

# Computer-Aided Design

Program 67800  
CIP 151301

## Certificate of Proficiency

The Computer-Aided Design (CAD) certificate program prepares students for entry-level positions as CAD technicians in business, industry and government.

CAD technicians generally work in the offices of manufacturing, construction, and architectural firms developing complete sets of working drawings and plans. Successful graduates will be able to:

- present technical information in graphic form from oral or written instructions;
- prepare complete working and assembly drawings of manufactured parts;
- develop both two- and three-dimensional views of technical objects or assemblies;
- accurately dimension various objects, assemblies, or structures;
- produce finished plots of drawings for both internal and external use.

Admission requires a high school diploma or its equivalent. Prior exposure to drafting or CAD is helpful, but not necessary. This program is intended primarily for part-time beginning students or for those currently working in the field who wish to upgrade their skills. Some required courses may be offered only during the evening, and some may be offered only in alternate semesters. It is essential that students plan ahead in consultation with the program coordinator.

MCCC is located near major engineering and architectural firms which provide employment opportunities for qualified graduates.

### Core Curriculum

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition (3/0)	3
ABT 120	Architectural Technology Graphics (2/6)	4
ABT 124	Architectural Working Drawings (2/6)	4
ARC 134	Building Construction Systems (3/0)	3
DRA 190	Introduction to Computer-Aided Drafting (1/2)	2
IST 101	Computer Concepts with Applications (2/2)	3
— —	General Education elective	3
— —	<b>Concentration electives</b>	10-12
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### Concentrations

#### AutoCAD Concentration Electives

Code	Course (lecture/lab hours)	Credits
ABT 132	Architectural Computer Drafting (1/2)	2
ABT 210	Construction Drawings (2/2)	3
DRA 238	Advanced Computer-Aided Design (2/2)	3
— —	Elective <sup>1</sup>	2-3

#### Revit Concentration Electives

Code	Course (lecture/lab hours)	Credits
ABT 210	Construction Drawings (2/2)	3
DRA 191	Introduction to Building Information Modeling (1/2)	2
DRA 248	Advanced Building Information Modeling (2/2)	3
— —	Elective <sup>1</sup>	2-3

#### 3-D Design Concentration Electives

Code	Course (lecture/lab hours)	Credits
DMA 105	Introduction to Computer Art (1/4)	3
DMA 120	3-D Modeling I (1/4)	3
DMA 220	3-D Modeling II (1/4)	3
— —	Elective <sup>1</sup>	2-3

NOTE: Proficiency in basic algebra is required.

<sup>1</sup> Select ARC 104 or any introductory course from another concentration: ABT 132; DMA 105, 120; DRA 191.

