coordinator.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F170 Beginning CAD

3 Credits

Offered As Demand Warrants

Instruction in basic working knowledge of CAD software and its applications in drafting. Topics covered include an introduction to CAD software applications, basic CAD skills and tools, through plotting finished drawings. Practical applications.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F210 Intermediate CAD

3 Credits

Offered As Demand Warrants

Techniques for construction and drafting output using CAD. Emphasis will be on the construction drawings produced for a building project and the software tools used in this process.

**Prerequisites:** DRT F170 or enrolled as a CE Major or permission of the program coordinator.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### DRT F260 Drafting Internship

1-6 Credits

Offered As Demand Warrants

Supervised work experience in process organizations. Assignments will be individually arranged with cooperating organizations from the private and public sectors. A maximum of 6 credits may be earned.

**Prerequisites:** Permission of program coordinator.

**Lecture + Lab + Other:** 0 + 3-18 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**Repeatable for Credit:** May be taken 6 times for up to 6 credits

### DRT F270 Advanced CAD

3 Credits

Offered As Demand Warrants

Advanced areas of CAD (3-D, menu modifications and Auto lisp).

**Prerequisites:** DRT F170; DRT F210; or permission of program coordinator.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus