

Build a Foundation

Applied Science and Technology Department

Computer Aided Drafting Technology
Building Materials Merchandising
Construction Technology

Department Contacts

CAD Program Coordinator
Kevin Haulotte
Fielding Technical Center, room
279A
(660) 596-7419 - Direct Line
khaulotte@sfccmo.edu

Building Materials and Construction
Program Coordinator
Steve Bloess
Fielding Technical Center, room 291A
(660) 596-7233 - Direct Line
jbloess@sfccmo.edu

Department Chair
Steve Snodgrass
Fielding Technical Center, room 279B
(660) 596-7430 - Direct Line
ssnodgrass@sfccmo.edu

State Fair Community College
(660) 530-5800
www.sfccmo.edu

A.A.S. IN COMPUTER AIDED DRAFTING (CAD)

Computer Aided Drafting is a great career choice if you like working with your hands and mind to create things and produce your own designs.

What do CAD grads do? They prepare technical drawings and plans used by production and construction workers to build everything from manufactured products, such as toys, toasters, industrial machinery, and spacecraft, to structures such as houses, office buildings, and oil and gas pipelines.

Their computer drawings provide visual guidelines, show the technical details of the products and structures, and specify dimensions, materials, and procedures. Computer drafters fill in technical details, using drawings, rough sketches, specifications, codes, and calculations previously made by engineers, surveyors, architects, or scientists. CAD professionals use technical handbooks, tables, calculators, and computers to complete their work.

SFCC's CAD program prepares graduates to work for manufacturers, surveyors, construction companies, architects, graphic designers, electrical engineers, structural engineers, government organizations, and more. A CAD degree from SFCC leads to jobs in many areas, including:

- MECH, which includes these disciplines: PLM, solid modeling, rapid prototyping, manufacturing, and Mechanical Drafting
- AEC, which includes Architectural Drafting, Civil Engineering, Structural Engineering, Construction Management, and Facilities Management
- Plant, which includes plant design, process piping, instrumentation and maintenance
- GIS, including Location-Based Services, mapping, GIS, LMS, and automated mapping
- EDA (Electronic Design Automation), chip and PCB design, simulation, and verification
- Graphic arts, animation, and associated industries

SFCC's high-tech CAD program has the latest in hardware and software technology at all CAD workstations. Classes usually have 10 to 15 students. The program is accredited by the National Association of Industrial Technology (NAIT).

Students are required to complete a 4-credit-hour internship in their last semester. Fully 90 percent of those students are offered full-time positions in the companies for which they intern, so the job outlook is excellent.

The salary range for CAD careers varies by specialty and level of responsibility. Median annual earnings of architectural and civil computer drafters, mechanical drafters and electrical and electronics drafters in 2004 ranged from \$34,700 to \$62,160.

The Technology Club and Skills USA support CAD program students and scholarships may be available. For more information, contact Student Services at (660) 530-5830.

Bachelor of Science of Industrial Technology degree

SFCC now offers 2+2 transfer degrees with all Missouri universities. This means you can transfer the 64 credit hours from your A.A.S. degree in CAD into a Bachelor of Science of Industrial Technology degree with an emphasis in CAD. There also are other B.S. transfer degree opportunities with engineering, CAD and architectural colleges.

SFCC has articulation agreements in place with most area career and technical schools. Up to 15 credit hours may be articulated into the CAD program. Because the majority of CAD students are employed and not full-time students, prerequisite requirements have been minimized. Most students can complete the CAD degree program in two calendar years. However, course sequences have been logically arranged to facilitate a progression from basic to complex skills. Therefore, the sequence should be followed.

CAD Program Sequence of Courses

First Semester

Class	Hours
Tech Math II or College Algebra	3
Technical Writing or English Composition I	3
Wellness Course	1
Print Reading	3
Introduction to Computer Drafting	3
Microcomputer Applications	3
Total Hours	16

Second Semester

Class	Hours
Business Communications or English Comp II	3
Public Speaking	3
Intermediate Computer Drafting	3
Technical Science	4
CAD Elective	3
Total Hours	16

Third Semester

Class	Hours
US History Before 1877 or US History After 1877 or American/National Government	3
Advanced Computer Drafting	3
CAD Elective	3
CAD Elective	3
*Approved Program Elective	3
Employment Strategies	1
Total Hours	16

Fourth Semester

Class	Hours
CAD Internship	4
CAD Elective	3
CAD Elective	3
*Approved Program Elective	3
*Approved Program Elective	3
Total Hours	16
DEGREE TOTAL	64

CAD Electives:

Class	Hours
CAD Programming	3
Architectural Drafting	3
Architectural Applications	3
Engineering Graphics	3
Solid Modeling I	3
Solid Modeling II	3
CAD/CAM	3
3D Visualization	3
Problems in CAD	3

*Approved Program Elective—Select nine credit hours from any courses with the following prefixes: CNST, IM, MACH, NET, DRFT, WELD

NOTE: Course sequence is effective beginning with the fall 2008 semester and is accordance with the 2008-2010 catalog. Not all courses are offered every semester. Check with an advisor.

For a complete description of the Associate of Applied Science degree general requirements, please visit www.sfccmo.edu and select Course Catalog, or call the Admissions Office at (660) 530-5833.