



Computer Aided Drafting and Design

Associate in Applied Science degree

Program Coordinator: William M. (Mike) Franklin

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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 102 Drafting Fundamentals	4				
CAD 100 Introduction to Computer Aided Design	3				
Technical Elective	3				SMT 110 Principles of Surveying recommended
MAT 116 Technical Mathematics or higher level Quantitative Reasoning course	3				
Total Semester Credit Hours	13				

Second Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
Technical Elective	4				CAD 120 Introduction to Architecture recommended
CAD 112 Engineering Graphics*	4			CAD 102	*See note on back.
CAD 201 Parametric Modeling	4				
Technical Elective	1 – 4				CAD 293 Special Problems recommended
ENG 101 Writing I	3				
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 Elective	4				
Social and Behavioral Sciences course	3				
Natural Sciences course	3				
Total Semester Credit Hours	15 – 18				

Fourth Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
CAD 298 Practicum or CAD 299 Cooperative Education	1 – 3			Approval of Program Coordinator	
Technical Elective(s)	9 – 3				Technical Electives must total 22 credit hours
Heritage or Humanities course	3				
Oral Communications course	3				
Total Semester Credit Hours	16 – 12				
Total Degree Credit Hours	60 – 62				

- Graduation Requirements:**
- 25% or more of Total Program 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.

*If CAD 112 Engineering Graphics is not offered by BCTC, CET 150 Civil Engineering Graphics may be substituted with the approval of the Computer Aided Drafting and Design Program Coordinator.

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
Diploma	Computer Aided Drafting and Design	ENG 101, MAT 116 or higher level Quantitative Reasoning course, CAD 100, CAD 102, CAD 112, CAD 200, CAD 201, CAD 298 or CAD 299, 22 hours of Technical Electives	48 - 50
Certificate	Computer Assisted Drafter	ENG 101, MAT 116 or higher level Quantitative Reasoning course, CAD 100, CAD 102, CAD 112, CAD 200, CAD 201, 3–4 hours of Technical Electives	28 – 29
Certificate	Detailer	ENG 101, MAT 116 or higher level Quantitative Reasoning course, CAD 100, CAD 102, CAD 112, CAD 200, 3–4 hours of Technical Electives	24 – 25
Certificate	Drafter Assistant	ENG 101, MAT 116 or higher level Quantitative Reasoning course, CAD 100, CAD 102, CAD 112	17
Certificate	3D Modeler	CAD 100, CAD 200, CAD 201, 5–7 hours of Technical Electives	16 – 18

Diploma Requirements: **25% or more of Total Diploma Credit Hours must be earned at BCTC**

Cumulative GPA must be 2.0 or higher

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