



Computer Aided Drafting and Design Diploma

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Program Website: <https://bluegrass.kctcs.edu/education-training/program-finder/computer-aided-drafting-design.aspx>

Student Name: _____ Student ID: _____

Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.

First Semester	Credit Hours	Term	Grade	Prereqs/	Notes
CAD 100 Introduction to Computer Aided Design	3				
CAD 102 Drafting Fundamentals	4				
Technical Elective	3				SMT 110 Principles of Surveying recommended
Technical Elective	1 – 3				
Quantitative Reasoning course	3				MAT 116 Technical Mathematics recommended
Total Semester Credit Hours	14 – 16				

Second Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
CAD 112 Engineering Graphics	4			CAD 102	CET 150 Civil Engineering Graphics can be substituted if CAD 112 is not offered.
CAD 201 Parametric Modeling	4				
Technical Elective	4				CAD 120 Introduction to Architecture recommended
Technical Elective	1 – 4				CAD 293 Special Problems recommended
Written Communication, Oral Communication, OR Heritage/Humanities course	3				ENG 101 Writing I recommended
Total Semester Credit Hours	16 – 19				

Third Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
CAD 200 Intermediate Computer Aided Design	4			CAD 100	
Technical Elective	1 – 4				CET 295 Independent Problems recommended
Technical Electives	4 – 13				Technical Electives must total 22 credit hours
CAD 298 Practicum OR CAD 299 Cooperative Education	1 – 3			Approval of Program Coordinator	
Total Semester Credit Hours	13 – 19				
Total Diploma Credit Hours	48 – 50				

- Graduation Requirements:**
- 25% or more of Total Diploma Credit Hours must be earned at BCTC
 - Cumulative GPA must be 2.0 or higher

Advisor Name _____ Advisor Contact _____

Additional Information

A grade of C or higher in each technical and mathematics course along with a 2.0 cumulative GPA is required to continue in the program.

Technical Electives

Course	Cr. Hrs.	Prerequisites
CAD 108 Introduction to Surveying	3	
CAD 120 Introduction to Architecture	4	CAD 100
CAD 150 Programming in CAD	4	CAD 100
CAD 212 Industrial Drafting Processes	4	CAD 100
CAD 216 Building Information Modeling	4	
CAD 222 Mechanical Design	4	CAD 100
CAD 220 Architectural Design	4	CAD 120
CAD 230 Construction Techniques	4	CAD 120
CAD 240 Advanced Dimensioning and Measurement	4	CAD 100
CAD 252 Commercial Detailing	4	CAD 120
CAD 262 Working Drawings	4	CAD 120
CAD 292 Industrial Applications	4	Approval of Instructor
CAD 293 Special Problems	1 – 4	Approval of Program Coordinator
DPT 100 Introduction to 3D Printing Technology	3	
DPT 102 3D Printing Technology Fundamentals	3	Demonstration of Digital Literacy
ACH 110 Survey of the Architectural Profession	1	
ACH 160 Building Materials and Construction I	3	
ACH 291 Construction Management	3	ACH 150, ACH 160 and ACH 161
BRX 120 Basic Blueprint Reading	3	
BRX 220 Blueprint Reading for Construction	3	
Other courses (such as courses with prefixes ACH, BRX, CAR, SMT, and PLW) approved by the Computer Aided Drafting and Design Coordinator	1 – 22	

Embedded Credentials

Credential	Title	Requirements	Total Credit Hours
Certificate	3D Modeler	CAD 100, CAD 200, CAD 201, 5–7 hours of Technical Electives	16 – 18

Certificate Requirements:

- 25% or more of Total Certificate Credit Hours must be earned at BCTC
- Grade of C or higher in each course required for certificate