

Metals Technology- Machine Tool Technology

› Associate of Applied Science



SFCC's Machine Tool Technology program offers training in how to use machine tools to manufacture useful products and parts. Our program will prepare you for a variety of machining-related occupations, such as machine operators, machine setters, machinists, and tool and die makers. Each represents different skills and skill levels.

Traditionally, machinists have directly controlled lathes, drill presses and milling machines—standard implements used every day to produce precision parts of metals, wood or plastics. Changes in technology have increased the demand for skilled machinists with communication, design, decision-making, and computer skills.

The introduction of computer numerically controlled (CNC) machines has dramatically changed the nature of the machinist's work. CNC machines are more productive and enable machinists to cut and shape parts with greater precision. CNC machines include machining tools such as lathes, multiaxis spindles, milling machines, laser cutting, water jet cutting, and wire electrical discharge machines—but

the functions formerly performed by human operators are now performed by computer-controlled modules. Equipment in the Machine Tool lab also is interfaced with the computer-aided design (CAD)/computer-integrated machining (CAM) lab to give you experience in computer-aided manufacturing.

The U.S. Bureau of Labor Statistics ranks Machine Tool Technology seventh in the top 10 occupational areas on the basis of net life earnings. The typical base salary for a Machine Tool Technician is \$23,000 to \$41,600. Base salary does not include overtime or benefits. Earning potential increases greatly with training and experience.

Affordable education

SFCC is here to help you reach your educational goals. One way we do that is by offering a top-quality education that's affordable. SFCC participates in the Missouri A+ program, so if you complete the program requirements at an A+ certified high school, you can use A+ funds to pay tuition and standard fees at SFCC. Other forms of aid also are available, including scholarships, grants and loans. A payment plan is available.

Contacts

Program Coordinator

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Fielding Technical Center
Room 284
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www.sfccmo.edu

Admissions Office

www.sfccmo.edu/admissions
Hopkins Student Services Center
3201 W. 16th St.
Sedalia, MO 65301
(660) 530-5833
admissions@sfccmo.edu

Admissions Checklist:

- Complete an application for admission online at www.sfccmo.edu.
- Request official academic transcript(s) from all colleges where credit was earned or attempted, including dual credit.*
- Submit ACT scores or schedule the free COMPASS test by calling the Testing and Career Center at (660) 530-5818.
- Request official high school, high school equivalency or home school transcript if required for pre-requisite or A+ eligibility.*

For specific admission requirements, visit www.sfccmo.edu; some academic programs require an additional application.

*Documents should be sent to Admissions, SFCC, 3201 W. 16th St., Sedalia, MO 65301.

Learn more.

Do more.

State Fair
Community College

SFCC offers tremendous value for your money. Check out these comparisons:

Missouri private college or university	\$20,662*
Missouri state college or university	\$7,449*
State Fair Community College (Missouri residents)	\$4,110
State Fair Community College (in-district residents)	\$2,940

*Source: <http://dhe.mo.gov/data/statsum>. Tuition and required fees for 30 credit hours a year, 2011-2012; SFCC costs are for 2014-2015. Comparisons do not include the cost of books, transportation or room and board.

Living on campus

The cost of residing on campus for the 2014-2015 academic year is \$3,113 per semester and includes a 19-meals per week plan with a value of \$1,300, OR \$3,013 per semester, which includes a 15-meals per week plan with a value of \$1,200. Rates are per semester and based on double occupancy. Off-campus rental housing also is available.

Transfer and bachelor's degree options

SFCC has agreements with four-year schools that ensure credit earned here transfers to those institutions. There also are specific agreements with Central Methodist University that provide bachelor's degree programs at Sedalia, Clinton, Lake of the Ozarks, and online; Drury University for on-ground and online programs; University of Central Missouri; and the University of Missouri. CMU and UCM also offer dual admission through SFCC.

To see how your SFCC courses will transfer to other colleges and universities, visit www.sfccmo.edu/transfer. Always talk with an advisor, either at SFCC or at the school to which you want to transfer, to get the most up-to-date information.

