DRAFTING TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

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

Degree Quick Facts

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

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
Complete the following course to fulfill the GEM 1 requirement:		
GEM 1 - Written Communication course		3
Complete the following course to fulfill the GEM 2 requirement:		
GEM 2 - Oral Communication course		3
Complete the following course to fulfill the GEM 3 requirement:		
GEM 3 - Mathematical Ways of Knowing course		3
Complete the following course to fulfill the GEM 6 requirement:		
GEM 6 - Social & Behavioral Ways of Knowing course		3
Complete the following courses to fulfill the General Education Elective requirement:		
PHYS 100	Survey of Physics	3
PHYS 100L	Survey of Physics Lab	1
Major Requirements		
DRFT 100	Construction Materials and Processes	3
DRFT 115	Drafting Basics	4
DRFT 119	Introduction to AutoCAD	4
DRFT 120	Residential Architecture	4
DRFT 122	Introduction to Revit	4
DRFT 139	Applied Math 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 214	Commercial Architecture	5
DRFT 216	Survey of Sustainable Design	2
DRFT 218	Electrical and Plumbing Systems Drafting	4
DRFT 290	Drafting Technology Capstone	1
Minimum Credit Hours Required		**64**

Plan of Study Guide

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 Student Success 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 115	Drafting Basics	4

DRFT 119	Introduction to AutoCAD	4
DRFT 139	Applied Math for Drafting	3
GEM 2 - Oral Communication course		3
	Total Semester Credit Hours	**17**
Spring		
DRFT 120	Residential Architecture	4
DRFT 122	Introduction to Revit	4
DRFT 190	Job Skills for Drafting	1
PHYS 100	Survey of Physics (GE Elective)	3
PHYS 100L	Survey of Physics Lab (GE Elective)	1
GEM 3 - Mathematical Ways of Knowing course		3
	Total Semester Credit Hours	**16**
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
GEM 1 - Written Communication course		3
	Total Semester Credit Hours	**16**
Spring		
DRFT 214	Commercial Architecture	5
DRFT 216	Survey of Sustainable Design	2
DRFT 218	Electrical and Plumbing Systems Drafting	4
DRFT 290	Drafting Technology Capstone	1
GEM 6 - Social & Behavioral Ways of Knowing course		3
	Total Semester Credit Hours	**15**
	Minimum Credit Hours Required	**64**

Program Learning Outcomes

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

- Understand the underlying CAD independent workflow required to create 2D drawings and 3D models.
- Understand how drafting fits into the overall product design phase and the construction design process.
- Demonstrate comprehensive knowledge of detail drafting standards to document a product or construction design, including geometry views, dimensioning and annotation standards, multiple material call-out methods, and overall drawing package.
- Demonstrate mastery of AutoCAD as a 2D drawing and drafting design tool.
- Demonstrate mastery of AutoCAD for Architecture and Revit as 3D modeling and 2D drafting design tools.
- Demonstrate intermediate skills required for 3D part design in Solidworks.
- Demonstrate intermediate skills required for Civil design in Civil 3D.
- Demonstrate the intermediate skills required for SketchUp for conceptual design, site massing design, and drawing creation.
- Understand advanced file management and workflow skills, including central model-based collaborative design, linked files and objects, and external file reference skills.
- Understand and apply job search skills and tools to evaluate different companies and start a career in drafting.