

## Technical and Vocational Programs

# D 50 15 0 Computer-Aided Drafting Technology – Diploma C 50 15 0 Computer-Aided Drafting Certificate (This program is located at COA - Currituck)

### CONCENTRATION OVERVIEW

This curriculum prepares the students to apply technical skills and advanced computer software and hardware to develop plans and related documentation, and manage the hardware and software of a CAD system. Included is instruction in architectural drafting, computer-assisted drafting and design (CADD), creating and managing two and three-dimensional models, linking CAD documents to other software applications and operating systems.

Upon completion of this concentration, graduates will be able to qualify for CAD jobs in architectural and engineering consulting firms and industrial design businesses.



### Student Learning Outcomes – Upon completion of the program, students will:

1. Use various Computer-Aided Drafting programs to produce design drawings in accordance with industry standards.
2. Use computer design programs to develop three-dimensional drawings that will promote visual understanding and for presentation purposes.
3. Apply new architectural and mechanical design skills to solve design problems.

Partnership: N/A

\*This program offers a [Career and College Promise pathway \(CCP\) D50150H](#). Courses within the pathway are highlighted in yellow.

# D 50 15 0 Computer-Aided Drafting Technology – Diploma

(Located at COA - Currituck)

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ARC 111 Intro to Arch. Technology		1	6		7	3
DFT 151 CAD I (1st 8 Weeks)		2	3		5	3
DFT 152 CAD II (2nd 8 Weeks)		2	3		5	3
MEC 161 Manufacturing Process		3			3	3
ISC 110 Workplace Safety		1			1	1
Select one of the following: COM 120 Intro Interpersonal Comm. OR ENG 111 Writing and Inquiry (Recommended for college transfer)	Pre-Requisites for COM 120: None Pre-Requisites for ENG 111: ENG 025	3			3	3
<b>TOTAL SEMESTER HOURS</b>		<b>12</b>	<b>12</b>		<b>23</b>	<b>16</b>
First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
DFT 153 CAD III	Pre-Requisites: DFT 152	2	3		5	3
DFT 154 Intro to Solid Modeling		2	3		5	3
DFT 189 Emerging Tech in CAD		1	2		3	2
SST 110 Intro to Sustainability		3			3	3
Select one of the following: MAT 110 Mathematical Measurement OR MAT 143 Quantitative Literacy OR MAT 171 Precalculus Algebra (Recommended for college transfer)	Pre-Requisites for MAT 110: None Pre-Requisites for MAT 143: ENG 025 and MAT 025 Pre-Requisites for MAT 171: MAT 035 or MAT 110 or MAT 143 or MAT 152 with a C or higher	2-3	2		4-5	3-4
<b>TOTAL SEMESTER HOURS</b>		<b>10-11</b>	<b>10</b>		<b>20-21</b>	<b>14-15</b>

First Year Summer Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
DFT 259 CAD Project		1	4		5	3
Select one of the following: WBL 110 World of Work OR WBL 111 Work-Based Learning I		0-1		0-10	1-10	1
DFT 254 Intermediate Solid Molding	Pre-Requisites: DFT 154	2	3		5	3
<b>TOTAL SEMESTER HOURS</b>		<b>3-4</b>	<b>7</b>	<b>0-10</b>	<b>11-20</b>	<b>7</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA</b>						<b>37-38</b>

## C 50 15 0 Computer-Aided Drafting Technology – Certificate

(Located at COA - Currituck)

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ISC 110 Workplace Safety		1			1	1
ARC 111 Intro to Arch. Technology		1	6		7	3
MEC 161 Manufacturing Processes I		3			3	3
DFT 151 CAD I (1st 8 Weeks)		2	3		5	3
DFT 152 CAD II (1st 8 Weeks)		2	3		5	3
<b>TOTAL SEMESTER HOURS</b>		<b>9</b>	<b>12</b>		<b>21</b>	<b>13</b>
First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
DFT 154 Intro to Solid Modeling		2	3		5	3
<b>TOTAL SEMESTER HOURS</b>		<b>2</b>	<b>3</b>		<b>5</b>	<b>3</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE</b>						<b>16</b>