NOTE: Not all courses are offered every semester. Check with an advisor. For a complete description of degree requirements and for course descriptions, please visit www.sfccmo.edu and select Course Catalog, or call the Admissions Office at (660) 530-5833. The catalog and any subsequent addendums are the official source for a program's sequence of courses. 10/14

Required Courses 2014-2016

AAS in Metals Technology with Emphasis in Machine Tool Technology

MACH 101 Introduction to Machining.....	4
MACH 102 Lathe and Milling Machine Operations	4
MACH 103 Milling and Grinding Machine Applications	4
MACH 104 Advanced Machining	4
MACH 114 Statistical Process Control.....	3
WELD 115 Print Reading for Welders and Machinists.....	3
WELD 101 Introduction to Welding.....	4
WELD 102 Structural Welding	4
MACH 106 CNC Machining	3
MACH 109 Advanced CNC Machining.....	3
CAD 134 CAD/CAM	3
MATH 108 Technical Math II (or) MATH 112 Intermediate Algebra.....	3
IEM 126 Industrial Safety (or) CNST 162 Construction Safety	3
PHYS 125 Technical Science	4
SS 120 Employment Strategies.....	1
Program Electives*	6
ENGL 101 English Composition I (or) ENGL 112 Technical Writing	3
HIST 101 U.S. History Before 1877 (or) HIST 102 U.S. History Since 1877 (or) POLS 101 American/National Government.....	3
SPTH 101 Public Speaking.....	3
Wellness Course**	1

Degree Total 66

Program Electives* - Select 6 hours from AUTO, CAD, CNST, IEM, MACH, MATH 107, (or) WELD
Wellness Course** - Select 1 hour from - EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

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Gainful Employment Disclosure

For more information about our graduation rates, the median debt of students who completed these certificates, and other important information, please visit www.sfccmo.edu/machinetool.

State Fair Community College does not discriminate on the basis of race, color, national origin, sex, disability, religion, sexual orientation, veteran status, or age in its programs and activities or in employment. The following persons have been designated to handle inquiries regarding the nondiscrimination policy: Director of Human Resources, Hopkins Student Services Center, (660) 596-7484, or Dean of Student and Academic Support Services, Hopkins Student Services Center, (660) 596-7393. The Hopkins Center is located on SFCC's Sedalia campus at 3201 W. 16th St., Sedalia, MO 65301. Inquiries also may be directed to the U.S. Department of Education, Office of Civil Rights at OCR.KansasCity@ed.gov.

Interested persons may obtain information as to the existence and location of services, activities and facilities at State Fair Community College that are accessible to and usable by persons with disabilities by contacting the Access Office, Student Services Office, Hopkins Student Services Center, Room 751, SFCC, 3201 W. 16th Street, Sedalia, MO 65301, (660) 530-5832.

SFCC is tobacco- and smoke-free. For details, visit www.sfccmo.edu.

Machine Tool Technology Professional Certificate	
MACH 101 Introduction to Machining.....	4
MACH 102 Lathe and Milling Machine Operations	4
MACH 103 Milling and Grinding Machine Applications	4
MACH 106 CNC Machining	3
WELD 115 Print Reading for Welders and Machinists	3
MACH 109 Advanced CNC Machining	3
MACH 115 Heat Treating and Metallurgy	3
MATH 108 Technical Math II	3
MACH 114 Statistical Process Control.....	3
CAD 134 CAD/CAM	3
Certificate Total 33	

Machinist Level I Skills Certificate^

MACH 101 Introduction to Machining.....	4
MACH 106 CNC Machining	3
WELD 115 Print Reading for Welders and Machinists.....	3
MATH 107 Technical Math I	3
IEM 126 Industrial Safety.....	3
Certificate Total 16	

Machinist Level II Skills Certificate^

MACH 102 Lathe and Milling Machine Operations	4
MACH 109 Advanced CNC Machining.....	3
MACH 115 Heat Treating and Metallurgy	3
MACH 114 Statistical Process Control.....	3
Program Elective *	3
Certificate Total 16	

Program Electives* - Select 3 hours from CAD, CSNT, IEM, MACH, or WELD not previously taken

