

GUIDED PATHWAY: CAD/CAM-CNC CERTIFICATE

MANUFACTURING and INDUSTRIAL TECHNOLOGY CAREER PATH



For more information, visit the [Dallas College Computer-Aided Design and Drafting webpage](http://www.dcccd.edu/CADD) [www.dcccd.edu/CADD] and your academic advisor at your campus.

This is an example course sequence for students interested in pursuing the CAD/CAM-CNC Certificate in Computer Aided Design and Drafting. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn a CAD/CAM-CNC Certificate in Computer-Aided Design and Drafting. Courses from this certificate may apply to the related A.A.S. degree. Students must earn at least 25% of the credit hours required for graduation through instruction by Dallas College. See catalog for [official certificate requirements](#).

This certificate has been developed to provide skills for entry-level CADD positions as well as skills needed in the machining industry and the manufacturing specialists who require training necessary for the integration of CAD and the CNC machines. Students enrolled in this program will learn the basics of CADD, how to set up and operate machinery such as mills and lathes and will also be trained in the programming of CNC.

Students pursuing this certificate are waived from the [Texas Success Initiative \(TSI\)](#) standards, but must meet course prerequisites.

Catalog Year	2021-2022	You may use this pathway if you entered Dallas College on or before this date.
Degree Type	Level I Certificate	
GPA Requirement	Student must earn a GPA of 2.0 or higher	
TSI	May be Exempt	

SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students. This is not an official degree plan. See catalog for [official certificate requirements](#).

CERTIFICATE MINIMUM: 32 SEMESTER CREDIT HOURS

SEMESTER 1

Total Hours: 14

[DFTG 1405](#) – Technical Drafting *This course has mechanical based coursework.*

[DFTG 1409](#) – Basic Computer-Aided Drafting

[INMT 1343](#) – Computer Aided Design/Computer Aided Manufacturing (CAD/CAM)

CHOOSE ONE: [MCHN 1343](#) – Machine Shop Mathematics *Must earn a grade of "C" or higher.* **OR**
[MATH 1314](#) – College Algebra *This is a Core course. Must earn a grade of "C" or higher.*

SEMESTER 1 ACTION ITEMS

1. Meet with your advisor to confirm academic and career goals before the end of the semester.
2. Meet with a career advisor or coach to research your career options and opportunities for job shadowing.

SEMESTER 2

Total Hours: 18

[DFTG 1325](#) – Blueprint Reading and Sketching *This course has mechanical based coursework.*

[DFTG 1495](#) – Special Topics in Mechanical Drafting and Mechanical Drafting CAD/CADD

[DFTG 1445](#) – Parametric Modeling and Design

[MCHN 1454](#) – Intermediate Machining II

[MCHN 2338](#) – Advanced Computer-Aided Manufacturing (CAM)

SEMESTER 2 ACTION ITEMS

1. Meet with your advisor to request an official program of study audit and confirm or update your academic/career path and program of study.
2. Meet with a career advisor or coach for assistance in preparing for job search.
3. Meet with your advisor to apply for the CAD-CAM-CNC Certificate.

