

GUIDED PATHWAY: COMPUTER-AIDED DESIGN AND DRAFTING A.A.S.

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 Computer Aided Design and Drafting. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an Associate of Applied Science (A.A.S.) degree Computer-Aided Design and Drafting. Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by Dallas College. See catalog for [official degree requirements](#).

The A.A.S. degree is designed to prepare you for employment in a wide range of industries as a CAD operator, printed circuit board designer or technician. Information in related fields is provided to enable the student to work effectively with engineers, technologists, architects and professional staff. Courses that complete the degree, [Computer-Aided Design Operator](#) Certificate (DO), and [Computer-Aided Design Advanced Operator](#) Certificate (AO) are noted below.

Visit the [NTCCC Transfer Consortium](#) to view guided pathways created for students who complete an A.A.S. degree and the options for transfer to complete a Bachelor of Applied Arts and Science. Speak with an academic advisor at your campus to choose courses that will help you to transfer to a specific university.

Catalog Year	2020-2021	You may use this pathway if you entered Dallas College on or before this date.
Degree Type	Associate of Applied Science	
GPA Requirement	Student must earn a GPA of 2.0 or higher	
TSI	Must be Complete	

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 degree requirements](#).

AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS

SEMESTER 1

Total Hours: 14

[DFTG 1409](#) – Basic Computer-Aided Drafting (Course also applies to DO, AO)

CHOOSE ONE: [DFTG 1315](#) – Architectural Blueprint Reading *Architecture based coursework* **OR**

[DFTG 1325](#) – Blueprint Reading and Sketching *Mechanical based coursework*
(Either course also applies to DO, AO)

CHOOSE ONE: [DFTG 1405](#) – Technical Drafting *Mechanical based coursework* **OR**

[ARCE 1421](#) – Architectural Illustration *Architecture based coursework*
(Either course also applies to DO, AO)

CHOOSE ONE: [MATH 1324](#) – Mathematics for Business and Social Sciences *This is a Core course. Must earn a grade of "C" or better.* **OR**

[MATH 1314](#) – College Algebra *This is a Core course. Must earn a grade of "C" or better.*
(Either course also applies to AO)

SEMESTER 1 ACTION ITEMS

1. Meet with your advisor to confirm your academic/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: 14

[DFTG 2419](#) – Intermediate Computer-Aided Drafting (Course also applies to DO, AO)

[DFTG 1417](#) – Architectural Drafting-Residential (Course also applies to AO)

[ENGL 1301](#) – Composition I *This is a Core course. You must earn a grade of "C" or better. (Course also applies to AO)*

CHOOSE ONE: * [ARCE 1303](#) – Architectural Materials and Methods of Construction
[DFTG 1315](#) – Architectural Blueprint Reading
[DFTG 1325](#) – Blueprint Reading and Sketching
[DFTG 1329](#) – Electro-Mechanical Drafting
[DFTG 2321](#) – Topographical Drafting
(Either course also applies to DO, AO)

* There are additional courses that can be selected. Speak with academic or faculty advisors for specific list. The following courses will **NOT** count toward the Computer-Aided Design Operator Certificate: DFTG 1333, DFTG 1340, DFTG 2381, INMT 1343

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. Apply for Computer-Aided Design Operator Certificate Completion.

SEMESTER 3

Total Hours: 17

[DFTG 1445](#) – Parametric Modeling and Design *(Course also applies to AO)*
[PSYC 2301](#) – General Psychology *This is a Core course.*
[HUMANITIES/FINE ARTS ELECTIVE*](#) *This is a Core course.*
[DFTG 2428](#) – Architectural Drafting-Commercial *(Course also applies to AO)*
CHOOSE ONE: [ARTC 1302](#) – Digital Imaging I*
[ARTC 1325](#) – Introduction to Computer Graphics* **OR**
[DFTG 2380](#) – Cooperative Education-Drafting and Design
(Either course also applies to AO)

*There are several options to fulfill this requirement. See your academic advisor for a specific list.

SEMESTER 3 ACTION ITEMS

1. Meet with a career advisor or coach for assistance in preparing for job search.

SEMESTER 4

Total Hours: 15

[DFTG 2438](#) – Final Project-Advanced Drafting *This is the capstone experience. (Course also applies to DO2)*
CHOOSE ONE: * [DFTG 1491](#) – Special Topics in Drafting and Design Technology/Technician
[DFTG 1495](#) – Special Topics in Mechanical Drafting
[DFTG 2431](#) – Advanced Technologies in Architectural Design and Drafting
[DFTG 2432](#) – Advanced Computer-Aided Drafting **OR**
[DFTG 2440](#) – Solid Modeling/Design
CHOOSE ONE: * [BCIS 1405](#) – Business Computer Applications **OR**
[ITSC 1401](#) – Introduction to Computers
CHOOSE ONE: [SPCH 1311](#) – Introduction to Speech Communication *This is a Core course.* **OR**
[SPCH 1315](#) – Public Speaking *This is a Core course.*

*There are additional courses that can be selected. Speak with academic or faculty advisors for specific list. The following courses will **NOT** count for the Computer-Aided Design Advanced Operator Certificate: DFTG 1333, DFTG 1340, DFTG 1336, IMNT 1343.

SEMESTER 4 ACTION ITEMS

1. After reviewing your degree plan and program of study, apply for Graduation.
2. Meet with your advisor to apply for the Computer-Aided Design and Drafting A.A.S. and Computer-Aided Design Advanced Operator Certificate.
3. Sign up for Commencement.
4. Join the [Alumni Network!](#)

PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS