# **GENERAL EDUCATION**

Program Requirements for General Education Associate of Arts Associate of Fine Arts Associate of Arts in Teaching Associate of Science Skills Certificates Professional Certificates Associate of Applied Science



### **PROGRAM REQUIREMENTS**

## **General Education Goals**

State Fair Community College faculty and staff maintain the belief that a core of learning experiences exist that are invaluable to all students regardless of their present or future roles in the workplace and the community. These core experiences, which are addressed and assessed in the general education program, are consistent with the required skill-based and knowledge-based learning outcomes identified by the Missouri Coordinating Board for Higher Education (CBHE). They are also consistent with the college's Institutional Learning Outcomes (ILOs) that students will achieve upon completion of their general or specialized study.

The CBHE outcomes include mastering the skills of communicating, higher-order thinking, managing information, and valuing. They also include acquiring knowledge in the areas of social and behavioral sciences, humanities and fine arts, mathematics, and life and physical sciences. The ILOs include thinking critically, communicating effectively, behaving responsibly, valuing others, developing life skills, utilizing technology, and investigating world processes. Students acquire these outcomes through a 42-hour block of core general education courses as well as additional electives.

## **General Education Matrix**

### Skill Area: Communicating

To develop students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically and to write and speak with thoughtfulness, clarity, coherence, and persuasiveness.

### Skill Area: Higher-Order Thinking

To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments, and to solve problems by applying evaluative standards.

### Skill Area: Managing Information

To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.

### Skill Area: Valuing

To develop students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.

### Knowledge Area: Social and Behavioral Sciences

To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. (Students must fulfill the state statute requirement of the Missouri Constitution.)

### Knowledge Area: Humanities and Fine Arts

To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances, and to appreciate the world of the creative imagination as a form of knowledge.

### Knowledge Area: Mathematics

To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. (The mathematics requirement for general education should have the same prerequisite(s) and level of rigor as college algebra.)

### Knowledge Area: Life and Physical Sciences

To develop students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations and shapes human history. Students should also understand that science is shaped by historical and social contexts.

### PROGRAM REQUIREMENTS | GENERAL EDUCATION

## **Professional Certificate in General Education**

Communica	9 Hours	
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
COMM 101 Public Speaking		3
American Ir	3 Hours	
LUCTION		-
HIST 101	U.S. History Before 1877	3
HIST 101 HIST 102	U.S. History Before 1877 U.S. History Since 1877	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from another institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional  $\frac{1}{2}$  credit hour.

Social Scient BADM 101 ECON 101 ECON 102 GEOG 101 HIST 108 HIST 109 POLS 103	Introduction to Business Principles of Macroeconomics Principles of Microeconomics World Geography World Civilization Before 1500 World Civilization After 1500 Introduction to Political Science	<b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
<b>Behavioral S</b> BADM 107 PSY 101 PSY 102 PSY 104 SOC 100 SOC 102	Sciences Personal Finance General Psychology Child Psychology Psychology of Personal Adjustment General Sociology Marriage and Family	3 Hours 3 3 3 3 3 3 3 3 3
Literature LIT 101 LIT 107 LIT 109 LIT 112 LIT 114	Introduction to Literature American Literature English Literature World Literature Topics in Literature	<b>3 Hours</b> 3 3 3 3 3 3
<b>Fine Arts</b> ART 101 ART 120 MUS 101 MUS 103	Art Appreciation Modern Art History Music Appreciation Music History and Literature Before 1800	<b>3 Hours</b> 3 3 3 3
MUS 104 THEA 107 THEA 125	Music History and Literature Since 1800 Introduction to Theatre Theatre History	3 3 3
Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104 SOC 120 SPAN 101	Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions American Diversity Elementary Spanish I	<b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3

Mathematics		3 Hours
MATH 114	College Algebra	3
MATH 116	Finite Math	3
MATH 117	Contemporary Mathematics	3
MATH 120	Trigonometry	3
MATH 122	Precalculus Math	5
MATH 125	Calculus for Business	3
MATH 127	Business Statistics	3
MATH 130	Calculus and Analytic Geometry I	5
Life and Ph	ysical Sciences	8 Hours

Life and Physical Sciences

Students must choose one course from the list of life sciences and one course from the list of physical sciences. At least one of the science courses selected must have a laboratory component, and the total credit hours of both categories must be equal to a minimum of 8 credit hours.

#### Life Sciences **BIO 100** Introduction to Biological Sciences 3 **BIO 103** Human Biology 3 Wildlife Conservation **BIO 105** 3 BIO 112 Introduction to Biology with Lab 5 BIO 125 Biology I with Lab 5 BIO 126 Biology II with Lab 5 BIO 208 Human Physiology with Lab 4 **Physical Sciences** Soils I with Lab AGRI 119 4 Introduction to Chemistry with Lab CHEM 101 5 CHEM 123 General Chemistry I with Lab 5 EASC 101 Introduction to Earth Sciences with Lab 5 Physical Geology with Lab EASC 106 5 EASC 118 Environmental Geology 3 EASC 120 Introduction to Astronomy 3 Introduction to Physical Science PHYS 103 3 PHYS 105 College Physics I with Lab 5 PHYS 118 General Physics I with Lab 5 Wellness 1 Hour EDUC 110 Introduction to Physical Education in the Elementary School 2 HLTH 101 Personal Health and Fitness 2 Building Fitness for Life I WELL 116 1 WELL 117 Building Fitness for Life II 1 WELL 118 Aerobics .5-1 WELL 119 Low Impact Aerobics 1-1.5 WELL 121 Women and Health 1 WELL 122 **Applied Wellness** 1 **General Education Elective** 1-3 Hours Select additional hours from the general education categories

listed above for a minimum total of 42 hours to meet the general education core. A total of 3 credit hours of WELL or WL prefix may be used between the Wellness and the General Education Elective requirements.

#### Certificate Total 42

### PROGRAM REQUIREMENTS | ASSOCIATE OF ARTS



## Associate of Arts

The Associate of Arts (AA) degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree.

If you're undecided on a major, the AA degree can serve as a springboard to explore new interests. It allows for flexibility and provides a wide choice of classes. We're here to help you discover the huge variety of academic programs and transfer options available to you with an Associate of Arts degree.

General Edu	42 Hours	
Communica	9 Hours	
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
COMM 101 Public Speaking		3
American Ir	3 Hours	
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from another institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional ½ credit hour.

Social Scier	3 Hours	
BADM 101 Introduction to Business		3
ECON 101	Principles of Macroeconomics	3
ECON 102 Principles of Microeconomics		3
GEOG 101	World Geography	3
HIST 108	World Civilization Before 1500	3
HIST 109	World Civilization After 1500	3
POLS 103	Introduction to Political Science	3

#### **Behavioral Sciences** 3 Hours BADM 107 Personal Finance 3 PSY 101 General Psychology 3 PSY 102 Child Psychology 3 **PSY 104** Psychology of Personal Adjustment 3 SOC 100 **General Sociology** 3 SOC 102 Marriage and Family 3 Literature 3 Hours Introduction to Literature LIT 101 3 LIT 107 American Literature 3 LIT 109 **English Literature** 3 LIT 112 World Literature 3 LIT 114 Topics in Literature 3 **Fine Arts** 3 Hours ART 101 Art Appreciation 3 ART 120 Modern Art History 3 MUS 101 **Music Appreciation** 3 MUS 103 Music History and Literature Before 1800 3 MUS 104 Music History and Literature Since 1800 3 THEA 107 Introduction to Theatre 3 THEA 125 Theatre History 3 **Humanities** 3 Hours **AGRI 106 Global Agriculture** 3 **FREN 101** Elementary French I 3 PHIL 101 Introduction to Philosophy 3 PHIL 102 Ethics 3 Living Religions PHIL 104 3 SOC 120 American Diversity 3 SPAN 101 Elementary Spanish I 3 **Mathematics** 3 Hours College Algebra MATH 114 3 MATH 116 Finite Math 3 MATH 117 **Contemporary Mathematics** 3 MATH 120 Trigonometry 3 MATH 122 Precalculus Math 5 MATH 125 Calculus for Business 3 **Business Statistics MATH 127** 3 **MATH 130** Calculus and Analytic Geometry I 5

### PROGRAM REQUIREMENTS | ASSOCIATE OF ARTS



## Associate of Arts (continued)

#### Life and Physical Sciences

8 Hours

4

5

5

5

5

3

3

3

5

5

Students must choose one course from the list of life sciences and one course from the list of physical sciences. At least one of the science courses selected must have a laboratory component and the total credit hours of both categories must be equal to a minimum of 8 credit hours.

#### Life Sciences

BIO 100	Introduction to Biological Sciences	3
BIO 103	Human Biology	3
BIO 105	Wildlife Conservation	3
BIO 112	Introduction to Biology with Lab	5
BIO 125	Biology I with Lab	5
BIO 126	Biology II with Lab	5
BIO 208	Human Physiology with Lab	4

### **Physical Sciences**

AGRI 119	Soils I with Lab
CHEM 101	Introduction to Chemistry with Lab
CHEM 123	General Chemistry I with Lab
EASC 101	Introduction to Earth Sciences with Lab
EASC 106	Physical Geology with Lab
EASC 118	Environmental Geology
EASC 120	Introduction to Astronomy
PHYS 103	Introduction to Physical Science
PHYS 105	College Physics I with Lab
PHYS 118	General Physics I with Lab

## Wellness

#### 1 Hour

weilliess		THOU
EDUC 110	Introduction to Physical Education in	n
	the Elementary School	2
HLTH 101	Personal Health and Fitness	2
WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	.5-1
WELL 119	Low Impact Aerobics	1-1.5
WELL 121	Women and Health	1
WELL 122	Applied Wellness	1
General Education Elective 1-3		

### **General Education Elective**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core.

### **Electives**

22 Hours

Additional courses numbered 100 or above may include 12 hours of restricted electives from technical training in the military or from technical courses taken at an accredited college. A maximum of 4 credit hours may be applied for THEA 115. Additional physical education activity and wellness courses (PE, PEAC, WELL, or WL prefix) may be accepted as elective credit for a maximum of 2 credit hours. Veterans, members of the National Guard and active duty military personnel may receive 2 hours of wellness credit by presenting a copy of their DD214 or similar record.

Note: A total of 3 credit hours of PE, PEAC, WELL, or WL prefix may be applied to the degree.

### **Degree Total 64**

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



## **Associate of Fine Arts in Art**

The Associate of Fine Arts in Art degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Art.

General Edu	42 Hours	
Communica	9 Hours	
ENGL 101	English Composition I	3
ENGL 102English Composition IICOMM 101Public Speaking		3
		3
American In	3 Hours	
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from another institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional ½ credit hour.

Social Scier	3 Hours	
BADM 101 Introduction to Business		3
ECON 101	Principles of Macroeconomics	3
ECON 102 Principles of Microeconomics		3
GEOG 101 World Geography		3
HIST 108	World Civilization Before 1500	3
HIST 109	World Civilization After 1500	3
POLS 103	Introduction to Political Science	3

<b>Behavioral</b> S	iciences	3 Hours
BADM 107	Personal Finance	3
PSY 101	General Psychology	3
PSY 102	Child Psychology	3
PSY 104	Psychology of Personal Adjustment	3
SOC 100	General Sociology	3
SOC 102	Marriage and Family	3
Literature		3 Hours
LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	English Literature	3
LIT 112	World Literature	3
LIT 114	Topics in Literature	3
Fine Arts		6 Hours
Fine Arts ART 101	Art Appreciation	6 Hours 3
	Art Appreciation Modern Art History	
ART 101		3
ART 101 ART 120	Modern Art History Global Agriculture	3 3
ART 101 ART 120 Humanities	Modern Art History	3 3 <b>3 Hours</b> 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy	3 3 <b>3 Hours</b> 3 3 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy Ethics	3 3 <b>3 Hours</b> 3 3 3 3 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions	3 3 <b>3 Hours</b> 3 3 3 3 3 3 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104 SOC 120	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions American Diversity	3 3 <b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions	3 3 <b>3 Hours</b> 3 3 3 3 3 3 3 3
ART 101 ART 120 Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104 SOC 120	Modern Art History Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions American Diversity	3 3 <b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



## **Associate of Fine Arts in Art**

Mathematics			3 Hours	Wellness		1
	MATH 114	College Algebra	3	EDUC 110	Introduction to Physical Education ir	٦
	MATH 116	Finite Math	3		the Elementary School	
	MATH 117	Contemporary Mathematics	3	HLTH 101	Personal Health and Fitness	
	MATH 120	Trigonometry	3	WELL 116	Building Fitness for Life I	
	MATH 122	Precalculus Math	5	WELL 117	Building Fitness for Life II	
	MATH 125	Calculus for Business	3	WELL 118	Aerobics	
	MATH 127	Business Statistics	3	WELL 119	Low Impact Aerobics	
	MATH 130	Calculus and Analytic Geometry I	5	WELL 121	Women and Health	
	Life and Ph	ysical Sciences	8 Hours	WELL 122	Applied Wellness	
Students must choose one course from the list of life			of life	Art Core		24 H
sciences and one course from the list of physical scienc			l sciences.	ART 103	Design I	
	At least one	of the science courses selected mu	st have a	ART 112	Drawing I	
	laboratory c	omponent and the total credit hours	ofboth		Design II	

laboratory component, and the total credit hours of both categories must be equal to a minimum of 8 credit hours.

#### **Life Sciences**

BIO 100 BIO 103 BIO 105 BIO 112 BIO 125 BIO 126 BIO 208	Introduction to Biological Sciences Human Biology Wildlife Conservation Introduction to Biology with Lab Biology I with Lab Biology II with Lab Human Physiology with Lab	3 3 5 5 5 4
Physical Sci	ences	
AGRI 119	Soils I with Lab	4
CHEM 101	Introduction to Chemistry with Lab	5
CHEM 123	General Chemistry I with Lab	5
EASC 101	Introduction to Earth Sciences with Lab	5
EASC 106	Physical Geology with Lab	5
EASC 118	Environmental Geology	3
EASC 120	Introduction to Astronomy	3
PHYS 103	Introduction to Physical Science	3
PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	.5-1
WELL 119	Low Impact Aerobics	1-1.5
WELL 121	Women and Health	1
WELL 122	Applied Wellness	1
Art Core		24 Hours
ART 103	Design I	<b>24 Hours</b> 3
	Design I Drawing I	
ART 103	5	3
ART 103 ART 112	Drawing I	3 3
ART 103 ART 112 ART 104	Drawing I Design II	- 3 3 3
ART 103 ART 112 ART 104 ART 113	Drawing I Design II Drawing II	3 3 3
ART 103 ART 112 ART 104 ART 113 ART 122	Drawing I Design II Drawing II Sculpture I (or) Ceramics I	3 3 3 3

Art Electives\* - Select 9 hours from ART 106, ART 107, ART 108, ART 110, ART 114, ART 115, ART 116, ART 117, ART 118, ART 122, ART 123, ART 126, (or) ART 127

#### **Degree Total 66**

Hour

2 2

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



## **Associate of Fine Arts in Music**

The Associate of Fine Arts in Music degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Music. Students must attend and pass four semesters of MUS 195 Concert and Recital Attendance.

General Edu	ucation Core	42 Hours
Communica	ations	9 Hours
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
COMM 101	Public Speaking	3
American Ir	stitutions	3 Hours
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from another institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional ½ credit hour.

Social Scien	ices	3 Hours
BADM 101	Introduction to Business	3
ECON 101	Principles of Macroeconomics	3
ECON 102	Principles of Microeconomics	3
GEOG 101	World Geography	3
HIST 108	World Civilization Before 1500	3
HIST 109	World Civilization After 1500	3
POLS 103	Introduction to Political Science	3
<b>Behavioral</b>	Sciences	3 Hours
BADM 107	Personal Finance	3
PSY 101	General Psychology	3
PSY 102	Child Psychology	3
PSY 104	Psychology of Personal Adjustment	3
SOC 100	General Sociology	3
SOC 102	Marriage and Family	3

<b>Literature</b> LIT 101 LIT 107 LIT 109 LIT 112 LIT 114	Introduction to Literature American Literature English Literature World Literature Topics in Literature	<b>3 Hours</b> 3 3 3 3 3 3
Fine Arts MUS 103 MUS 104	Music History and Literature Before 1800 Music History and Literature Since 1800	<b>6 Hours</b> 3 3
Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104 SOC 120 SPAN 101	Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions American Diversity Elementary Spanish I	<b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3
Mathematic MATH 114 MATH 116 MATH 117 MATH 120 MATH 122 MATH 125 MATH 127 MATH 130	College Algebra Finite Math Contemporary Mathematics Trigonometry Precalculus Math	<b>3 Hours</b> 3 3 3 5 5 3 3 5 5

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



8 Hours

## **Associate of Fine Arts in Music**

#### Life and Physical Sciences

Students must choose one course from the list of life sciences and one course from the list of physical sciences. At least one of the science courses selected must have a laboratory component, and the total credit hours of both categories must be equal to a minimum of 8 credit hours.

#### Life Sciences

Life Science	15	
BIO 100 BIO 103 BIO 105 BIO 112 BIO 125 BIO 126 BIO 208	Introduction to Biological Sciences Human Biology Wildlife Conservation Introduction to Biology with Lab Biology I with Lab Biology II with Lab Human Physiology with Lab	3 3 5 5 5 4
Physical Sci	ences	
AGRI 119	Soils I with Lab	4
CHEM 101	Introduction to Chemistry with Lab	5
CHEM 123	General Chemistry I with Lab	5
EASC 101	Introduction to Earth Sciences with Lab	5
EASC 106	Physical Geology with Lab	5
EASC 118	Environmental Geology	3
EASC 120	Introduction to Astronomy	3
PHYS 103	Introduction to Physical Science	3
PHYS 105 PHYS 118	College Physics I with Lab General Physics I with Lab	5 5
		0
Wellness		Hour
EDUC 110	Introduction to Physical Education in	
	the Elementary School	2
HLTH 101	Personal Health and Fitness	2
WELL 116 WELL 117	Building Fitness for Life I	1 1
WELL 117 WELL 118	Building Fitness for Life II Aerobics	.5-1
WELL 110 WELL 119	Low Impact Aerobics	1-1.5
WELL 119 WELL 121	Women and Health	1-1.5
WELL 122	Applied Wellness	1

Music Core		25 Hours
MUS 100	Fundamentals of Music	3
MUS 105	Fundamentals of Aural Training	1
MUS 106	Music Theory I	3
MUS 107	Music Theory II	3
MUS 108	Music Theory III	3
MUS 109	Aural Training I	1
MUS 110	Aural Training II	1
MUS 111	Aural Training III	1
MUS 145	Beginning Piano Class I	2
MUS 146	Beginning Piano Class II	2
Music Electiv	les*	5

**Concert and Recital Attendance** MUS 195

**4** Semesters Concert and Recital Attendance

Music Electives\* - Select 5 hours from MUS 102, MUS 119, MUS 120, MUS 121, MUS 122, MUS 136, MUS 137, MUS 138, MUS 139, MUS 140, MUS 150, MUS 151, MUS 152, MUS 153, MUS 155, MUS 160, MUS 161, MUS 162, MUS 163, MUS 175, MUS 176, MUS 177, MUS 178, MUS 210, MUS 211, MUS 212, MUS 213

#### Degree Total 67

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



3

## **Associate of Fine Arts in Theatre**

The Associate of Fine Arts in Theatre degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Theatre.

General Edu	ucation Core	42 Hours
Communica	ations	9 Hours
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
COMM 101	Public Speaking	3
American Ir	stitutions	3 Hours
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from another institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional ½ credit hour.

American/National Government

POLS 101

Social Scien	ices	3 Hours
BADM 101	Introduction to Business	3
ECON 101	Principles of Macroeconomics	3
ECON 102	Principles of Microeconomics	3
GEOG 101	World Geography	3
HIST 108	World Civilization Before 1500	3
HIST 109	World Civilization After 1500	3
POLS 103	Introduction to Political Science	3
<b>Behavioral</b>	Sciences	3 Hours
BADM 107	Personal Finance	3
PSY 101	General Psychology	3
PSY 102	Child Psychology	3
PSY 104	Psychology of Personal Adjustment	3
SOC 100	General Sociology	3
SOC 102	Marriage and Family	3

<b>Literature</b> LIT 101 LIT 107 LIT 109 LIT 112 LIT 114	Introduction to Literature American Literature English Literature World Literature Topics in Literature	<b>3 Hours</b> 3 3 3 3 3 3 3
Fine Arts THEA 125	Theatre History	<b>6 Hours</b> 3
<b>Select an a</b> ART 101 ART 120 MUS 101 MUS 103 MUS 104	dditional course: Art Appreciation Modern Art History Music Appreciation Music History and Literature Before 1800 Music History and Literature Since 1800	3 3 3 3 3
Humanities AGRI 106 FREN 101 PHIL 101 PHIL 102 PHIL 104 SOC 120 SPAN 101	Global Agriculture Elementary French I Introduction to Philosophy Ethics Living Religions American Diversity Elementary Spanish I	<b>3 Hours</b> 3 3 3 3 3 3 3 3 3 3
Mathematic MATH 114 MATH 116 MATH 117 MATH 120 MATH 122 MATH 125 MATH 127 MATH 130	College Algebra Finite Math Contemporary Mathematics Trigonometry Precalculus Math Calculus for Business Business Statistics Calculus and Analytic Geometry I	<b>3 Hours</b> 3 3 3 3 5 3 3 5 5 3

### PROGRAM REQUIREMENTS | ASSOCIATE OF FINE ARTS



## **Associate of Fine Arts in Theatre**

### Life and Physical Sciences

8 Hours

5

5

Students must choose one course from the list of life sciences and one course from the list of physical sciences. At least one of the science courses selected must have a laboratory component, and the total credit hours of both categories must be equal to a minimum of 8 credit hours.

#### **Life Sciences**

PHYS 105

PHYS 118

BIO 100 BIO 103 BIO 105 BIO 112 BIO 125 BIO 126 BIO 208	Introduction to Biological Sciences Human Biology Wildlife Conservation Introduction to Biology with Lab Biology I with Lab Biology II with Lab Human Physiology with Lab	3 3 5 5 5 4
Physical Sci	, .,	
AGRI 119	Soils I with Lab	4
CHEM 101	Introduction to Chemistry with Lab	5
CHEM 123	General Chemistry I with Lab	5
EASC 101	Introduction to Earth Sciences with Lab	5
EASC 106	Physical Geology with Lab	5
EASC 118	Environmental Geology	3
EASC 120	Introduction to Astronomy	3
PHYS 103	Introduction to Physical Science	3

College Physics I with Lab

General Physics I with Lab

Wellness		1 Hour
EDUC 110	Introduction to Physical Education	n in
	the Elementary School	2
HLTH 101	Personal Health and Fitness	2
WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	.5-1
WELL 119	Low Impact Aerobics	1-1.5
WELL 121	Women and Health	1
WELL 122	Applied Wellness	1
Theatre Co	re	22 Hours
<b>Theatre Co</b> THEA 110	<b>re</b> Stagecraft and Lighting	<b>22 Hours</b> 3
THEA 110	Stagecraft and Lighting	3
THEA 110 THEA 111	Stagecraft and Lighting Acting I	3
THEA 110 THEA 111 THEA 119	Stagecraft and Lighting Acting I Stage Makeup	3 3 3
THEA 110 THEA 111 THEA 119 THEA 122	Stagecraft and Lighting Acting I Stage Makeup Costume Construction	3 3 3 3
THEA 110 THEA 111 THEA 119 THEA 122 THEA 128	Stagecraft and Lighting Acting I Stage Makeup Costume Construction Introduction to Theatre Design	3 3 3 3 3 3
THEA 110 THEA 111 THEA 119 THEA 122 THEA 128 THEA 131	Stagecraft and Lighting Acting I Stage Makeup Costume Construction Introduction to Theatre Design Script Analysis	3 3 3 3 3 3 3 3

### Degree Total 64

## PROGRAM REQUIREMENTS | ASSOCIATE OF ARTS IN TEACHING

## **Associate of Arts in Teaching**

The Associate of Arts in Teaching (AAT) degree prepares students with a foundation in educational principles, theory and practice, and exposes them to complex problems and relationships in the field of education. Teachers play an essential role in fostering the intellectual and social development of children in their formative years. Using a variety of active learning approaches, teachers help children understand abstract principles, solve problems, and develop critical thought processes. Whether desiring to teach preschool or elementary school, teachers provide the tools and the environment for their students to develop into responsible citizens. Any Missouri community college student who has earned an AAT degree is guaranteed consistent treatment by the majority of four-year transfer institutions. Completing the AAT is the first step to achieving a Bachelor of Arts or a Bachelor of Science in an Elementary Education degree.

Bachelor's degree institutions with teacher education programs have different requirements. It is essential to work with an advisor to select the correct courses (categories indicated with \*\* in the dEGREE Requirements) needed for the transfer institution of choice.

The Missouri Department of Elementary and Secondary Education-Office of Educator Quality is working with representative stakeholder groups to redesign the standards for educator preparation including certification requirements. These changes and implementation schedule will be communicated to students through individual advising sessions, meetings, and/or other college communications. If there are any questions and/ or concerns, please contact the Director of Educator Preparation in the Office of Educator Quality.

### **Other AAT Requirements**

A successful background check included in EDUC 108 is required in this program. This requirement is included in and will be met once students successfully complete EDUC 108. This course must be successfully completed prior to taking most ECD or EDUC courses.

Minimum cumulative GPA of 2.5 and institutional GPA of 2.0 is required to apply for graduation.

Students who began their AAT in fall 2013 and will graduate in 2017 or after are required to have a cumulative GPA of 2.75 or higher and a content area GPA of 3.0 or higher (courses at SFCC with an EDUC prefix) for transfer institution acceptance.

Successful completion of the MoGEA (180 or higher for Mathematics; 183 or higher for Reading Comprehension and Interpretation; 188 or higher for Science and Social Studies; 167 or higher for Writing) is required.

**Note:** A student who meets all course requirements for the Associate of Arts in Teaching but does not have a 2.5 GPA, (but has at least a cumulative 2.0 GPA) and has not successfully completed the MoGEA may still apply to graduate with an Associate of Arts degree.

#### Degree Requirements

ullements	
omplete with a grade of C or higher*	
Introduction to the Field of Education	.5
English Composition I	3
	3
Public Speaking	3
World Geography	3
American/National Government	3
English Composition II	3 3 3 3 3 3 3
****	3
Teaching Profession with	
Field Experience	3
U.S. History Before 1877 (or)	
U.S. History Since 1877	3
Child Psychology	3
**	1
Foundations of Education	3
Introduction to Earth Sciences	
with Lab (or)	
College Physics I with Lab	5
Technology for Teachers	3
	3
*	3
0,	5
	3
lectives*****	9
	<ul> <li>Introduction to the Field of Education English Composition I</li> <li>Public Speaking World Geography American/National Government English Composition II</li> <li>Teaching Profession with Field Experience U.S. History Before 1877 (or) U.S. History Since 1877 Child Psychology</li> <li>Foundations of Education Introduction to Earth Sciences with Lab (or)</li> <li>Physical Geology with Lab (or) College Physics I with Lab Technology for Teachers</li> <li>Introduction to Biology with Lab (or) Biology I with Lab</li> </ul>

#### Degree Total 65.5

*Fine Arts\*\** - Select 3 hours from ART 101, ART 120, MUS 101, MUS 103, MUS 104, THEA 107, (or) THEA 125

Humanities\*\*\* - Select 3 hours from AGRI 106, FREN 101, PHIL 101, PHIL 102, PHIL 104, SOC 120, (or) SPAN 101

*Literature\*\*\*\** - Select 3 hours from LIT 101, LIT 107, LIT 109, LIT 112, (or) LIT 114

*Mathematics*<sup>\*\*\*\*\*</sup> - Select 3 hours from MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, MATH 127, (or) MATH 130

Suggested Electives\*\*\*\*\* - Select 9 hours from ATSM 105, ATSM 110, ATSM 115, ATSM 120, ECON 101, EDUC 218\*, EDUC 230\*, EDUC 240\*, FREN 101, (or) SPAN 101

Wellness<sup>\*\*\*\*\*\*\*</sup> - Select 1 hour from EDUC 110<sup>\*</sup>, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | ASSOCIATE OF SCIENCE



## **Associate of Science in Chemistry**

The Associate of Science (AS) in Chemistry is designed for students who want to earn a bachelor's degree in chemistry at a four-year institution. This program provides students with the first two years of study toward a Bachelor of Science degree at the University of Central Missouri (UCM) in Warrensburg. Students take basic courses common to most science and pre-health disciplines and continue their studies of chemistry at UCM. The curriculum was developed in cooperation with UCM and the Coordinating Board for Higher Education (CBHE). Chemistry programs at other institutions differ slightly, so it is strongly suggested that a student electing to receive an AS degree work very closely with an advisor from both State Fair Community College and the receiving institution to individually plan the four-semester degree plan.

#### **Degree Requirements**

ENGL 101	English Composition I	3
COMM 101	Public Speaking	3
HLTH 101	Personal Health and Fitness	2
BIO 112	Introduction to Biology with Lab	5
CHEM 123	General Chemistry I with Lab	5
ENGL 102	English Composition II	3
MATH 130	Calculus and Analytic Geometry I	5
CHEM 124	General Chemistry II with Lab	5

CHEM 221	Organic Chemistry I with Lab	5
CHEM 222	Organic Chemistry II with Lab	5
PHYS 105	College Physics I with Lab (or)	
PHYS 118	General Physics I with Lab	5
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Fine Arts, Hui	manities, Literature, or Social Sciences**	9
PHYS 106	College Physics II with Lab (or)	
PHYS 119	General Physics II with Lab	3
Elective*		3

#### Degree Total 64

*Elective*<sup>\*</sup> - Select 1 course from BIO 125, BIO 126, MATH 120, (or) MATH 131. You must check the individual degree requirements at your transfer institution to determine which course is best for your area.

*Fine Arts, Humanities, Literature, or Social Sciences*<sup>\*\*</sup> -Select 9 hours from AGRI 106, ART 101, ART 120, BADM 101, ECON 101, ECON 102, FREN 101, GEOG 101, HIST 108, HIST 109, LIT 101, LIT 107, LIT 109, LIT 112, LIT 114, MUS 101, MUS 103, MUS 104, PHIL 101, PHIL 102, PHIL 104, POLS 103, SOC 120, SPAN 101, THEA 107, (or) THEA 125

### PROGRAM REQUIREMENTS | ASSOCIATE OF SCIENCE



### **Associate of Science in Engineering**

The Associate of Science (AS) in Engineering is designed for students who want to earn a bachelor's degree in any engineering field at a four-year institution. This program provides students with the first two years of study toward a Bachelor of Science degree at the Missouri University of Science and Technology (MS&T) in Rolla. Students take basic courses common to most engineering disciplines and continue their studies in specialized areas (electrical, mechanical, civil, chemical, etc.) during their remaining years at MS&T. The curriculum responds to the Model Program for Engineering Transfers developed in cooperation with MS&T and the Coordinating Board for Higher Education (CBHE). Engineering programs at other institutions differ slightly, so it is strongly suggested that a student electing to receive an AS degree work very closely with an advisor from both State Fair Community College and the receiving institution to individually plan the four-semester degree plan.

### **Degree Requirements**

Check the specific major for which course would be best\* ENGL 101 English Composition I 3 ENGL 102\* English Composition II (or)

COMM 101*	Public Speaking	3
MATH 130	Calculus and Analytic Geometry I	5
MATH 131	Calculus and Analytic Geometry II	5
MATH 132	Calculus and Analytic Geometry III	5
ECON 101	Principles of Macroeconomics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3

Behavioral Sciences, Fine Arts, Humanities, Literature,

or Social Sciences**		6
Electives***		16
Wellness****		1
PHYS 118	General Physics I with Lab	5
PHYS 119	General Physics II with Lab	5
CHEM 123	General Chemistry I with Lab	5

#### Degree Total 65

Behavioral Sciences, Fine Arts, Humanities, Literature, or Social Sciences<sup>\*\*</sup> - Select 6 hours from AGRI 106, ART 101, ART 120, BADM 101, BADM 107, ECON 102, FREN 101, GEOG 101, HIST 108, HIST 109, LIT 101, LIT 107, LIT 109, LIT 112, LIT 114, MUS 101, MUS 103, MUS 104, PHIL 101, PHIL 102, PHIL 104, POLS 103, PSY 101, PSY 102, PSY 104, SOC 100, SOC 102, SOC 120, SPAN 101, THEA 107, (or) THEA 125

*Electives*<sup>\*\*\*</sup> - Select 16 hours from BIO 112, EDT 111, EDT 130, CAPP 125, CHEM 124, CHEM 221, CIS 155, CIS 157, MATH 114, MATH 120, MATH 134, (or) PHYS 203. You must check the individual degree requirements at your transfer institution to determine which course is best for your area.

Wellness\*\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | ASSOCIATE OF APPLIED SCIENCE



## **Associate of Applied Science General Education Requirements**

General Edu	ication Core	16 Hours	WELL 119	Low Impact
<b>Communica</b> ENGL 101		3 Hours	WELL 121 Women a WELL 122 Applied W	
ENGL 101 ENGL 102	English Composition I English Composition II	3 3	General Ed	ucation Electi
ENGL 110 ENGL 112	Business Communications Technical Writing	3 3	Program Re	quirements
Mathematic	s	3 Hours		
MATH 101 MATH 107 MATH 108	Business Math Technical Math I Technical Math II	3 3 3		legree progra lective course
MATH 110 MATH 112	Intermediate Algebra with Review Intermediate Algebra	5 3	Communica COMM 101,	a <b>tions</b> ENGL 101, EN
MATH 114 MATH 116 MATH 117 MATH 120 MATH 122	College Algebra Finite Math Contemporary Mathematics Trigonometry Precalculus Math	3 3 3 5	MATH 114, N	<b>25</b> /ATH 107, MA /ATH 116, MA <sup>-</sup> /ATH 127, MA
MATH 125 MATH 127 MATH 130	Calculus for Business Business Statistics Calculus and Analytic Geometry I	3 3 5	BADM 101, E HIST 108, H	<b>Behavioral Sc</b> 3ADM 107, EC ST 109, POLS
American In		3 Hours	SOC 100, SC	
HIST 101 HIST 102	U.S. History Before 1877 U.S. History Since 1877	3 3	<b>Higher-Ord</b> BADM 103, I	<b>er Thinking</b> ENGL 102, SO(
POLS 101 These cours	American/National Government es satisfy the state requirement for t	3 :he	<b>Valuing</b> PHIL 101, PH	HL 104, SOC 10
Missouri Cor	nstitution. Students transferring cred story or national government from a	it for	Managing I	•

institution whether in Missouri or out-of-state may need to complete POLS 102 Missouri Constitution for an additional <sup>1</sup>/<sub>2</sub> credit hour.

### Wellness

#### 1 Hour

All students, except those in Allied Health programs, must complete the 1 credit hour wellness requirement.

EDUC 110	Introduction to Physical Education in	
	the Elementary School	2
HLTH 101	Personal Health and Fitness	2
WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	1

Aerobics 1 d Health 1 ellness 1 tives\* 6 Hours 45-79 Hours

Degree Total 61-95

am includes six hours of general ses from two of the following

NGL 102. ENGL 110. ENGL 112

ATH 108, MATH 110, MATH 112, ATH 117, MATH 120, MATH 122, ATH 130

#### ciences

CON 101, ECON 102, GEOG 101, S 103, PSY 101, PSY 102, PSY 104,

)C 120

102. SOC 120

CAPP 125, CIS 103, ENGL 101, ENGL 102, HEOC 140

#### Life and Physical Sciences

AGRI 108, AGRI 118, AGRI 119, BIO 100, BIO 103, BIO 105, BIO 112, BIO 125, BIO 126, BIO 207, BIO 208, CHEM 101, CHEM 123, EASC 101, EASC 106, EASC 118, EASC 120, PHYS 103, PHYS 105, PHYS 118, PHYS 125

#### **Humanities and Fine Arts**

AGRI 106, ART 101, ART 120, FREN 101, LIT 101, LIT 107, LIT 109, LIT 112, LIT 114, MUS 101, MUS 103, MUS 104, PHIL 101, PHIL 102, PHIL 104, SOC 120, SPAN 101, SPAN 120, THEA 107, THEA 125

### PROGRAM REQUIREMENTS | ACCOUNTING



## **AAS in Accounting**

The Accounting program prepares students with a foundation in accounting principles, theory and practice, and exposes them to complex problems and relationships in fields of business, cost management, tax, and economics. Persons planning a career in accounting should have an aptitude for mathematics; be able to analyze, compare and interpret facts and figures quickly, and make sound judgments based on this knowledge. They must be good at working with people as well as with business systems and computers. Accuracy and the ability to handle responsibility with limited supervision are important. Perhaps most important, accountants should have high standards of integrity. The practical skills received from this program will prepare students for a variety of employment opportunities including financial accountant, bookkeeper, income tax preparer, payroll specialist, or cost/management accountant.

### **Degree Requirements**

Courses to co	omplete with a grade of C or higher*	
ACCT 109*	Applied Accounting Procedures	3
CAPP 125*	Microcomputer Applications	3
ENGL 101	English Composition I	3
Mathematics	5**	3
BADM 101	Introduction to Business	3
OADM 121*	Calculators	1
ACCT 101*	Principles of Financial Accounting	3
ENGL 110	Business Communications	3
CAPP 166*	Excel	3
BADM 107	Personal Finance	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3

### Wellness\*\*\*

Wellness***		1
ACCT 102*	Managerial Accounting	3
ACCT 203*	Intermediate Financial Accounting I	3
ACCT 132*	Business Taxation	3
ECON 101	Principles of Macroeconomics	3
BADM 103	Legal Environment of Business	3
SS 120	Employment Strategies	1
ACCT 220*	Current Topics in Accounting	3
ACCT 137*	Introduction to Federal Taxation	3
ACCT 125*	Computerized Accounting	
	Applications	3
BSMT 125	Human Relations (or)	
COMM 101	Public Speaking	3
ACCT 175*	Accounting Internship	4

#### **Degree Total 64**

Mathematics\*\* - Select 3 hours from MATH 101\*, MATH 110\* (or) MATH 112\*

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | AGRICULTURE



## **Professional Certificate in Agricultural Business**

The Professional Certificate in Agricultural Business is designed to provide the student with business skills specific to agriculture. Career paths such as production agriculture, agricultural lending, commodity marketing, risk management, business management, and agricultural retail sales would be well served by completion of this certificate. Students will learn valuable skills in price risk management through hedging practices, effective management of business resources and leadership of human resources, analyzing economic factors and their relationship to agriculture, basic salesmanship skills, and the impact of agriculture and food policy on the agriculture industry.

### **Certificate Requirements**

	•	
AGRI 132	Agriculture Economics	3
AGRI 134	Marketing Farm Commodities	3
AGRI 136	Ag Credit and Finance	3
AGRI 138	Ag Business Management	3
BSMT 110	Salesmanship	3
AGRI 137	Farm Management, Recordkeeping	1
AGRI 133	Agricultural and Food Policy	3

### Certificate Total 19

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/agriculture.

### PROGRAM REQUIREMENTS | AGRICULTURE



## **Professional Certificate in Agronomy**

The Professional Certificate in Agronomy focuses on the skills required for certification by The American Society of Agronomy and The Missouri Certified Crop Adviser Board. The student will study plant growth and development, crop production, soil formation, composition and properties, soil nutrient management, crop scouting, pest management, and agricultural chemicals. Student will also complete state exams to obtain a commercial applicator's license. Completion of the certificate will prepare the student to pass the required exams to become a Certified Crop Adviser.

### **Certificate Requirements**

AGRI 118	Plant Science	3
AGRI 119	Soils I with Lab	4
AGRI 121	Soils II	3
AGRI 123	Soil Erosion and Management	3
AGRI 127	Farm Chemicals	3
AGRI 168	Commercial Applicator Licensing	2
AGRI 174	Crop and Insect Scouting	2

#### Certificate Total 20

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/agriculture.

### PROGRAM REQUIREMENTS | AGRICULTURE



## **AAS in Agriculture**

The Agriculture program provides a vast assortment of opportunities. Firms supply farmers with fertilizer, seed, feed, fuel, chemicals, machinery, equipment, marketing, credit, and supplies. Agribusinesses also produce, buy, process, package, transport, and deliver livestock and products to the consumer. In agribusiness, trained staff familiar with agriculture, marketing, accounting, economics, and public relations is a must. Agriculture is one of the largest and most diverse industries in the world. Careers in agriculture are exciting and satisfying; the opportunities are numerous and the salaries competitive. Students interested in agriculture are self-motivated, goal-oriented, and take a tenacious, creative approach to problem solving. The technical and business skills to be gained will provide an advantage to work on the family farm or pursue a job in agribusiness. The program combines instruction with job experience. In addition to regular classroom hours, students work for a major industry in their chosen career field with an occupational internship. The internship provides a unique opportunity to apply the knowledge acquired in class to work situations.

### **Degree Requirements**

AGRI 101	Ag Leadership and Issues I	2
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
AGRI 118	Plant Science	3
AGRI 119	Soils I with Lab	4
AGRI 125	Natural Resources (or)	
AGRI 129	General Horticulture	3
AGRI 131	Introduction to Agribusiness Systems	3
AGRI 102	Ag Leadership and Issues II	1
AGRI 132	Agriculture Economics	3

AGRI 127	Farm Chemicals	3
AGRI 137	Farm Management, Recordkeeping	1
AGRI 108	Animal Science	3
AGRI 175	Occupational Internship	4
AGRI 103	Ag Leadership and Issues III	2
Wellness***		1
AGRI 116	Animal Nutrition (or)	
AGRI 133	Agricultural and Food Policy	3
AGRI 134	Marketing Farm Commodities	3
AGRI 114	Livestock Management (or)	
BSMT 110	Salesmanship	3
General Educ	cation*	3
AGRI 138	Ag Business Management	3
AGRI 174	Crop and Insect Scouting	2
AGRI 104	Ag Leadership and Issues IV	1
Mathematics	**	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
AGRI 136	Ag Credit and Finance	3
AGRI 168	Commercial Applicator Licensing	2
AGRI 121	Soils II	3
	Degree Total	68
General Educ	ration* - Select 3 hours from ART 101 BADN	1

General Education" - Select 3 hours from ART 101, BADM 103, COMM 101, MUS 101, or SPAN 101

*Mathematics\*\** - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101,

WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

WELL 12

### PROGRAM REQUIREMENTS | AGRICULTURE



## **AAS in Agriculture with Emphasis in Agronomy**

The Agronomy program provides students with a strong foundation to pursue a career in an agronomic related field. As world population approaches nine billion people, agronomists will be responsible for increasing food production on fewer acres while ensuring resources will be available for future generations. Employment opportunities include crop and seed production; fertilizer sales and application; pest and weed control; seed sales; crop scouting; seed analysts, and soil scientists. Course work focuses on soil and plant sciences, soil erosion management, soil fertilization, and chemical safety and application. In addition to regular classroom hours, students work for an employer in the agronomy industry with an occupational internship. The internship provides a unique opportunity to apply the knowledge acquired in class to work situations.

#### **Degree Requirements**

AGRI 101	Ag Leadership and Issues I	2
AGRI 118	Plant Science	3
AGRI 119	Soils I with Lab	4
AGRI 129	General Horticulture	3
AGRI 131	Introduction to Agribusiness Systems	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
AGRI 102	Ag Leadership and Issues II	1
AGRI 137	Farm Management, Recordkeeping	1

AGRI 123 AGRI 127	Soil Erosion and Management Farm Chemicals	3
AGRI 175	Occupational Internship	4
AGRI 103	Ag Leadership and Issues III	2
AGRI 125	Natural Resources	3
AGRI 174	Crop and Insect Scouting	2
AGRI 133	Agricultural and Food Policy	3
AGRI 134	Marketing Farm Commodities	3
Mathematics	<b>*</b>	3
AGRI 104	Ag Leadership and Issues IV	1
AGRI 121	Soils II	3
AGRI 168	Commercial Applicator Licensing	2
AGRI 149	Chemistry of Soil Additives	3
BADM 107	Personal Finance	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness**		1
	Deer	an Total Co

### Degree Total 62

Mathematics\* - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

Wellness\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

### PROGRAM REQUIREMENTS | AGRICULTURE



# AAS in Agriculture with Emphasis in Animal Science

The Animal Science program is focused on the livestock portion of the agricultural industry. Students will gain a fundamental knowledge of livestock production through animal selection and reproduction, nutrition, and management courses. This program focuses on all species of livestock and is intended for students pursuing a career in livestock production.			AGRI 116 AGRI 114 AGRI 134 AGRI 103 BIO 210 AGRI 112 AGRI 104	Animal Nutrition Livestock Management Marketing Farm Commodities Ag Leadership and Issues III Principles of Genetics with Lab Livestock and Meat Evaluation Ag Leadership and Issues IV	3 3 2 4 3 1
Degree Rec AGRI 101 AGRI 108 <i>Mathematic</i> ENGL 101 AGRI 131	Ag Leadership and Issues I Animal Science	3 HI 3 HI 3 HI 3 RI		Livestock Breeding Livestock Reproduction U.S. History Before 1877 (or) U.S. History Since 1877 (or) American/National Government	3 3 1 3
AGRI 110	Contemporary Issues in Animal	J		Degree 1	otal 60
Agriculture3AGRI 137Farm Management, Recordkeeping1BADM 107Personal Finance3AGRI 102Ag Leadership and Issues II1AGRI 175Occupational Internship4BIO 112Introduction to Biology with Lab5		112 Wellness** -	S <sup>*</sup> - Select 3 hours from MATH 110 (or) N Select 1 hour from EDUC 110, HLTH 101 .17, WELL 118, WELL 119, WELL 121, (or) \	., WELL	

### PROGRAM REQUIREMENTS | AGRICULTURE



## AAS in Agriculture with Emphasis in Horticulture

The Horticulture program will prepare students for numerous career opportunities with practical experience in a fully equipped greenhouse and an internship to enhance the classroom learning experiences. Workers in landscaping, groundskeeping, nursery, greenhouse, and lawn service occupations are responsible for a variety of tasks necessary to achieve a pleasant and functional outdoor environment. They also care for indoor gardens and planting in commercial and public facilities. Nursery and greenhouse workers help cultivate plants. Managers make decisions about type and quantity of plants to be grown; purchase seed, fertilizers, and chemicals; hire employees; manage record keeping and marketing, and oversee operations. Landscape contractors usually follow designs of a landscape architect to install trees, shrubs, sod, and ornamental features. Groundskeepers maintain a variety of facilities including athletic fields, golf courses, cemeteries, college campuses, and parks.

### Degree Requirements

	Ag Loodorchip and loouan l	~
AGRI 101	Ag Leadership and Issues I	2
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
AGRI 118	Plant Science	3
AGRI 131	Introduction to Agribusiness Systems	3
AGRI 129	General Horticulture	3
AGRI 102	Ag Leadership and Issues II	1
AGRI 127	Farm Chemicals	3

AGRI 137 AGRI 175 BADM 107	Farm Management, Recordkeeping Occupational Internship Personal Finance	1 4 3
AGRI 103	Ag Leadership and Issues III	2
Wellness**		1
AGRI 126	Ornamental Woody Plants	3
AGRI 128	Ornamental Herbaceous Plants	3
AGRI 138	Ag Business Management	3
AGRI 119	Soils I with Lab	4
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
AGRI 104	Ag Leadership and Issues IV	1
AGRI 151	Landscape Design and	
	Maintenance	3
AGRI 121	Soils II	3
AGRI 168	Commercial Applicator Licensing	2
Mathematics	5*	3
AGRI 154	Greenhouse Management with Lab	4
AGRI 179	Innovative Horticulture	1
	Degree	Total 62

 $Mathematics^{\star}$  - Select 3 hours from MATH 101, MATH 110, MATH 112, (or) MATH 114

*Wellness\*\** - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | AUTOMOTIVE TECHNOLOGY



## **Skills Certificate in Advanced Driveability**

The Skills Certificate in Advanced Driveability is a study of engine operation and condition diagnoses, including gasoline and automotive fuels; turbo/supercharging; electrical and electronic fundamentals; computer principles and operations; fuel pumps; fuel injectors; ignition systems; temperature and oxygen sensors; EVAP systems; EGR systems; catalytic converters, and more. The program introduces the diagnosis and troubleshooting of automotive engine control systems, including information on digital storage oscilloscopes; fuel injection and ignition system diagnosis; current ramping tests, plus scan tool diagnosis. Also included are fundamental principles; servicing; troubleshooting and repair of modern automotive engines, and removal; disassembly; cleaning; inspection; repairs; reassembly, and installation of engine assemblies.

### Certificate Requirements

All course requirements must be completed with a grade of C or higher

o or riignor		
AUTO 100	Introduction to Automotive Technology	3
AUTO 116	Automotive Electrical System	
	Fundamentals	3
AUTO 118	Advanced Automotive Electrical	
	and Electronics	3
AUTO 106	Power Train Management	5
AUTO 108	Advanced Engine Performance	6

### Certificate Total 20

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/automotive.

### PROGRAM REQUIREMENTS | AUTOMOTIVE TECHNOLOGY



## **Skills Certificate in Automotive Chassis**

The Skills Certificate in Automotive Chassis provides an in-depth study of automotive steering, suspension and wheel systems, including brake systems and related components. Learn how to inspect and replace components; diagnose handling and suspension problems, and the setup and completion of four wheel alignments. The program includes the theory and operations of hydraulic braking systems, drum brakes, disc brakes, power assist, and ABS diagnosis and service. System principles and theory will be presented that will facilitate an understanding of how brake systems operate in detail and how the brake system relates to other systems in the automobile.

### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

AUTO 100	Introduction to Automotive Technology	3
AUTO 113	Steering, Suspension and Wheels	5
AUTO 115	Automotive Brakes	5
AUTO 116	Automotive Electrical System	
	Fundamentals	3

Certificate Total 16



## Skills Certificate in Automotive Electrical/Electronics, Heating/ Air Conditioning

The Skills Certificate in Automotive Electrical/Electronics, Heating/Air Conditioning develops students' skills and knowledge required to understand the fundamental principles of electricity and electronics and how these principles apply to automotive systems. These specifics include the study of wiring diagrams and electrical symbols; how to utilize appropriate equipment such as meters and scopes; the proper methods to repair circuits, along with the techniques and strategies used to troubleshoot and diagnose various types of automotive electrical systems. The theory of operation, diagnosis and repair of automotive heating, ventilation, air conditioning, and engine cooling systems are taught. Additionally, students learn the function and repair of modern Automatic Climate Control Systems, along with servicing and retrofitting A/C systems.

### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

AUTO 100	Introduction to Automotive Technology	3
AUTO 106	Power Train Management	5
AUTO 116	Automotive Electrical System	
	Fundamentals	3
AUTO 118	Advanced Automotive Electrical	
	and Electronics	3
AUTO 119	Automotive Heating and Air	
	Conditioning	5

### Certificate Total 19

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/automotive.

### PROGRAM REQUIREMENTS | AUTOMOTIVE TECHNOLOGY



## Skills Certificate in Automotive Transmission, Driveline and Axles

The Skills Certificate in Automotive Transmission, Driveline and Axles includes the fundamental principles, troubleshooting and repair of manual and automatic transmissions/transaxles, drivelines and axles. Included in the course is the study of clutch systems; drive shafts and universal joints; drive axle and related gears; four-wheel drive systems, and drivetrain electrical controls theory of operation. The study of the diagnostic approach to determine needed repairs, overhaul procedures and the electrical control theory of operation are also included.

### **Certificate Requirements**

All course red	quirements must be completed with a grade	of
C or higher		
AUTO 100	Introduction to Automotive Technology	3

		0
AUTO 103	Manual Transmissions, Drivelines	
	and Axles	5
AUTO 105	Automatic Transmissions	5
AUTO 116	Automotive Electrical System	
	Fundamentals	3

Certificate Total 16

## Professional Certificate in Automotive Technology

The Professional Certificate in Automotive Technology requires satisfactory completion of the 12 core courses within the Automotive Technology program. Students who complete this course of study will learn automotive systems, theory and principles and receive specialized hands-on training using up-to-date industry standard equipment. With this certificate, the student will be prepared to enter the labor force equipped with the knowledge and skills to go to work. In addition, this specialized training enhances the student's chance of securing employment quickly.

### **Certificate Requirements**

All AUTO course requirements must be completed with a grade of C or higher

5	5	
AUTO 100	Introduction to Automotive Technology	3
AUTO 116	Automotive Electrical System	
	Fundamentals	3
AUTO 118	Advanced Automotive Electrical	
	and Electronics	3
AUTO 106	Power Train Management	5
AUTO 103	Manual Transmissions, Drivelines	
	and Axles	5
AUTO 105	Automatic Transmissions	5
AUTO 113	Steering, Suspension and Wheels	5
AUTO 115	Automotive Brakes	5
AUTO 119	Automotive Heating and Air	
	Conditioning	5
AUTO 108	Advanced Engine Performance	6
AUTO 121	Automotive Engines	6
SS 120	Employment Strategies	1

### Certificate Total 52

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/automotive.

### PROGRAM REQUIREMENTS | AUTOMOTIVE TECHNOLOGY



## **AAS in Automotive Technology**

The Automotive Technology program gives students the opportunity to study automotive systems in depth, beginning with fundamental principles and guickly advancing to more sophisticated theories and application. Along with classroom study, the program is designed to help students develop a strong skill foundation through lab and shop learning activities. In today's automotive repair industry, technicians must have the ability to guickly diagnose and repair vehicle systems from the trivial problems to the most sophisticated. This course of study will prepare the student to embrace the ever-changing technology associated with the automobile repair industry. An automotive technician must be well versed in computers, mathematics, reading, and communication skills, along with skills specific to the trade. The program will provide instruction on employability skills and shop operation management. Students frequently work with dirty and greasy parts and in awkward positions. They often lift heavy parts and tools. Minor cuts, burns and bruises are common.

The Automotive Technology program has attained national accreditation status from the National Automotive Technicians Education Foundation (NATEF), an affiliate of the National Institute of Automotive Service Excellence (ASE), signifying that the program meets uniform standards for instructional facilities, equipment, curriculum, and staff credentials.

#### **Degree Requirements**

All AUTO course requirements must be completed with a arade of C or higher

grade of C C	or nigner	
AUTO 100	Introduction to Automotive Technology	3
AUTO 116	Automotive Electrical System	
	Fundamentals	3
AUTO 118	Advanced Automotive Electrical	
	and Electronics	3
AUTO 106	Power Train Management	5
AUTO 103	Manual Transmissions, Drivelines	
	and Axles	5
AUTO 105	Automatic Transmissions	5
AUTO 113	Steering, Suspension and Wheels	5
AUTO 115	Automotive Brakes	5
AUTO 119	Automotive Heating and	
	Air Conditioning	5
AUTO 108	Advanced Engine Performance	6
AUTO 121	Automotive Engines	6
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 107	Technical Math I	3
MATH 108	Technical Math II	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness*		1
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1

#### Degree Total 69

Wellness\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | BUSINESS MANAGEMENT



## **Skills Certificate in Basic Business Competencies**

The Skills Certificate in Basic Business Competencies is designed to help students obtain basic business skills and knowledge needed to quickly enter the workforce. The certificate consists of 16 hours and is attainable in one semester. Students completing this program should be ready for entry-level employment in most business settings.

Upon completion, students can easily continue their education because the certificate satisfies requirements applicable to Associate of Applied Science degrees in Accounting, Management Specialty, Marketing and Retail Specialty, and Office Management Specialty. Check the AAS degree requirements page for any minimum grade requirements.

### **Certificate Requirements**

BADM 101	Introduction to Business	3
MATH 101	Business Math	3
ENGL 101	English Composition I	3
CAPP 125	Microcomputer Applications	3
BSMT 125	Human Relations	3
SS 120	Employment Strategies	1

### Certificate Total 16

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

### PROGRAM REQUIREMENTS | BUSINESS MANAGEMENT



3

3

3

3

3

3

1

3 3

3

3

3

3

## **AAS in Business Management with Management Specialty**

In the Business Management with Management Specialty program, students should possess leadership and decision-making skills and enjoy analyzing information and implementing solutions in a variety of situations. It is essential that a student possess good communication and human relation skills to be successful. This program requires all students to complete an internship between the first and second year and offers students the experience of employment in a degree-related field. Employment opportunities in this area typically are found in entry-level positions in human resource management, banking, insurance, and entry-level management in areas such as retail, sales and food service. Many students pursuing this degree are seeking to open their own business.

### **Degree Requirements**

BADM 101	Introduction to Business
Mathematics	** D
BSMT 108	Principles of Management
ENGL 101	English Composition I
CAPP 125	Microcomputer Applications
BSMT 110	Salesmanship
Wellness****	
BSMT 106	Principles of Marketing
BADM 107	Personal Finance
ENGL 110	Business Communications (or)
COMM 101	Public Speaking
ACCT 101	Principles of Financial Accounting
BSMT 175*	Business Management Internship
ACCT 102	Managerial Accounting

BADM 103	Legal Environment of Business	3
BSMT 117	Human Resource Management	3
Program Ele	ctive***	3
ECON 101	Principles of Macroeconomics	3
SS 120	Employment Strategies	1
BSMT 125	Human Relations	3
Program Elective***		3
BADM 109	Business Ethics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 130	Business Strategies	3

#### Degree Total 65

*Internship*\* - The internship is to be completed after taking approximately 30 credit hours of Business Management degree classes with 15 of those comprised of BADM or BSMT courses. In the case that BSMT 175 cannot be taken, 3 hours may be selected from the following courses to meet the degree requirement: ACCT 137, CAPP 160, CAPP 166, ECON 102, (or) SOC 120. The program coordinator must approve all internships and substitutions.

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

*Program Electives*<sup>\*\*\*</sup> - Select 6 hours from ACCT 132, BSMT 118, BSMT 119, BSMT 120, CAPP 160, CAPP 166, PHIL 104, PSY 101, (or) SOC 100

Wellness\*\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | BUSINESS MANAGEMENT



3

3

3

3

3

3

1

3 3

3

3

3

3

3

3

## AAS in Business Management with Marketing and Retail Specialty

In the Business Management with Marketing and Retail Specialty program, students should possess good communication, problem-solving and human relations skills, and be team oriented. It is also helpful if the student enjoys doing research, can be creative, open minded, and organized. This program requires all students to complete an internship between the first and second year and offers students the experience of employment in a degree-related field. Employment opportunities in this area typically are found in entry-level positions in retail management, retail sales and supervision, professional sales, marketing, customer service, product distribution, and advertising.

### **Degree Requirements**

<u> </u>	
BSMT 106	Principles of Marketing
Mathematics	5** 5
CAPP 125	Microcomputer Applications
ENGL 101	English Composition I
BSMT 110	Salesmanship
COMM 101	Public Speaking
Wellness****	
BSMT 108	Principles of Management
BSMT 119	Customer Service Management
ENGL 110	Business Communications
ACCT 101	Principles of Financial Accounting
BSMT 175*	Business Management Internship
BSMT 118	Retail Marketing
BADM 107	Personal Finance
BSMT 120	Advertising

BADM 109 HIST 101 HIST 102	Business Ethics U.S. History Before 1877 (or) U.S. History Since 1877 (or)	3
POLS 101	American/National Government	3
BSMT 125	Human Relations	3
Program Ele	ctive***	3
BSMT 117	Human Resource Management	3
BADM 103	Legal Environment of Business	3
SS 120	Employment Strategies	1
BSMT 150	Marketing Strategies	3

### Degree Total 65

Internship\* - The internship is to be completed after taking approximately 30 credit hours of Business Management degree classes with 15 of those comprised of BADM or BSMT courses. In the case that BSMT 175 cannot be taken, 3 hours may be selected from the following courses to meet the degree requirement: ACCT 137, CAPP 160, CAPP 166, ECON 102, (or) SOC 120. The program coordinator must approve all internships and substitutions.

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

*Program Elective\*\*\** - Select 3 hours from ACCT 102, ACCT 132, BADM 101, BSMT 130, CAPP 160, CAPP 166, (or) ECON 101

Wellness<sup>\*\*\*\*</sup> - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | BUSINESS MANAGEMENT



## **Professional Certificate in Office Support Services**

The Professional Certificate in Office Support Services is designed to help students update their computer skills and get into the workforce as quickly as possible. This certificate consists of 32 hours and is designed to be completed within one year. Students gain an understanding of computers and computer software. Job readiness skills are also covered to help enhance the student's potential. Students completing this program should be prepared for entry-level employment in most business office settings.

**Note:** Technology courses must be completed within five years of graduation unless the student has been continuously enrolled for a longer period of time. Students need to type 45 words per minute with a maximum of five errors in order to receive their certificate.

### **Certificate Requirements**

Courses to complete with a grade of C or higher\*

OADM 104	Keyboarding	3
CAPP 125*	Microcomputer Applications	3
OADM 121*	Calculators	1
OADM 106*	Document Formatting	2
OADM 116*	Records and Database Management	3
BSMT 125	Human Relations	3
OADM 134	Office Management	3
SS 120	Employment Strategies	1
OADM 125*	Skillbuilding for Office Support Services	1
Business Ele	ctive**	3
Program Elec	ctives***	9

Certificate Total 32

*Business Elective\*\** - Select 3 hours from BADM 103, BADM 107, BADM 109, or a course you have not taken from Group A or Group B

Program Electives\*\*\* - Select either Group A (or) Group B

### Group A:

	Word Business Communications Transcription Skills	3 3 3
<b>Group B:</b> ACCT 109 <sup>*</sup> CAPP 166 <sup>*</sup> MATH 101 <sup>*</sup>	Applied Accounting Procedures Excel Business Math	3 3 3

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

### PROGRAM REQUIREMENTS | BUSINESS MANAGEMENT



## AAS in Business Management with Office Management Specialty

In the Business Management with Office Management Specialty program students should be good organizers, problem solvers and planners. They should be detailoriented and efficient, computer-literate, and able to express themselves well verbally and in writing. It is also essential they have good human relations skills. An internship in the last semester gives the student the opportunity to apply the knowledge and skills learned to a workplace setting. Employment opportunities for office managers and administrative assistants in this area typically are found in small businesses of all types and in service-providing industries such as banks and insurance agencies.

**Note:** Technology courses must be completed within five years of graduation unless the student has been continuously enrolled for a longer period of time. Students need to type 52 words per minute with a maximum of five errors in order to receive their degree.

### **Degree Requirements**

Course to complete with a grade of B or higher*			
Courses to co	omplete with a grade of C or higher**		
OADM 104**	Keyboarding (or test out)	3	
CAPP 125**	Microcomputer Applications	3	
BSMT 106	Principles of Marketing (or)		
BSMT 110	Salesmanship	3	
Mathematics	***	3	
ENGL 101	English Composition I (or)		
ENGL 112	Technical Writing	3	
OADM 118**	Transcription Skills	3	

Wellness****		1
BSMT 108	Principles of Management	3
ACCT 101	Principles of Financial Accounting (or)	
ACCT 109	Applied Accounting Procedures	3
ENGL 110	Business Communications	3
BADM 107		3
CAPP 166**		3
OADM 121**		1
OADM 106**	<u> </u>	2
OADM 127*	Skillbuilding for Office Management	1
OADM 116**	Records and Database Management	3
CAPP 160**	Word	3
BADM 109		3
BSMT 117	0	3
HIST 101	, , , , , , , , , , , , , , , , , , , ,	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 125	Human Relations	3
BADM 103	Legal Environment of Business	3
CAPP 164**		3
OADM 134**	5	3
OADM 175**	<u> </u>	3
SS 120	Employment Strategies	1
	D	

### Degree Total 69

Mathematics<sup>\*\*\*</sup> - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

*Wellness\*\*\*\** - Select 1 hour from EDUC 110, HLTH 101,

WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or)

WELL 122

### PROGRAM REQUIREMENTS | COMPUTER AND NETWORK ADMINISTRATION



## Skills Certificate in Enterprise Server Administration

The Skills Certificate in Enterprise Server Administration is designed to prepare students for entry into the server administration field and includes courses such as Server Administration, Directory Services, as well as a choice of electives from other server technologies common to today's corporate IT environments.

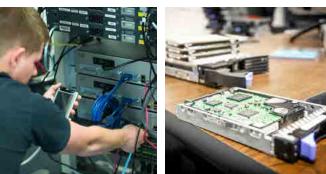
#### **Certificate Requirements**

All course requirements must be completed with a grade of *C* or higher

NET 101	Introduction to Networks	3
NET 126	Network Client	3
NET 120	Network Server	3
NET 138	Network Directory Services	3
Program Electives*		6

### Certificate Total 18

*Program Electives*\* - Select 6 hours from NET 135, NET 136, NET 222, (or) NET 223



## Skills Certificate in Information Security

The Skills Certificate in Information Security is designed to prepare students for entry into the information security field. In addition to covering basic network and security and related topics, students will study Ethical Hacking and Digital Forensics.

### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

NET 101	Introduction to Networks	3
NET 106	Introduction to Network Security	3
NET 103	Routing/Switching Essentials	3
NET 158	Network Firewalls	3
NET 202	Digital Forensics	3
NET 206	Ethical Hacking	3

### Certificate Total 18

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/networking.

### PROGRAM REQUIREMENTS | COMPUTER AND NETWORK ADMINISTRATION



## **Skills Certificate in Storage and Virtualization**

The Skills Certificate in Storage and Virtualization is designed to prepare students for entry into the storage and virtualization administration areas in today's corporate data centers.

### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

-		
NET 101	Introduction to Networks	3
NET 106	Introduction to Network Security	3
NET 126	Network Client	3
NET 120	Network Server	3
NET 238	Server Virtualization	3
NET 240	Enterprise Storage	3

Certificate Total 18

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/networking.

### PROGRAM REQUIREMENTS | COMPUTER AND NETWORK ADMINISTRATION



## **AAS in Computer and Network Administration**

The Computer and Network Administration program prepares students for a number of certifications, including A+, Network +, Security +CCNA, MCP, MCSA, or MCSE. Students work on current versions of software and hardware. The high demand for certified network administrators will continue to increase as software and hardware become more and more complex. Typical job titles for this degree are systems administrator, IT specialist, IT manager, LAN administrator, or network manager. Tasks associated with the job may include installation, configuration, and support of a local area network (LAN), a wide area network (WAN), and an Internet system or segment of the network. Students learn to maintain and monitor network hardware and software to ensure network availability to all system users.

#### **Degree Requirements**

Courses to c	omplete with a grade of C or higher*	
NET 101*	Introduction to Networks	3
NET 106*	Introduction to Network Security	3
NET 140*	PC Hardware	3
NET 142*	PC Operating Systems	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
NET 126*	Network Client	3
NET 120*	Network Server	3
NET 103*	Routing/Switching Essentials	3

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications	3
NET 175*	Network Administration Internship	4
SS 120	Employment Strategies	1
Wellness*****		1
NET 138*	Network Directory Services	3
NET 201*	Scaling Networks	3
Mathematics**		3
NET Electives***		9
NET 203*	Connecting Networks	3
NET 158*	Network Firewalls	3
CAPP 125*	Microcomputer Applications	3
Program Elective****		3

#### Degree Total 66

- Mathematics\*\* Select 3 hours from MATH 108\*, MATH 110\* (or) MATH 112\*
- NET Electives\*\*\* Select 9 hours from NET
- *Program Elective\*\*\*\** Select 3 hours from CIS (except CIS 103), NET, (or) WEB
- Wellness\*\*\*\*\* Select 1 hour from EDUC 110, HLTH 101,
- WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | COMPUTER INFORMATION SYSTEMS



## AAS in Computer Information Systems with Emphasis in Accounting

The Computer Information Systems (CIS) with Emphasis in Accounting program can launch an exciting career. Changes in markets and technology have transformed the way companies compete in the global workplace. Businesses are rapidly computerizing their accounting and information systems. Preparing for tomorrow's jobs today requires a new level of skill and dedication. Working in the field of accounting computer information systems demands patience, persistence and extreme accuracy. Students need to think logically and analytically. A graduate of the CIS/Accounting program has the skills needed to set up and maintain the latest computerized accounting systems. The demand is increasing daily for employees who can apply both accounting and computer skills.

#### **Degree Requirements**

Courses to complete with a grade of C or higher*		
CAPP 125	Microcomputer Applications	
CAPP 166*	Excel	
CIS 103*	Introduction to CIS	
CIS 124*	Database Management	
CIS 145*	Visual Basic	
CIS 161*	Systems Analysis	
ACCT 175*	Accounting Internship (or)	
CIS 175*	CIS Internship	
CIS 185*	Project Management	
ACCT 101*	Principles of Financial Accounting	
ACCT 102*	Managerial Accounting	

ACCT 109* ACCT 125*	Applied Accounting Procedures Computerized Accounting	3
	Applications	3
ACCT 132*	Business Taxation	3
Program Ele	ctives***	9
WEB 160*	Portfolio Design	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications (or)	
COMM 101	Public Speaking	3
Mathematics**		3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness****		1
SS 120	Employment Strategies	1

### Degree Total 66

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, MATH 127, (or) MATH 130

*Program Electives*<sup>\*\*\*</sup> - Select 9 hours from ACCT 137<sup>\*</sup>, CIS 155<sup>\*</sup>, CIS 157<sup>\*</sup>, CIS 162<sup>\*</sup>, CIS 163<sup>\*</sup>, WEB 114<sup>\*</sup>, (or) WEB 116

*Wellness*<sup>\*\*\*\*</sup> - Select 1 hour from EDUC 110, HLTH 101,

WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements. Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

3 3

3

3

3

3

4

3

3

3

## PROGRAM REQUIREMENTS | COMPUTER INFORMATION SYSTEMS



## **Skills Certificate in Programming**

The Skills Certificate in Programming is designed to allow students to achieve this qualification in a single 18-credit hour semester. The courses for this certificate prepare students for entry-level programming jobs using the languages of Visual Basic, C#, Java, and an understanding of database relationships and SQL coding.

### **Degree Requirements**

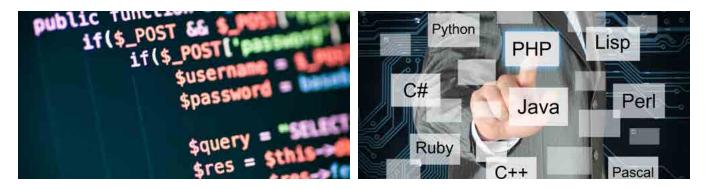
All course requirements must be completed with a grade of C or higher

CIS 103	Introduction to CIS	3
CIS 124	Database Management	3
CIS 145	Visual Basic	3
CIS 155	Programming in C#	3
CIS 158	Java	3
CIS 161	Systems Analysis	3

Certificate Total 18

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/programming.

### PROGRAM REQUIREMENTS | COMPUTER INFORMATION SYSTEMS



3

3 3

3

3

3

3

3

3 9

3

3

# AAS in Computer Information Systems with Emphasis in Programming

The Computer Information Systems with Emphasis in Programming prepares students to enter an exciting field of computer programming. Local, national and international companies including banks, insurance companies, state agencies, and major programming firms have hired State Fair Community College graduates. Students receive hands-on experience in programming. COBOL, DB2, Visual Basic, C#, and JAVA are taught in addition to courses in programming concepts, software and hardware applications, and computer operations. An internship provides an opportunity to apply knowledge and skills in a work environment.

#### **Degree Requirements**

· · ·	
Courses to co	omplete with a grade of C or higher*
CAPP 125	Microcomputer Applications
CIS 103*	Introduction to CIS
CIS 124*	Database Management
CIS 145*	Visual Basic
CIS 162*	Advanced Visual Basic
CIS 155*	Programming in C#
WEB 103*	Introduction to Web Development
CIS 185*	Project Management
ACCT 101*	Principles of Financial Accounting
Program Elec	ctives***
CIS 163*	SQL Server
WEB 160*	Portfolio Design

CIS 157*	Advanced C#	3
CIS 158*	Java	3
CIS 161*	Systems Analysis	3
CIS 175*	CIS Internship	4
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications (or)	
COMM 101	Public Speaking	3
Mathematics	S**	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness****		1
SS 120	Employment Strategies	1

#### Degree Total 69

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, MATH 127, (or) MATH 130

*Program Electives\*\*\** - Select 9 hours from CIS 148\*, CIS 149\*, CIS 151\*, CIS 164\*, CIS 168\*, NET 101\*, WEB 114\*, (or) WEB 116\*

*Wellness\*\*\*\** - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | COMPUTER INFORMATION SYSTEMS



# AAS in Computer Information Systems with Emphasis in Web Development

3 3 3

3 3

3

3

6

3

3 3

3

3

The Computer Information Systems with Emphasis in Web Development program is designed to enable graduates to create powerful websites. The degree is ideal for the individual seeking a career in the world of cyber industry. With the explosion of e-commerce, many companies now generate a substantial percentage of their revenue from online purchases. Even the smallest companies have a presence on the Web. Companies are seeking individuals with the ability to create interactive websites capable of accessing multiple databases.

#### **Degree Requirements**

Courses to complete with a grade of C or higher\* CAPP 125 Microcomputer Applications

CAPP 162*	Desktop Publishing
CIS 103*	Introduction to CIS
CIS 124*	Database Management
CIS 145*	Visual Basic
NET 101*	Introduction to Networks
WEB 103*	Introduction to Web Development
Program Elec	ctives***
WEB 116*	Web Development
WEB 117*	Advanced Web Development
CIS 158*	Java
CIS 161*	Systems Analysis
WEB 160*	Portfolio Design

WEB 114*	Web Scripting	3
WEB 118*	Digital Imaging	3
WEB 120*	XML	3
WEB 175*	Web Development Internship	4
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications (or)	
COMM 101	Public Speaking	3
Mathematics	**	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness****		1
SS 120	Employment Strategies	1

#### Degree Total 69

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, MATH 127, (or) MATH 130

*Program Electives*\*\*\* - Select 6 hours from CIS 155\*, CIS 157\*, CIS 162\*, CIS 163\*, NET 120\*, (or) WEB 130\*

*Wellness*<sup>\*\*\*\*</sup> - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

#### PROGRAM REQUIREMENTS | CONSTRUCTION MANAGEMENT TECHNOLOGY



3

3

3

3

3

3

3

3

3 3

# **AAS in Construction Management Technology**

The Construction Management Technology program can provide the knowledge and skills needed to begin a rewarding career in the construction industry. In this program, theory and practical courses are combined to lead to competencies needed to meet employers' needs. Graduates may work with businesses engaged in all areas of construction. The jobs are varied and challenging, including general contractors, construction management, materials suppliers, and employment with government agencies. Work environments range from permanent offices to job site offices. Studies of future workforce needs project a high demand for persons trained in construction technology. The program is accredited by the American Council for Construction Education (ACCE).

#### **Degree Requirements**

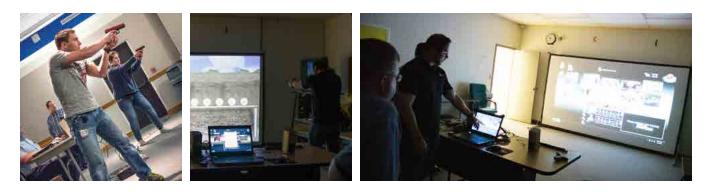
EDT 105	Print Reading for Construction
EDT 111	Introduction to Engineering Design
CNST 101	Construction Materials and Methods I
CNST 113	Construction Management
ENGL 101	English Composition I (or)
ENGL 112	Technical Writing
Mathematics	 >
Life and Phys	sical Sciences**
CNST 103	Construction Materials and Methods II
CNST 162	Construction Safety
CAPP 125	Microcomputer Applications
EDT 120	Architectural Design
HIST 101	U.S. History Before 1877 (or)

HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
CNST 142	Building Mechanical Systems	3
CNST 148	Construction Codes and Law	3
ACCT 101	Principles of Financial Accounting	3
Business Ele	ctive*	3
ENGL 110	Business Communications (or)	
COMM 101	Public Speaking	3
Wellness****		1
SS 120	Employment Strategies	1
CNST 106	Construction Estimation	3
CNST 138	Construction Planning and Scheduling	3
CNST 160	Statics and Strength of Materials	3
Program Electives****		6

#### Degree Total 68

- Business Elective\* Select 3 hours from BADM 101, BSMT 106, BSMT 108, (or) BSMT 115
- *Life and Physical Sciences\*\** Select 3 hours from BIO, CHEM, EASC, (or) PHYS
- *Mathematics\*\*\** -Select 3 hours from MATH 108 (or) MATH 114.
- *Program Electives\*\*\*\** Select 6 hours from BADM, BSMT, EDT, CNST, ECON, IEM, MACH, SPAN, (or) WELD
- Wellness\*\*\*\*\* Select 1 hour from EDUC 110, HLTH 101,
- WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | CRIMINAL JUSTICE



# **AAS in Criminal Justice**

The Criminal Justice program prepares students to enter the job market for various occupations in criminal justice, including but not limited to law enforcement and corrections. In addition, successful completion of the degree requirements prepares students to enter a law enforcement training academy for Missouri police officers.

The Associate of Arts degree is designed for students seeking to continue their education at a four-year college or university.

The education of a criminal justice student requires assimilation of knowledge and acquisition of skills through practical experiences and classroom participation. Essential skills and capabilities needed will vary with the demand of the job to be performed.

Students may receive college credit for past basic law enforcement academy/corrections training. Please contact the program coordinator for more information.

Students are also required to complete the NOCTI exam in the area of Criminal Justice during their final semester. Students may be responsible for the cost of the exam.

**Note:** People with felony convictions may have difficulty securing employment in the criminal justice field.

#### **Degree Requirements**

CJ 101	Introduction to Law Enforcement (or)
SOC 103	Introduction to Social Work
CJ 102	Introduction to Criminal Justice
CJ 104	Criminal Investigation
CJ 105	Criminal Law
CJ 107	Criminology
CJ 109	Juvenile Delinquency

CJ 111 CJ 118 CJ 115 CJ 175	Introduction to Corrections Criminal Justice Communications Procedural Law Supervised Occupational Experience	3 3 3
	in Criminal Justice	4
CJ 103	Traffic Safety and Investigation (or)	
CJ 122	Current Events in Criminal Justice	3
ENGL 101	English Composition I	3
COMM 101	Public Speaking	3
PSY 101	General Psychology	3
SOC 100	General Sociology	3
CAPP 125	Microcomputer Applications	3
Mathematics	S*	3
HIST 101	U.S. History Before 1877 (or)	-
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 125	Human Relations (or)	-
SOC 120	American Diversity	3
Program Ele	,	3
CJ 124	Drugs, Society and Criminal Justice	3
Wellness***	<b>3</b> . <b>,</b>	1
CJ 150	Criminal Justice Seminar	1

#### Degree Total 66

 $\textit{Mathematics}^*$  - Select 3 hours from MATH 101, MATH 110 (or) MATH 112

Program Elective\*\* - Select 3 hours from CJ 103, CJ 122, PHIL 102, PSY 104, SOC 101, (or) SOC 102

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements. Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

3

3 3

3

3

3

### PROGRAM REQUIREMENTS | DENTAL HYGIENE

# **AAS in Dental Hygiene**

The dental hygienist is a dynamic health care professional who is the only member of the dental health team, other than the dentist, licensed to provide direct care to the patient.

The diverse duties of the dental hygienist are rewarding and include therapeutic prophylaxis; exposing, processing and mounting radiographs; collecting and evaluating medical history information; performing head and neck examinations; formulating treatment plans and oral home care interventions; executing periodontal assessment and therapy; applying agents for the prevention of decay; applying desensitizing and antimicrobial agents, and administering local anesthesia and nitrous oxide analgesia.

The dental hygienist also acts as a dental health educator and is responsible for teaching patients prevention of dental disease and providing nutritional counseling as well as being active in community health efforts, such as school based sealant programs and nursing home screenings and assessments.

The education of a dental hygienist requires students to engage in diverse, complex and specific experiences vital to the assimilation of knowledge, acquisition of skills and development of judgment through patient care experiences. The practice of dental hygiene emphasizes collaboration among dentists, other hygienists, allied health care professionals, and the patient.

Unique combinations of cognitive, affective, psychomotor, physical, and social abilities are required to satisfactorily perform these functions. The ability to physically perform these functions is addressed in the Essential Qualifications Information included in the dental hygiene application packet. Students in the AAS in Dental Hygiene program must verify that they meet these requirements.

The program is five semesters, requiring a minimum of 92 credit hours and includes the prerequisite courses. All of the dental hygiene courses in the *"Sequence of Courses"* are subject to a proprietary grading scale and must be passed with a 75 percent or better. Additionally, a 2.75 GPA must be maintained in order to continue in the program.

Admission to the dental hygiene program at SFCC is competitive and requires an additional admission application. An application packet is available online at

www.sfccmo.edu/applications or by request from Student Services on the Sedalia campus. This packet contains the *Essential Qualifications* and admission requirements, fee schedule, program mission and philosophy, sequencing of courses, an application form and other pertinent information. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program. The program accepts 10 first-year students each fall.

Students have opportunities to develop lifelong learning skills and friendships. A student enrollment of 10 per class allows for students to work closely and develop working relationships that support learning and service. The dental hygiene student joins the Student American Dental Hygiene Association and participates in many campus events, state conferences and community health activities.

Applicants must have successfully completed all prerequisites for the Dental Hygiene program by the end of the spring semester before the fall they wish to enter. However, priority admission will be given to those applicants who have completed the prerequisite courses prior to the application deadline. State Fair Community College does accept transfer courses from other colleges, but applicants are advised to have their transcript evaluated before assuming transfer of credits.

The SFCC Dental Hygiene program has been accredited by the Commission on Dental Accreditation since 2005.

#### Licensure

After completion of an accredited dental hygiene program, a dental hygiene candidate for licensure must take a written National Board Dental Hygiene Examination (NBDHE) (www.ada.org/2662.aspx), a regional clinical exam (CRDTS) (www.crdts.org), and the Missouri Jurisprudence exam in order to obtain a Missouri license. The college prepares the students for the successful completion of these tests, but individual results are based upon the student's performance. SFCC does not guarantee passage of exams.

The SFCC's program has had a 97.5% average pass rate on the NBDHE test in the last eight years, 100% pass rate on the Missouri Jurisprudence exam, and 92.5% first-time testing average on CRDTS, and 100% on second attempts.

### PROGRAM REQUIREMENTS | DENTAL HYGIENE



#### **Degree Prerequisite Requirements**

All prerequisite requirements require a grade of C or higher			
and an overall 2.70 GPA prior to admission to the program			
BIO 121	Microbiology for Allied Health with Lab	4	
BIO 207	Human Anatomy with Lab	4	
BIO 208	Human Physiology with Lab	4	
CHEM 101	Introduction to Chemistry with Lab	5	
Mathematics	S*	3	

Mathematics\* - Select 3 hours from MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, (or) MATH 127

#### **Degree Requirements**

Courses to complete with a grade of B or higher<sup>\*</sup> Courses to complete with a grade of C or higher<sup>\*\*</sup> Courses can be completed prior to the start of the program<sup>\*\*\*</sup>

DH 131*	Introduction to Dental Hygiene Theory
DH 140*	Dental Hygiene Pre-Clinic I
DH 102**	Dental Radiography
DH 104*	Dental Radiography Lab
DH 108**	Oral Anatomy and Histology
DH 106*	Dental Clinic Emergencies
DH 133*	Dental Hygiene Theory I
DH 141*	Dental Hygiene Pre-Clinic II

DH 142*	Dental Hygiene Clinic I	2
DH 118*	Principles of Periodontics	2
DH 111**	Pharmacology	3
DH 120*	* Dental Biomaterials with Lab	2
DH 134*	Dental Hygiene Theory II	1
DH 143*	Dental Hygiene Clinic II	3
DH 128*	Local Anesthesia	2
DH 135*	, ,	2
DH 144*	Dental Hygiene Clinic III	6
DH122**	5,	3
DH 115*	Community Dental Health I	2
DH 136*	, ,	2
DH 145*		6
DH 113*	Dental Hygiene Ethics and Legal Issues	1
DH 124*		
	Education	2
DH 117*	Community Dental Health II	.5
HEOC 1		.5
ENGL 10	<b>J</b>	3
HIST 102		
HIST 102		
POLS 10		3
COMM 1	5	3
PSY 101		3
SOC 100	D** General Sociology***	3

Degree Total 92

### PROGRAM REQUIREMENTS | DIAGNOSTIC MEDICAL SONOGRAPHY



# **AAS in Diagnostic Medical Sonography**

Sonographers are diagnostic medical professionals who operate ultrasonic imaging devices to produce diagnostic images, scans, videos, or 3D volumes of anatomy and diagnostic data. Sonography requires specialized education and skills to view, analyze and modify the scan to optimize the information in the image. Because of the high levels of decisional latitude and diagnostic input, sonographers have a high degree of responsibility in the diagnostic process.

#### About the Program

Through classroom theory, laboratory practice and clinical application, students learn to safely use ultrasound in the diagnosis of trauma and disease. Students are introduced to the vast opportunities in diagnostic medical sonography and achieve entry-level competency in the performance and evaluation of ultrasound examinations and procedures. This is an intense 22-month course of study.

#### **Admission Process**

Students in the program are admitted to the college on the same basis as other students, but admission to the college does not ensure admission into the program. Enrollment in the program is selective and admission cannot be offered to all qualified applicants. A selection committee comprised of the program director, clinical coordinator, members of the advisory committee, and possibly other college personnel will evaluate students for the class.

Only students meeting the minimum requirements and who have submitted a completed application packet prior to the application deadline will be presented to the Admissions Committee. Applicants will receive a letter regarding admissions status following committee review. Decisions of the Admissions Committee are final.

An informational packet with application materials is available online at www.sfccmo.edu/applications or in Student Services on the Sedalia campus. Students must complete all prerequisites PRIOR to entry into the professional level program. However, students are eligible to apply while they are taking the prerequisites on the condition that they are completed prior to the beginning of the program. Under these circumstances, program admission is contingent upon successful completion of prerequisite coursework, with the required letter grade, as well as maintenance of the required 3.0 GPA. Transcript evidence of satisfactory completion (or enrollment verification) of prerequisite coursework must be received with the application packet.

### PROGRAM REQUIREMENTS | DIAGNOSTIC MEDICAL SONOGRAPHY



#### **Degree Prerequisite Requirements**

DMS 100	Diagnostic Medical Sonography	
	Prep Workshop	.5
Courses mus	t be completed with grades of B or higher	-
PHYS 105	College Physics I with Lab (or)	
PHYS 125	Technical Science (or)	
RAD 130	Radiation Production and	
	Characteristics	3
ENGL 101	English Composition I (or)	
ENGL 102	English Composition II	3
Mathematics	>* >	3
HEOC 120	Medical Terminology I	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4
Course must	be completed with a grade of C or higher	
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
		0

Mathematics\* - Select 3 hours from MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, (or) MATH 125





#### Degree Requirements

Courses to complete with a grade of B or higher\* Courses to complete with a grade of C or higher\*\*

DMS 102*	Patient Care and Healthcare	
	Communication	2
DMS 120**	Sonography Principles and	
	Instrumentation I	3
PSY 101*	General Psychology (or)	
SOC 100*	General Sociology	3
DMS 110*	Scanning Techniques Lab I	3
DMS 130*	General Sonography I	2
DMS 140*	OB/GYN Sonography I	2
DMS 150*	Vascular Sonography I	2
DMS 160*	Ultrasound Clinical Education I	3.5
DMS 122**	Sonography Principles and	
	Instrumentation II	3
DMS 112*	Scanning Techniques Lab II	2
DMS 132*	General Sonography II	2
DMS 142*	OB/GYN Sonography II	2
DMS 152*	Vascular Sonography II	2
DMS 162*	Ultrasound Clinical Education II	7
DMS 164*	Ultrasound Clinical Education III	4.5
DMS 134*	General Sonography III	2
DMS 144*	OB/GYN Sonography III	2
DMS 154*	Vascular Sonography III	2
DMS 166*	Ultrasound Clinical Education IV	7
DMS 168*	Ultrasound Clinical Education V	7
HEOC 135*	Allied Health Career Development	.5
DMS 106*	Medical Law and Ethics	1

Degree Total 88

### PROGRAM REQUIREMENTS | EARLY CHILDHOOD DEVELOPMENT



# **AAS in Early Childhood Development**

The Early Childhood Development program prepares graduates to enter the child care field at several levels. Graduates from the program will be prepared to manage an in-home child care facility, teach in an early childhood classroom or be a director for an early childhood center. This program offers various forms of classroom options (hybrid, online and on ground) to enable students who are employed in the field to complete a degree and increase their opportunities for advancement. Graduates must be physically able and willing to participate in all children's activities.

**Note:** Completion of these four courses allows a student to apply for The Child Development Associate (CDA) Credential: ECD 101, ECD 107, ECD 109, and ECD 131.

#### **Other Requirements**

A successful background check included in EDUC 108 is required in this program. This requirement is included in and will be met once students successfully complete EDUC 108. This course must be successfully completed prior to taking most ECD or EDUC courses.

#### **Degree Requirements**

All ECD and EDUC courses must be completed with a grade of C or higher

EDUC 108	Introduction to the Field of Education	.5
ECD 101	Introduction to Early Childhood	3
ECD 103	Child Growth and Development	3
ECD 127	Parent/Teacher Interaction	3
ENGL 101	English Composition I	3
Humanities o	or Fine Arts*	3
EDUC 212	Technology for Teachers	3
ECD 107	Child Nutrition, Health and Safety	3
ECD 109	Observation, Planning and	
	Assessment	3

ECD 111 COMM 101 <i>Mathematics</i>	Language Development/Early Literacy Public Speaking	3 3 3
Wellness****		1
ECD 115	Child Social/Emotional Development	3
ECD 117	Creative Expression and Play	3
ECD 121	Curriculum Strategies for Early	
	Childhood	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
EDUC 218	Children's Literature	3
ECD 125	Introduction to Special Individuals	3
PSY 101	General Psychology	3
ECD 129	Administration in Early	
	Childhood Care	3
ECD 175	Child Care Practicum	3
Program Elec	ctive***	3
SS 120	Employment Strategies	1

#### Degree Total 65.5

Humanities or Fine Arts\* - Select 3 hours from ART 101, MUS 101, SOC 120, SPAN 101, (or) THEA 107

Mathematics\*\* - Select 3 hours from MATH 101, MATH 110, MATH 112, (or) MATH 116

*Program Elective*<sup>\*\*\*</sup> - Select 3 hours from ATSM 105, ATSM 110, ATSM 115, ATSM 120, COMM 105, ECD 131, EDUC 220, PSY 102, PSY 104, SOC 102, (or) SOC 103

Wellness<sup>\*\*\*\*</sup> - Select 1 hour from EDUC 110<sup>\*</sup>, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

## PROGRAM REQUIREMENTS | ENGINEERING DESIGN TECHNOLOGY (formerly CAD)



# **Skills Certificate in Architectural Design**

The Skills Certificate in Architectural Design (formerly Architectural Drafting) provides necessary skills and knowledge to obtain employment in the growing, highdemand engineering design field as a designer/drafter in an architectural environment. The outlook for competent designers is expected to increase faster than average since all new buildings require designs and specifications to manufacture, build and assemble. The application of engineering and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Professional Certificate in Engineering Design Technology (formerly Computer Aided Drafting Technology).

