

DRAFTING TECHNOLOGY - ADVANCED TECHNICAL CERTIFICATE (ATC)

Explore More About This Program: <https://cwi.edu/program/drafting-technology>

Certificate Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Manufacturing and Welding
- **Program Code:** DRFT.ATC
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the [Special Course Fees](#) web page.

Certificate Requirements

Course	Course Title	Min Credits
General Education Requirements		
Select one of the following (GEM 3):		3-5
MATH 123	Math in Modern Society	
MATH 143 or MATH 143P	College Algebra	
MATH 147	College Algebra and Trigonometry	
MATH 153	Statistical Reasoning	
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
PSYC 140	Human Relations for Career and Personal Success (GEM 6)	3
Major Requirements		
DRFT 100	Construction Materials and Processes	3
DRFT 114	Drafting Basics	3
DRFT 118	Introduction to Revit	3
DRFT 119	Introduction to AutoCAD	4
DRFT 120	Residential Architecture	4
DRFT 123	Introduction to Solidworks	3
DRFT 139	Applied Problem Solving for Drafting	3
DRFT 190	Job Skills for Drafting	1
DRFT 211	Civil Drafting and Math	4
DRFT 212	Structural and HVAC System Drafting	5
DRFT 213	Machine Drafting and Design	4
DRFT 217	Commercial Architecture	4
DRFT 218	Electrical and Plumbing Systems Drafting	4
DRFT 239	Advanced Revit Techniques	3
DRFT 290	Drafting Technology Capstone	1
Minimum Credit Hours Required		55

Certificate Plan: Fall Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this Plan of Study Guide. Please register for your major requirements each semester as shown below using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this plan.

NOTE: The required general education courses may be completed during any semester the student prefers, including summer semesters.

First Year

Fall		Credit Hours
DRFT 100	Construction Materials and Processes	3
DRFT 114	Drafting Basics	3
DRFT 118	Introduction to Revit	3
DRFT 119	Introduction to AutoCAD	4
Select one of the following (GEM 3):		3-5
MATH 123	Math in Modern Society	
MATH 143 or MATH 143P	College Algebra or College Algebra	
MATH 147	College Algebra and Trigonometry	
MATH 153	Statistical Reasoning	
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Total Semester Credit Hours		16
Spring		
DRFT 120	Residential Architecture	4
DRFT 123	Introduction to Solidworks	3
DRFT 139	Applied Problem Solving for Drafting	3
DRFT 190	Job Skills for Drafting	1
PSYC 140	Human Relations for Career and Personal Success (GEM 6)	3
Total Semester Credit Hours		14
Second Year		
Fall		
DRFT 211	Civil Drafting and Math	4
DRFT 212	Structural and HVAC System Drafting	5
DRFT 213	Machine Drafting and Design	4
Total Semester Credit Hours		13
Spring		
DRFT 217	Commercial Architecture	4
DRFT 218	Electrical and Plumbing Systems Drafting	4
DRFT 239	Advanced Revit Techniques	3
DRFT 290	Drafting Technology Capstone	1
Total Semester Credit Hours		12
Minimum Credit Hours Required		55

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use their understanding of machine, architectural, civil, mechanical, electrical, plumbing, and structural drafting and design to become an entry-level drafter/designer in one of the disciplines of drafting.
- Use at least three types of software for Computer-Aided Drafting and Design (CADD) for producing two and three-dimensional objects.
- Analyze problems related to the profession requiring integration of fundamental skills in drafting, CADD, and required mathematics.
- Apply critical thinking and problem-solving skills to drafting and design related tasks.