#### **Certificate Requirements**

EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 120	Architectural Design	3
EDT 155	3D Visualization	3
Program Elective*		3
SS 120	Employment Strategies	1

### Certificate Total 16

Program Elective\* - Select 3 hours from CNST, EDT 115, EDT 125, (or) EDT 130



# **Skills Certificate in Mechanical Design**

The Skills Certificate in Mechanical Design (formerly Mechanical Drafting) provides necessary skills and knowledge to obtain employment in the growing, highdemand engineering design field as a designer/drafter in a manufacturing and engineering environment. The outlook for competent designers is expected to increase faster than average since all new products require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Professional Certificate in Engineering Design Technology (formerly Computer Aided Drafting Technology).

#### **Certificate Requirements**

EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 130	Manufacturing Design I	3
EDT 155	3D Visualization	3
Program Ele	ective*	3
SS 120	Employment Strategies	1

#### Certificate Total 16

Program Elective\* - Select 3 hours from EDT 115, EDT 120, EDT 132, MACH (or) WELD

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/CAD.

### PROGRAM REQUIREMENTS | ENGINEERING DESIGN TECHNOLOGY (formerly CAD)



# **Professional Certificate in Engineering Design Technology**

The Professional Certificate in Engineering Design Technology (formerly Computer Aided Drafting Technology) will provide necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in a manufacturing, civil, structural, or architectural environment. The outlook for competent designers is expected to increase faster than average since all new products and buildings require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Associate of Applied Science in Engineering Design Technology (formerly Computer Aided Drafting Technology).

#### **Certificate Requirements**

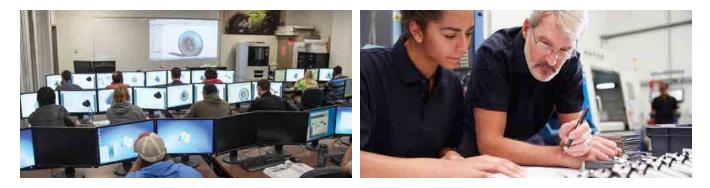
EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 120	Architectural Design	3
EDT 130	Manufacturing Design I	3
EDT 155	3D Visualization	3
SS 120	Employment Strategies	1
EDT 115	Advanced Engineering Design	3
EDT 125	Architectural Applications	3
EDT 132	Manufacturing Design II	3
Program Ele	ectives*	6

### Certificate Total 31

*Program Electives\** - Select 6 hours from CNST, EDT, IEM, MACH, RETB, RETS, WELD

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/CAD.

### PROGRAM REQUIREMENTS | ENGINEERING DESIGN TECHNOLOGY (formerly CAD)



# **AAS in Engineering Design Technology**

The Engineering Design Technology program (formerly Computer Aided Drafting Technology) will provide necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in a manufacturing, civil, structural, or architectural environment. The outlook for competent designers is expected to increase faster than average since all new products and buildings require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs.

#### **Degree Requirements**

Print Reading for Construction
Introduction to Engineering Design
Microcomputer Applications
5*
English Composition I (or)
Technical Writing
Advanced Engineering Design
Architectural Design
Public Speaking
English Composition II (or)

ENGL 110	Business Communications	3
PHYS 105	College Physics I with Lab (or)	0
PHYS 125	Technical Science	4
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
EDT 155	3D Visualization	3
EDT 130	Manufacturing Design I	3
SS 120	Employment Strategies	1
EDT 125	Architectural Applications	3
EDT 132	Manufacturing Design II	3
EDT 190	EDT Capstone	3
EDT 175	EDT Internship	4
Program Elec	ctives**	9

#### Degree Total 64

Mathematics\* -Select 3 hours from MATH 108 (or) MATH 114

*Program Electives\*\** - Select 9 hours from CNST, EDT 134, EDT 180, IEM, MACH, RETB, RETS, (or) WELD

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101,

WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or)

WELL 122

3 3

3

3

1 3

3

3

### PROGRAM REQUIREMENTS | HEALTH CARE SPECIALIST



# **Skills Certificate in Nurse Aide**

The Skills Certificate in Nurse Aide is designed to provide a student with the training to become a Certified Nurse Assistant (CNA), Certified Medication Technician (CMT), Restorative Nurse Assistant (RNA), and a Home Health Aide (HHA). The courses are offered on-ground and online, and clinicals are on-site at an approved long-term care facility.

A CNA works closely with nurses and the health care team. The nurse assistant must be skilled in the actual procedures being performed; have a strong grasp of emergency procedures; be able to stay calm in stressful situations, and be able to observe a patient's condition and report that information back to the nurse. Tasks may include turning and repositioning bedridden patients; helping patients exercise and move in and out of bed; preparing patients for surgery, treatment or examination; applying dressing, and transporting patients to treatment units.

The CMT training prepares a student to work in long-term care facilities. The program teaches skills in administration of non-parenteral (oral or by inhalation) medications and in assisting RNs or LPNs with medication therapy.

The RNA training teaches the skills needed to provide rehabilitation care for residents in nursing homes. Students learn rehabilitation philosophy; how to work with departmental organizations; the role of the physical therapist; the proper techniques of body mechanics and transfers, and how to assist patients with walking. The HHA training provides students the knowledge and ability to provide basic care needs for families with unique health needs. These needs include home management, nutrition, meal planning, adapting basic care activities, observing a client's medication and special needs, as well as special procedures in emergency care.

**Note:** If a student passes HEOC 152, but does not pass HEOC 155, they will have one additional semester to retake HEOC 155 from a regularly scheduled SFCC class. Any retake of HEOC 155 after one semester will require that HEOC 152 be retaken.

#### **Certificate Requirements**

HEOC 152	Certified Nurse Assistant	6
HEOC 155	Certified Nurse Assistant Clinical	2
HEOC 158	Certified Medication Technician	4
HEOC 160	Certified Medication Technician Clinical	1
HEOC 162	Home Health Aide	2
HEOC 164	Restorative Nurse Assistant	2
HEOC 166	Restorative Nurse Assistant Clinical	1

#### Certificate Total 18

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/healthcarespecialist.

### PROGRAM REQUIREMENTS | HEALTH CARE SPECIALIST



# **Professional Certificate in Nurse Aide**

The Professional Certificate in Nurse Aide consists of a combination of the Skills Certificate in Nurse Aide along with other health care related classes. Students can increase employability with completion of this certificate.

**Note:** If a student passes HEOC 152, but does not pass HEOC 155, they will have one additional semester to retake HEOC 155 from a regularly scheduled SFCC class. Any retake of HEOC 155 after one semester will require that HEOC 152 be retaken.

#### **Certificate Requirements**

HEOC 152	Certified Nurse Assistant	6
HEOC 155	Certified Nurse Assistant Clinical	2
HEOC 158	Certified Medication Technician	4
HEOC 160	Certified Medication Technician Clinical	1

HEOC 162	Home Health Aide	2
HEOC 164	Restorative Nurse Assistant	2
HEOC 166	Restorative Nurse Assistant Clinical	1
HEOC 120	Medical Terminology I	3
Program Electives*		9

#### Certificate Total 30

Program Electives<sup>\*</sup> - Select 9 hours from BIO 103, HEOC 122, HEOC 140, HEOC 168, HEOC 170, HEOC 172, HLTH 102, (or) SPAN 120

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/healthcarespecialist.

### PROGRAM REQUIREMENTS | HEALTH CARE SPECIALIST



# AAS Health Care Specialist with Emphasis in Nurse Aide

The Health Care Specialist with emphasis in Nurse Aide program includes all the courses from the Professional Certificate in Nurse Aide as well as general education courses in communications, math, social science, wellness, and other general education electives. Graduates of this program will have the skills necessary to work in all capacities of a long-term care facility.

**Note:** If a student passes HEOC 152, but does not pass HEOC 155, they will have one additional semester to retake HEOC 155 from a regularly scheduled SFCC class. Any retake of HEOC 155 after one semester will require that HEOC 152 be retaken.

### **Degree Requirements**

Degreenced		
HEOC 120	Medical Terminology I	3
HEOC 122	Medical Terminology II	3
HEOC 140	Technology and Health Care	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4
CAPP 125	Microcomputer Applications	3
HLTH 102	First Aid	2
SS 120	Employment Strategies	1
Program Ele	ctives**	7
ENGL 101	English Composition I	3
Mathematics	S*	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness***		1
HEOC 152	Certified Nurse Assistant	6
HEOC 155	Certified Nurse Assistant Clinical	2
HEOC 158	Certified Medication Technician	4
HEOC 160	Certified Medication Technician Clinical	1
HEOC 162	Home Health Aide	2
HEOC 164	Restorative Nurse Assistant	2
HEOC 166	Restorative Nurse Assistant Clinical	1
General Edu	cation****	6

#### Degree Total 64

Mathematics\* - Select 3 hours from MATH 110 (or) MATH 112

*Program Electives\*\** - Select 7 hours from BIO 103, HEOC 168, HEOC 170, HEOC 172, (or) SPAN 120

*Wellness\*\*\** - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

*General Education*\*\*\*\* - Select 6 hours from two areas:

#### Communications

COMM 101, ENGL 102, ENGL 110, ENGL 112

#### Mathematics

MATH 101, MATH 107, MATH 108, MATH 114, MATH 116

Social and Behavioral Sciences BADM 101, BADM 107, ECON 101, ECON 102, HIST 108, HIST 109, PSY 101, PSY 102, SOC 100

#### Higher-Order Thinking

BADM 103, ENGL 102, SOC 120

#### Valuing

PHIL 101, PHIL 104, SOC 102, SOC 120

#### Managing Information

CIS 103, ENGL 102

#### Life and Physical Sciences

AGRI 108, AGRI 118, CHEM 101, PHYS 103, PHYS 105, PHYS 125

#### **Humanities and Fine Arts**

ART 101, FREN 101, LIT 101, LIT 107, LIT 109, LIT 112, LIT 114, MUS 101, PHIL 101, PHIL 102, PHIL 104, SOC 120, SPAN 101, SPAN 120, THEA 107

## PROGRAM REQUIREMENTS | HEALTH CARE SPECIALIST



# Skills Certificate in Pharmacy Technician

The Skills Certificate in Pharmacy Technician provides the knowledge and skills to prepare students with no pharmacy background to take the Pharmacy Technician Certificate Board Examination (PTCE) to achieve CPhT designation.

#### **Certificate Requirements**

HEOC 120	Medical Terminology I	3
PHRM 105	Pharmacy Technician I	3
PHRM 107	Pharmacy Technician II	3
PHRM 109	Pharmacology for Pharmacy Technicians	3
PHRM 111	Practicum for Pharmacy Technicians	3
PHRM 115	Pharmacology Certification	3

Certificate Total 18



The Professional Certificate in Pharmacy Technician consists of a combination of the Skills Certificate in Pharmacy Technician along with other health care related courses. Students can increase employability with completion of this certificate.

#### **Certificate Requirements**

HEOC 120	Medical Terminology I	3
PHRM 105	Pharmacy Technician I	3
PHRM 107	Pharmacy Technician II	3
PHRM 109	Pharmacology for Pharmacy Technicians	3
PHRM 111	Practicum for Pharmacy Technicians	3
PHRM 115	Pharmacology Certification	3
HEOC 140	Technology and Health Care	3
Program Ele	ctives*	9
0		-

#### Certificate Total 30

*Program Electives*\* - Select 9 hours from CHEM 101, HEOC 122, HLTH 102, MATH 110, (or) MATH 112

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/pharmacytechnology.

### PROGRAM REQUIREMENTS | HEALTH CARE SPECIALIST



# AAS Health Care Specialist with Emphasis in Pharmacy Technician

The Health Care Specialist with emphasis in Pharmacy Technician program includes all the courses from the Professional Certificate in Pharmacy Technician as well as general education courses in communications, math, social science, wellness, and other general education electives. Graduates of this program will have the skills necessary to work in both retail and hospital pharmacies, as well as related fields in the health care industry. The CPhT is a nationally recognized certification and is required in some states.

#### **Degree Requirements**

209.00.004		
HEOC 120	Medical Terminology I	3
HEOC 122	Medical Terminology II	3
HEOC 140	Technology and Health Care	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4
CAPP 125	Microcomputer Applications	3
HLTH 102	First Aid	2
SS 120	Employment Strategies	1
Program Elec	ctives**	7
ENGL 101	English Composition I	3
Mathematics	<b>S</b> *	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Wellness***		1
PHRM 105	Pharmacy Technician I	3
PHRM 107	Pharmacy Technician II	3
PHRM 109	Pharmacology for Pharmacy Technicians	3
PHRM 111	Practicum for Pharmacy Technicians	3
PHRM 115	Pharmacology Certification	3
General Educ	cation****	6

### Degree Total 61

 $\textit{Mathematics}^*$  - Select 3 hours from MATH 110 (or) MATH 112

*Program Electives\*\** - Select 7 hours from BIO 103, HEOC 168, HEOC 170, HEOC 172, (or) SPAN 120

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

*General Education\*\*\*\** - Select 6 hours from two areas:

#### Communications

COMM 101, ENGL 102, ENGL 110, ENGL 112

#### Mathematics

MATH 101, MATH 107, MATH 108, MATH 114, MATH 116

#### Social and Behavioral Sciences BADM 101, BADM 107, ECON 101, ECON 102, HIST 108, HIST 109, PSY 101, PSY 102, SOC 100

#### Higher-Order Thinking

BADM 103, ENGL 102, SOC 120

#### Valuing

PHIL 101, PHIL 104, SOC 102, SOC 120

# Managing Information

CIS 103, ENGL 102

#### Life and Physical Sciences

AGRI 108, AGRI 118, CHEM 101, PHYS 103, PHYS 105, PHYS 125

#### **Humanities and Fine Arts**

ART 101, FREN 101, LIT 101, LIT 107, LIT 109, LIT 112, LIT 114, MUS 101, PHIL 101, PHIL 102, PHIL 104, SOC 120, SPAN 101, SPAN 120, THEA 107

### PROGRAM REQUIREMENTS | HEALTH INFORMATION TECHNOLOGY



# **Professional Certificate in Medical Coding**

The Professional Certificate in Medical Coding will prepare students for The American Health Information Management Association (AHIMA) certification exam to become a certified coder. Medical coders assign a code to each diagnosis and procedure by using classification systems software. The classification system determines the amount for which health care providers will be reimbursed if the patient is covered by Medicare, Medicaid, or other insurance programs using the system.

#### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

HEOC 120	Medical Terminology I	3
BIO 207	Human Anatomy with Lab	4
HIT 100	Introduction to Health Information	
	Technology	3

CAPP 125 HEOC 122 BIO 208 HIT 224 HIT 105 HIT 204 HIT 206 HIT 208 HIT 215	Microcomputer Applications Medical Terminology II Human Physiology with Lab Human Disease and Conditions Health Care Technologies Coding I Coding II Coding III Principles of Health Care	3 3 4 3 3 3 3 3 3 3
Ũ	Reimbursement	3

#### **Certificate Total 38**

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

### PROGRAM REQUIREMENTS | HEALTH INFORMATION TECHNOLOGY



# **AAS in Health Information Technology**

The Health Information Technology (HIT) program will give students the education needed for greater success in their new chosen profession. The value in completing the HIT degree is eligibility to take the national credentialing exam for registered health information technicians. Other benefits for the student are to improve earning potential; open doors for career advancement; reach short-term goals and focus on long-term goals; achieve a foundation of broad and deep understanding of the health information management field; be associated with The American Health Information Management Association's (AHIMA) strong and long-standing reputation of excellence, and connect with a strong network of AHIMAcertified peers.

AHIMA-certified professionals pass a rigorous exam and commit to ongoing continuation of their education. When a student seeks certification, it shows an employer a deep personal commitment and sense of accountability, as well as credibility and confidence in an individual's professional knowledge. A student who carries AHIMA credentials will agree to abide by the AHIMA Code of Ethics that will improve the quality of information and care the patient receives.

Registered HITs may be employed in any organization that uses patient data or health information, such as pharmaceutical companies, law and insurance firms, and health product vendors. Most RHITs work in hospitals but can also be employed in other health care settings including physician practices, nursing homes, home health agencies, and public health agencies.

Once a student has achieved the AAS in Health Information Technology degree, he or she can further enhance skills, open the door to even greater opportunities, and obtain a higher level of education by enrolling in a baccalaureate program for Health Information Administration.

SFCC's HIT program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

#### Degree Requirements

Degree Requirements		
Courses to co	omplete with a grade of C or higher*	
HEOC 120*	Medical Terminology I	3
BIO 207*	Human Anatomy with Lab	4
HIT 100*	Introduction to Health Information	
	Technology	3
HIT 115*	Health Care and the Law*	
HEOC 122*	Medical Terminology II	3
Mathematics		3 3 3 4
BIO 208*	Human Physiology with Lab	4
CAPP 125*	Microcomputer Applications	3
ENGL 112	Technical Writing	3
HIT 200*	Health Care Statistics and Quality	
	Management	3
CAPP 164	Access	3 3 3 3 3 3 3 3 3 3
HIT 224*	Human Disease and Conditions	3
HIT 204*	Coding I	3
HIT 206*	Coding II	3
PSY 101	General Psychology	3
HIT 105*	Health Care Technologies	3
BSMT 108	Principles of Management	3
SS 120	Employment Strategies	1
HIT 208*	Coding III	3
HIT 215*	Principles of Health Care	
	Reimbursement	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
HIT 275*	Professional Practice Experience	3
HIT 220*	Health Information Management	3
Wellness***		1

#### Degree Total 70

Mathematics\*\* - Select 3 hours from MATH 110 (or) MATH 112

Wellness\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY



# Skills Certificate in Electro-Mechanical Technology

The Skills Certificate in Electro-Mechanical Technology provides new and existing maintenance technicians with state-of-the-art skills in maintaining and troubleshooting industrial electricity and mechanical devices.

#### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher IEM 106 Industrial Mechanics 3 IEM 108 Fluid Power Technology 3

		0
IEM 102	Electric Fundamentals	3
IEM 104	Electrical Power	3
IEM 112	Control Circuit Troubleshooting	3
IEM 114	Motor Controls	3

Certificate Total 18

# Skills Certificate in Manufacturing Production Technician

The Skills Certificate in Manufacturing Production Technician prepares students for entry into production employment with a solid foundation of manufacturing processes, safety, quality, operations and maintenance functions. The four CPT courses have a certification assessment through the Manufacturing Skill Standards Council (MSSC). Through MSSC students will earn a certificate for each of the four assessments successfully completed, and students who successfully complete all four assessments are awarded the Certified Production Technician (CPTAE) from MSSC. The CPT is recognized by the National Association of Manufacturers (NAM). This certificate can be accepted as part of the technical requirements for the AAS in Industrial Technology with Emphasis in Electrical Maintenance.

### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

CPT 102	Safety	3
CPT 104	Quality Practices and Measurements	3
CPT 106	Manufacturing Processes and Production	3
CPT 108	Maintenance Awareness	3
Program Elec	ctive*	4

#### Certificate Total 16

Program Elective\* - Select 4 hours from IEM, MACH 101, SS 120, (or) WELD 101

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/industrialtechnology.

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY



# **Professional Certificate in Total Productive Maintenance**

The Professional Certificate in Total Productive Maintenance is designed to prepare students as industrial maintenance technologists or millwrights for employment in commercial, production, manufacturing, and other industrial settings. Inclusion of major maintenance disciplines of fluid power, mechanics, electrical, and PLC controls results in a comprehensive knowledge and skill base, with emphasis on safety, reliability, predictive, and preventive maintenance. Competency is gained in interpreting and utilizing electrical and fluid power schematics for troubleshooting, as well as PLC functions and programming. This certificate is fully accepted as part of the technical requirements for the Associate of Applied Science in Industrial Technology with Emphasis in Electrical Maintenance and comprises the recommended courses students should pursue in the first two semesters.

#### Certificate Requirements

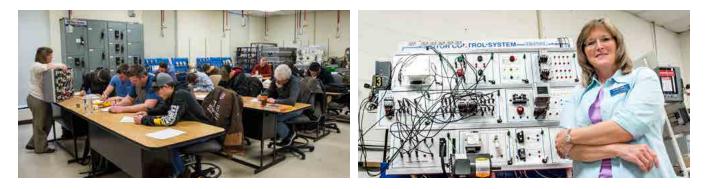
All course requirements must be completed with a grade of C or higher

IEM 106	Industrial Mechanics	3
IEM 108	Fluid Power Technology	3
IEM 102	Electric Fundamentals	3
IEM 104	Electrical Power	3
IEM 112	Control Circuit Troubleshooting	3
IEM 114	Motor Controls	3
IEM 122	Introduction to PLCs	3
IEM 124	Intermediate PLCs	3
IEM 126	Industrial Safety	3
IEM 128	Maintenance Management	3

#### Certificate Total 30

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/industrialtechnology.

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY



# AAS in Industrial Technology with Emphasis in Electrical Maintenance

The Industrial Technology with Emphasis in Electrical Maintenance program is designed to prepare students as electrical and maintenance technologists or millwrights for employment in commercial, production, manufacturing, and other industrial settings. Inclusion of all major maintenance disciplines results in a comprehensive knowledge and skill base. Competency is gained in interpreting and utilizing electrical and fluid power schematics for troubleshooting; performing general wiring tasks in accordance with the National Electrical Code, and programming, troubleshooting and converting machinery to programmable logic control. The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time.

#### **Degree Requirements**

Dogroomoq		
Courses to co	omplete with a grade of C or higher*	
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
COMM 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
Mathematics	5**	3
PHYS 125	Technical Science	4
Wellness****		1
SS 120	Employment Strategies	1
IEM 106*	Industrial Mechanics	3
IEM 108*	Fluid Power Technology	3
IEM 102*	Electric Fundamentals	3
IEM 104*	Electrical Power	3
IEM 112*	Control Circuit Troubleshooting	3
IEM 114*	Motor Controls	3
Program Ele	ctives***	12
IEM Electives	5****	18
	_	

*Mathematics\*\** - Select 3 hours from MATH 108, MATH 110 (or) MATH 112

*Program Electives\*\*\** - Select 12 hours from AUTO, EDT, CNST, IEM, INDT, MACH, MATH 107, NET, RETB, RETS, (or) WELD

Wellness\*\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

IEM Electives<sup>\*\*\*\*\*</sup> – Select 18 hours from any of the four groups

Control Tech	nnology Group	
IEM 122*	Introduction to PLCs	3
IEM 124*	Intermediate PLCs	3
IEM 132	Advanced PLCs	3
IEM 134	PLC Networks	3
Electronics (	Group	
IEM 110	Digital Principles	3
IEM 116	Solid State Devices	3
IEM 118	Analog/Digital	3
Electrical Ins	stallations Group	
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution	3
IEM 140	Transformers and Motors	3
Safety and M	lanagement Group	
IEM 126	Industrial Safety	3
IEM 128	Maintenance Management	3
IEM 146	Quality Management and Control	3

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements. Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

**Degree Total 66** 

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY



# AAS in Industrial Technology with Emphasis in Biomass Energy

The Industrial Technology with Emphasis in Biomass Energy program utilizes biomass energy sources such as wood chips, agricultural residues or even municipal waste to produce such commodities as electricity, transportation fuels and renewable natural gas, as well as to generate heat for buildings, whole communities or for industrial processes. The program offers significant employment opportunities and prepares students to pursue careers in this varied and growing career field. Structured to provide students with a fundamental understanding of the theory and application of the various types of renewable energy technology, the biomass emphasis enables students to develop an in-depth understanding of power plant operations, biomass chemistry and selecting fuels for applications, operating boilers and reciprocating internal combustion engines. The program offers students classroom time, hands-on lab experience and internship opportunities. In addition, the program emphasizes environmental protection systems, OSHA safety training and an understanding of the National Electrical Code as it applies to the installation of power generation systems. Proficiency in math skills, the use of computers, safety equipment and hand tools, and an understanding of basic chemistry is required. There is a Technical Skills Assessment (TSA) test covering maintenance items associated with operating these types of facilities. There is a separate fee for this exam.

The program is pursuing certification through the Interstate Renewable Energy Council' (IREC), which utilizes the Institute for Sustainable Power Quality (ISPQ) STANDARD 01022 for the accreditation and certification of renewable energy, energy efficiency and distributed generation training providers. This certification process ensures continuity, consistency and quality in the delivery of training.

\*IREC (www.irecusa.org), a nonprofit organization, is responsible for the full accreditation and certification cycle, including processing applications, assigning registered auditors, awarding the credential, and maintaining all records of applicants, candidates and award recipients.

#### **Degree Requirements**

Degree Req	uirements	
Courses to co	omplete with a grade of C or higher*	
ENGL 101	English Composition I (or)	
	Technical Writing	3
COMM 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
	Technical Math II	3
PHYS 125	Technical Science	4
Wellness**		1
	Introduction to Renewable Energy	3
IEM 122*	Introduction to PLCs	3
IEM 106	Industrial Mechanics	3
IEM 108	Fluid Power Technology	3
IEM 102	Electric Fundamentals	3
IEM 104	Electrical Power	3
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution and Switchgear	3
SS 120	Employment Strategies	1
RETB 105*	Biomass/Biofuels Energy Generation	3
RETB 110*	Power Plant Systems	3
RETB 115*	Plant Boilers and Operations	4
RETB 120*	Turbines and Generators	3
	Power Plant Chemistry with Lab	5
RETB 175*	Biomass Generation Internship	8

#### Degree Total 68

*Wellness\*\** - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY



# **Skills Certificate in Solar Electric Installation**

The Skills Certificate in Solar Electric Installation is designed for those individuals desiring a career in the fastest growing form of power generation in the world - solar power. In this program students will learn the fundamentals of solar energy, markets and applications for photovoltaic technology (PV), system sizing principles, and PV array electrical and mechanical design. The program includes the North American Board of Certified Energy Practitioner (NABCEP) Entry Level Certificate of Knowledge Exam. The training is only open to qualified individuals, such as engineers, electricians and construction trades related, who have relevant work experience. Passing the NABCEP PV Entry Level Certificate of Knowledge Exam is required and demonstrates a student has achieved a basic knowledge of the fundamental principles of the application, design, installation, and operation of grid-tied and stand-alone PV systems. It is aligned with NABCEP Solar Professional Standards and Job Task Analysis Requirements. There is an additional fee to take the NABCEP Entry Level Exam.

#### **Certificate Requirements**

All course requirements must be completed with a grade of C or higher

0 01 11191101		
RETS 102	Introduction to Renewable Energy	3
RETS 106	Introduction to Solar PV Systems	1
RETS 110	Solar PV Site Planning	2
RETS 114	Solar PV System Design	3
RETS 118	Solar PV Balance of Systems	2
RETS 122	Solar PV Utility Interconnection	1
RETS 130	Practical Solar PV Experience	4
RETS 134	Solar PV Commissioning	2

#### Certificate Total 18

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/renewableenergy.

### PROGRAM REQUIREMENTS | INDUSTRIAL TECHNOLOGY

# AAS in Industrial Technology with Emphasis in Solar Electric

The Industrial Technology with Emphasis in Solar Electric program will enable students to develop an indepth understanding of how to design, specify, adapt, implement, configure, install, inspect, and maintain photovoltaic systems, including grid-connected and stand-alone systems, with or without battery storage for residential and commercial applications. The program offers students classroom and hands-on lab experience, as well as an opportunity to install a system on a building. Internship opportunities will be offered. In addition, the program will emphasize OSHA safety training and detailed understanding of the National Electrical Code as it applies to the installation of solar PV systems.

According to the Solar Energy Industries Association (SEIA) (www.seia.org), employment opportunities in the solar industry continue to grow at a pace of 10 to 25 percent annually. This program prepares students to pursue careers in this growing career field. The program is structured to initially provide students with a fundamental understanding of the theory and application of the various types of renewable energy technology.

The program requires students to lift objects weighing 30 pounds or more and perform installation tasks on roof structures that are sloped and at heights of 10 to 30 feet above the ground. Proficiency in math skills, using computers, safety equipment, and hand tools is required. The curriculum covers all the objectives for the North American Board of Certified Energy Practitioners (NABCEP) (www.NABCEP.org) Entry Level Exam Program. NABCEP is the "gold standard" for PV certification and designed to raise industry standards and promote consumer confidence. Upon successful completion of the program, students will be afforded the opportunity to take the NABCEP PV Entry Level Exam for Level 1 certification. In addition, they will be prepared to take the NABCEP Certified Solar PV Installer Exam once they complete the appropriate work experience requirements. There is an additional fee to take the NABCEP Entry Level Exam.

The program is pursuing certification through the Interstate Renewable Energy Council\* (IREC), which utilizes the Institute for Sustainable Power Quality (ISPQ) STANDARD 01022, for the accreditation and certification of renewable energy, energy efficiency and distributed generation training providers. This certification process ensures continuity, consistency and quality in the delivery of training.

\*IREC (www.irecusa.org), a nonprofit organization, is responsible for the full accreditation and certification cycle, including processing applications, assigning registered auditors, awarding the credential, and maintaining all records of applicants, candidates and award recipients.

#### **Degree Requirements**

3 3 3 4 1
3 3 4
3 3 4
3 3 4
3 4
3 4
3 4
3 4
1
3
/ 4
3
3
3
3
3
3
1
1
2
3
2
1
4
2
8
,

#### Degree Total 66

Wellness\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY



# **Skills Certificate in CNC Operation**

The Skills Certificate in CNC Operation allows students to gain experience with computer numerical controlled (CNC) machines and provides the technical information on setup and operation of CNC mills and lathes. Students will learn to proof, edit and post process CNC programs using computer aided drafting (CAD) and computer aided manufacturing (CAM) software.

#### **Certificate Requirements**

Courses to c	omplete with a grade of C or higher*	
MACH 106*	CNC Machining	3
MACH 115	Heat Treating and Metallurgy	3
MACH 109*	Advanced CNC Machining	3
MATH 108	Technical Math II	3
EDT 134	Computer Aided Manufacturing	3
SS 120	Employment Strategies	1

**Certificate Total 16** 



# **Skills Certificate in Machinist Level I**

The Skills Certificate in Machinist Level I is designed for the student who wants to get into the manufacturing workforce as soon as possible. Upon completion of the certificate, students will gain knowledge and exposure to various styles of machining, including manual and computer numerical controlled (CNC) machining. The certificate also allows students to gain certifications from the National Institute for Metal Working Skills (NIMS). This 16-credit hour program can be completed in one semester and provides entry-level experience and fundamental skills. This certificate can be earned on its own or stacked with the Skills Certificate in Machinist Level II.

Machinists need good eyesight, hand-eye coordination and manual dexterity. Students need to be able to concentrate for long periods of time as well as lift up to 45 pounds, bend, stoop, and kneel. All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Certificate Requirements**

Courses to co	omplete with a grade of C or higher*	
MACH 101*	Introduction to Machining	4
MACH 106*	CNC Machining	3
MATH 107	Technical Math I	3
MACH 113	Print Reading for Machinists	3
IEM 126	Industrial Safety	3

#### Certificate Total 16

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.

### PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY





# Skills Certificate in Machinist Level II

The Skills Certificate in Machinist Level II is designed for the student who wants to improve current skills or advance in his or her career. Upon completion of the certificate, students will gain knowledge and exposure to advanced styles of machining, including manual and computer numerical controlled (CNC) machining. The certificate also allows students to gain certifications from National Institute for Metal Working Skills (NIMS). This 13-credit hour program can be completed in one semester and provides further knowledge and increases productivity in the workplace. This certificate can be earned on its own or stacked with the Skills Certificate in Machinist Level I.

Machinists need good eyesight, hand-eye coordination and manual dexterity. Students need to be able to concentrate for long periods of time as well as lift up to 45 pounds, bend, stoop, and kneel.

#### **Certificate Requirements**

Courses to c	omplete with a grade of C or higher*	
MACH 102*	Lathe and Milling Machine Operations	4
MACH 109*	Advanced CNC Machining	3
MACH 115	Heat Treating and Metallurgy	3
MACH 114	Quality and Precision Measurements	3
EDT 130	Manufacturing Design I	3

Certificate Total 16

# Professional Certificate in Machine Tool Technology

The Professional Certificate in Machine Tool Technology gives the student machine shop skills, including conventional and CNC machining processes. There is a strong emphasis on preparing the students for entry-level employment in the machine shop industry, including computer numerical controlled (CNC) operators and setup, manual machinists, computer aided drafting (CAD) and computer aided manufacturing (CAM) users, and inspectors.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

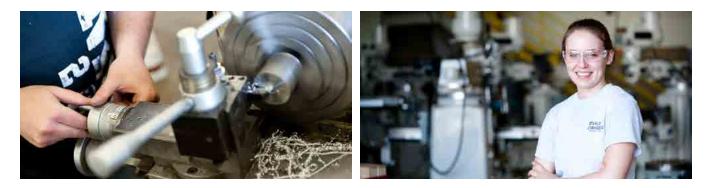
#### **Certificate Requirements**

Courses to co	omplete with a grade of C or higher*	
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
MACH 109*	Advanced CNC Machining	3
MACH 113	Print Reading for Machinists	3
MACH 115	Heat Treating and Metallurgy	3
MATH 108	Technical Math II	3
MACH 114	Quality and Precision Measurement	3
EDT 134	Computer Aided Manufacturing	3

#### Certificate Total 33

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.

### PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY



# AAS in Manufacturing Technology with Emphasis in Precision Machining Technology

The Manufacturing Technology with Emphasis in Precision Machining Technology program teaches the processes of manufacturing and machining with an understanding of specifications, dimensions, materials, guality, print reading, assembly methods, and inspection. The program prepares students for machining-related occupations such as machinist helper, manual machine operator, entry machinist, computer numerical control (CNC) operator, CNC setup, and manufacturing technician, all with a strong emphasis on safety. Because of the demanding changes in technology, the need for skilled manufacturing personnel with communications, design, decision-making and computer skills is increasing. The CNC equipment in the machine tool program is interfaced with the computer aided drafting (CAD) and computer aided manufacturing (CAM) lab to provide students with integrated manufacturing skills. The physical requirements for this occupation typically includes lifting up to 50 pounds, pushing, pulling, reaching, walking, kneeling, manual dexterity, and standing for long periods of time.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Degree Requirements**

Degree Req	unements	
Courses to c	omplete with a grade of C or higher*	
	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	Quality and Precision Measurement	3
MACH 113	Print Reading for Machinists	3
WELD 101	Introduction to Welding	4
WELD 102	Structural Welding	4
MACH 106*	CNC Machining	3
MACH 109*	Advanced CNC Machining	3 3
EDT 134	Computer Aided Manufacturing	3
Mathematics	5 ** 5	3
CNST 162	Construction Safety (or)	
IEM 126	Industrial Safety	3
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1
Program Ele	ctives***	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
COMM 101	Public Speaking	3
Wellness****		1

#### Degree Total 66

Mathematics\*\* - Select 3 hours from MATH 108, MATH 110 (or) MATH 112

*Program Electives\*\*\** - Select 6 hours from AUTO, CNST, EDT, IEM, MACH, MATH 107, (or) WELD

Wellness\*\*\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

# PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY

# **Skills Certificate in Structural Welding**

The Skills Certificate in Structural Welding is designed for the student who wants to get into the workforce as soon as possible. The welding courses follow American Welding Society (AWS) guidelines, and the successful student will be eligible for up to six AWS welder qualifications, according to the AWS D 1.1 Structural Welding Code. In the classroom, students will learn the technological information associated with the welding processes and how to apply that information to practical use on the job. This program meets the needs of both beginning and experienced welders who are seeking certification.

Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Certificate Requirements**

WELD 101	Introduction to Welding	4
WELD 102	Structural Welding	4
WELD 116	Print Reading for Welders	3
CNST 162	Construction Safety	3
WELD 114	Structural Layout and Fabrication	3
Mathematics	5*	3

#### Certificate Total 20

Mathematics\* - Select 3 hours from MATH 107, MATH 108, MATH 110, MATH 112, (or) MATH 114

# **Professional Certificate in Pipe Welding**

The Professional Certificate in Pipe Welding is for students who want to learn the skills of pipe welding. The course follows the American Society of Mechanical Engineers (ASME) section 9 codes. The course involves Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) of pipe in the 2G, 5G, and 6G positions. The successful student will be eligible for up to six ASME section 9 qualifications in pipe. In the classroom the student will learn the technological information associated with the pipe welding process and how to apply that information to practical use on the job. This program meets the needs of both the beginning and experienced welders who are seeking certification/qualifications in pipe welding.

Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Certificate Requirements**

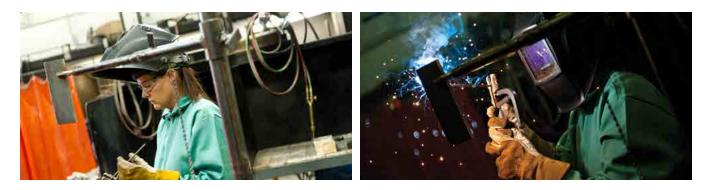
WELD 101	Introduction to Welding	4
WELD 102	Structural Welding	4
WELD 103	Pipe Welding	4
WELD 104	TIG Welding	4
WELD 116	Print Reading for Welders	3
CNST 162	Construction Safety	3
WELD 114	Structural Layout and Fabrication	3
WELD 105	Advanced Pipe Welding	4
Mathematics	5*	3

#### Certificate Total 32

Mathematics  $^{\ast}$  - Select 3 hours from MATH 107, MATH 108, MATH 110, MATH 112, (or) MATH 114

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/welding.

### PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY



# **Professional Certificate in Welding Technology**

The Professional Certificate in Welding Technology is a one-year certificate program and is based on four semesters of instruction and hands-on experience. Students will study oxy/acetylene welding and cutting; shielded metal arc welding (stick); gas metal arc welding (mig); gas tungsten arc welding (tig), and plasma arc cutting.

All welding procedures follow American Welding Society (AWS) guidelines. Welder qualifications are available for the successful student in AWS D 1.1 Structural Welding Code and ASME Section 9 (pipe).

In the classroom, students will learn the technological information associated with welding processes and how to apply that information to practical use on the job. This program meets the needs of both beginning and experienced welders who are seeking certification.

Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Certificate Requirements**

oci incato i	cequilements	
CNST 162	Construction Safety	3
WELD 114	Structural Layout and Fabrication	3
WELD 116	Print Reading for Welders	3
WELD 101	Introduction to Welding	4
WELD 102	Structural Welding	4
WELD 103	Pipe Welding	4
WELD 104	TIG Welding	4
MACH 115	Heat Treating and Metallurgy	3
WELD 105	Advanced Pipe Welding	4
WELD 160	Welding Fabrication	4
Mathematics	· · · · · · · · · · · · · · · · · · ·	3

#### Certificate Total 39

Mathematics\* - Select 3 hours from MATH 107, MATH 108, MATH 110, MATH 112, (or) MATH 114

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/welding.

### PROGRAM REQUIREMENTS | MANUFACTURING TECHNOLOGY



# AAS in Manufacturing Technology with Emphasis in Welding Technology

The Manufacturing Technology with Emphasis in Welding Technology program is designed for the individual who wants to learn the millwright trade, fabrication/shop management or quality control/quality assurance. The program is a combination of the welding and machine tool programs, and the successful student will have the skills and knowledge to become part of today's workforce.

Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

#### **Degree Requirements**

Degree Req	ulternetics	
WELD 101	Introduction to Welding	4
WELD 102	Structural Welding	4
WELD 103	Pipe Welding	4
WELD 104	TIG Welding	4
WELD 116	Print Reading for Welders	3
MACH 115	Heat Treating and Metallurgy	3
MACH 101	Introduction to Machining	4
EDT 111	Introduction to Engineering Design	3
CNST 162	Construction Safety	3
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1
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
COMM 101	Public Speaking	3
Wellness**		1
WELD 165	CNC Plasma Cutting	3
WELD 160	Welding Fabrication	4
WELD 105	Advanced Pipe Welding	4
WELD 114	Structural Layout and Fabrication	3
Mathematics	~* >	3

#### Degree Total 64

Mathematics\* - Select 3 hours from MATH 107, MATH 108, MATH 110, MATH 112, (or) MATH 114

Wellness\*\* - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

### PROGRAM REQUIREMENTS | MARINE TECHNOLOGY



# **AAS in Marine Technology**

The Marine Technology program is a partnership with the Lake Career and Technical Center (LCTC) in Camdenton and State Fair Community College-Lake of the Ozarks. The program courses are only taught at the LCTC campus in Camdenton. The general education requirements are taught at State Fair Community College locations. Participants earn an Associate of Applied Science degree via articulation and/or experiential credit. Students who have graduated from an accredited marine technology/ power sports program or have experience in industry may earn up to 45 credit hours toward the Marine Technology degree. To qualify for the articulated credit, students must provide official transcripts from an accredited technical program, occupational testing scores and/or industry certification.

The physical requirements of this profession typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity and working in cramped positions for sustained periods of time.

Successful completion of an approved end of program marine technical assessment is required

#### **Degree Requirements**

e taken from State Fair Community College
English Composition I (or)
Technical Writing
5*
U.S. History Before 1877 (or)
U.S. History Since 1877 (or)
American/National Government

Wellness**		1
PHYS 125	Technical Science	4
BADM 101		
ECON 101	Principles of Macroeconomics (or)	
PSY 101	General Psychology (or)	
COMM 101	Public Speaking	3
Courses ava	ilable for articulation from the Lake Career a	nd
Technical Ce	enter	
MRN 101	Marine Systems Rigging I	6
MRN 105	Marine Ignition Systems	3
MRN 107	Marine Starter and Charging Systems	2
MRN 109	Marine Cooling Systems	2
MRN 111	Marine Lubrication Systems	2
MRN 113	Marine Engine Component and	
	Precision Measuring	3
MRN 115	Marine Shop Procedures and	
	Business Operations	2
MRN 117	Marine Engine Systems Analysis	2
MRN 119	Marine Systems Preventive Maintenance	4
MRN 121	Marine Power Transfer Systems	4
MRN 123	Marine Systems Troubleshooting	3
MRN 125	Marine Fuel Systems	4
MRN 127	Marine Instrumentation Systems	2
MRN 129	Marine Power Trim/Tilt Systems	2
MRN 175	Marine Technology Internship	4
SS 120	Employment Strategies	1

#### Degree Total 63

 $\textit{Mathematics}^*$  - Select 3 hours from MATH 108, MATH 110 (or) MATH 112

Wellness<sup>\*\*</sup> - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements. Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

3

3

3

### PROGRAM REQUIREMENTS | NURSING



### Nursing

The Nursing program is a bi-level program that prepares the student to complete the requirements for the Professional Certificate in Practical Nursing after Year One (Level 1) and the requirements for the Associate of Applied Science in Nursing after Year Two (Level 2). This competency based bi-level curriculum allows students to transition from practical nursing to associate degree nursing in a seamless fashion. An advanced placement option is available for current licensed practical nurses into Year Two (Level 2). The program has full approval by the Missouri State Board of Nursing and is accredited by the Department of Elementary and Secondary Education.

Admission to the Nursing program at SFCC is competitive and requires an additional admission application. Nursing application packets contain admission criteria, essential abilities for admission, state licensure requirements, mission and philosophy statements, fee schedules, course sequences, and an application. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program. Application packets are available online.

#### Mission

The mission of the Nursing program is to prepare students to become registered professional nurses through a bi-level program in an educational environment that promotes evidence-based critical thinking, growth of the individual student, a holistic view of health care, and the use of technology and quality improvement principles to enhance patient care and documentation. The student is expected to be caring, conscientious, flexible, professional, and accountable for their actions. In addition, education is a lifelong learning process that results in behavioral change and is most effective as a shared responsibility.

## PROGRAM REQUIREMENTS | NURSING



# **Professional Certificate in Practical Nursing**

# Prerequisite Courses for Professional Certificate in Practical Nursing Year One (Level 1)

The successful applicant must have a 2.75 GPA for all prerequisites and an overall 2.5 GPA

Course to co	mplete with a grade B or higher*	
Courses to complete with a grade of C or higher**		
BIO 207*	Human Anatomy with Lab	4
ENGL 101**	English Composition I (or)	
ENGL 102**	English Composition II	3
Mathematics***		3
NURS 102	CPR for Health Care Providers (AHA)	.5

Mathematics\*\*\* - Select 3 hours from MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, (or) MATH 127

#### **Certificate Requirements**

All Year One (Level 1) course requirements must be completed with a grade of B or higher. Each eight-week session of nursing must be successfully completed to take the next eight-week courses.

Courses can be completed prior to the start of the program\*

0001000 001		,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
BIO 208*	Human Physiology with Lab	4
NURS 110	Personal Vocational Concepts	1
NURS 112	Introduction to Psycho-Social Health	2
NURS 114	Fundamentals I	2
NURS 117	Fundamentals II	3
NURS 118	Fundamentals II Clinical	1.5
NURS 119	Allied Health Pharmacology	3
NURS 122	Adult Health I	4
NURS 124	Adult Health II	4
NURS 126	Adult Health Nursing Clinical	3
NURS 132	Nutrition	3
NURS 134	Nursing Care for the	
	Childbearing Family	2
NURS 136	Childbearing Family Clinical	1.5
NURS 140	Nursing Care for the Child	
	Rearing Family	2
NURS 142	Child Rearing Family Clinical	1.5
NURS 128	Adult Health III	2
NURS 130	Adult Health Care Coordination Clinical	2
HEOC 135	Allied Health Career Development	.5
PSY 101*	General Psychology	3

### Certificate Total 55.5

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

## PROGRAM REQUIREMENTS | NURSING



# **AAS in Nursing**

Upon successfully passing the LPN licensure exam (after the first year) students may continue into Year Two of the program without having to reapply. In addition, Licensed Practical Nurses will be eligible to apply for advanced placement in Year Two.

#### Prerequisite Courses for Associate Degree Nursing Advanced Placement for Year Two (Level 2)

The successful applicant must have a 2.75 GPA for all prerequisites and an overall 2.5 GPA

Course to complete with a grade B or higher*		
Courses to complete with a grade of C or higher**		
BIO 208*	Human Physiology with Lab	4
ENGL 101**	English Composition I (or)	
ENGL 102**	English Composition II	3
Mathematics***		3
NURS 102	CPR for Health Care Providers (AHA)	.5
PSY 101**	General Psychology	3

Mathematics\*\*\* - Select 3 hours from MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, (or) MATH 127

# Courses required after acceptance as Advanced Placement into Year Two (Level 2)

Course to complete with a grade of B or higher NURS 210 Nursing Transition Course (required for advanced placement students only)

#### **Degree Requirements**

All Year Two (Level 2) course requirements must be completed with grades of B or higher. Each eight-week session of nursing courses must be successfully completed to take the next eight-week courses.

Courses can be completed prior to the start of the program\*

В	IO 121*	Microbiology for Allied Health with Lab	4
Ν	URS 213	Introduction to Professional Nursing	2
Ν	URS 227	Complex Health: Family	3
Ν	URS 228	Complex Health: Family Clinical	1
Ν	URS 230	Complex Health: Adult Clinical I	1
Ν	URS 215	Complex Health: Mental Health	2.5
Ν	URS 216	Complex Health: Mental Health Clinical	2
Ν	URS 221	Complex Health: Nutrition/Metabolic	2.5
Ν	URS 231	Complex Health: Adult Clinical II	1
Ν	URS 233	Complex Health: Adult Clinical III	3
Ν	URS 234	Complex Health: Activity and Rest	3
Ν	URS 237	Complex Health: Cognitive/Perceptual	3
Ν	URS 219	Complex Health: Elimination	3
Ν	URS 243	Professional Nursing Capstone Clinical	2.5
Н	IST 101*	U.S. History Before 1877 (or)	
Н	IST 102*	U.S. History Since 1877 (or)	
P	OLS 101*	American/National Government	3
С	OMM 101*	Public Speaking	3

#### Degree Total 95

Prospective students should be aware that Section 335.066, RSMo of the Missouri Nursing Practice Act may prohibit persons from taking the state nursing licensure exams in cases of prior legal action. Before starting prerequisites or applying to the nursing program, consult with a nursing advisor or refer to the act online at http:// www.moga.mo.gov/statutes/C300-99/335000066.HTM.

Note: Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essentialqualifications to view these requirements. Not all courses are offered every semester. Check with your advisor or the program coordinator. Refer to the course descriptions for prerequisites.

2

### PROGRAM REQUIREMENTS | OCCUPATIONAL THERAPY



# **Occupational Therapy Assistant**

The Occupational Therapy Assistant program is a oneplus-one degree program that prepares students to practice as Certified Occupational Therapy Assistants (COTA) after meeting certification and state licensure standards. State Fair Community College (SFCC) is one of five colleges in the Missouri Health Professions Consortium (MHPC) currently selected to offer the program coordinated through the University of Missouri. SFCC offers and enrolls students in the general education coursework; sophomore level (professional level) coursework typically originates from a classroom located in Columbia, Missouri and is conveyed to SFCC students via interactive television and internet-based technology. Through the combination of general education, professional level coursework, classroom and laboratory practice, and clinical fieldwork experiences, students will learn the profession of occupational therapy assistant. The professional year does not run on a traditional SFCC academic cycle. Classes will begin the Monday after New Year's Day and will run through the end of the fall semester. Completion of professional year coursework takes one full calendar year.

#### Accreditation

The MHPC Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). Following successful completion of coursework and passing of the certification exam, individuals will be a Certified Occupational Therapy Assistant (COTA). Even with successful coursework completion students may be prohibited from sitting for the NBCOT Certification Exam if they have a felony conviction. In Missouri, state licensure is required in order to practice and acquisition of a license is contingent upon passing the NBCOT Certification Exam. For more information regarding accreditation, please contact the American Occupational Therapy Association:

#### ACOTE

c/o Accreditation Department American Occupational Therapy Association (AOTA) 4720 Montgomery Lane, Suite 200 Bethesda, MD 20814-3449 (301) 652-2682 | TDD (800) 377-8555 accred@aota.org www.acoteonline.org

#### **Admission Process**

Enrollment in the MHPC Occupational Therapy Assistant program is selective and an informational packet with application materials is available online or at the Sedalia campus. Students must complete all general education coursework PRIOR to entry into the professional level program. However, students can complete coursework in the semester prior to the start of the program; under these circumstances, program admission would be contingent upon successful completion of general education prerequisite coursework and maintenance of the required 2.5 GPA. Transcript evidence of satisfactory completion of general education/prerequisite coursework must be received with the application packet. SFCC may not be able to offer admission to all qualified applicants. Only students meeting all admission criteria and submitting completed application packets within the established timeframe will be considered. The Selection Committee meetings are conducted the summer before the start of the professional year. Admission decisions of the Selection Committee are final. Applicants will receive a letter regarding admissions status following committee review.

### PROGRAM REQUIREMENTS | OCCUPATIONAL THERAPY





# **AAS in Occupational Therapy Assistant**

# Year One - General Education Requirements/Program Prerequisites

All prerequisite requirements require a grade of C or higher and an overall 2.5 GPA maintained

*Courses can be completed prior to the start of the program*<sup>\*</sup>

	1 1 1 1	0
BIO 207*	Human Anatomy with Lab	4
BIO 208*	Human Physiology with Lab	4
COMM 101*	Public Speaking	3
ENGL 101*	English Composition I	3
PSY 101*	General Psychology	3
PSY 210*	Lifespan Development	3
HEOC 120 <sup>*</sup>	Medical Terminology I	3
Mathematics	**	3
HIST 101*	U.S. History Before 1877 (or)	
HIST 102*	U.S. History Since 1877 (or)	
POLS 101*	American/National Government	3
General Educ	cation Elective*	3
SOC 100 i	s recommended	
Mathematics** - Select 3 hours from MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122		

MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, (or) MATH 127

General Education/Program Prerequisites Total 32

#### Year Two - Each January (spring semester)

All degree requirements require a grade of C or higher and an overall 2.5 GPA maintained

### Semester 1: January-April

Demester T	January-April	
OTA 200	Foundations of Occupational Therapy	4
OTA 205	Medical Conditions in Occupational	
	Therapy	3
OTA 210	Analysis of Occupations	2
OTA 215	Mental Health and Psychosocial Practice	4
OTA 220	Pediatric and Adolescent Practice	4
Semester 2	May-August	
OTA 250	Functional Kinesiology	2
OTA 255	Physical Disabilities Practice	4
OTA 260	Community Practice	3
OTA 265	Ethics, Management, and Leadership	3
OTA 270	Professional Skills	3
Semester 3: August-December		
OTA 290	Level II Fieldwork A	8
OTA 295	Level II Fieldwork B	8
	Professional Total	48

Degree Total 80

### PROGRAM REQUIREMENTS | PARAPROFESSIONAL EDUCATOR



# **AAS in Paraprofessional Educator**

The Paraprofessional Educator program is geared for students wishing to pursue employment as a paraprofessional educator or substitute teacher within a pre K-12 school. The graduate will meet current state and federal regulations for working as a paraprofessional educator in any classroom or school setting. Many of the courses will transfer to a four-year institution and will count toward a bachelor's degree. Other courses are specific to the needs of students with whom paraprofessionals are likely to work. All students must pass a criminal background check to work in this field.

#### **Other Requirements:**

A successful background check included in EDUC 108 is required in this program. This requirement is included in and will be met once students successfully complete EDUC 108. This course must be successfully completed prior to taking most ECD or EDUC courses.

#### **Degree Requirements**

All ECD and EDUC courses must be completed with a grade of C or higher

Introduction to the Field of Education	.5
English Composition I	3
Art Appreciation (or)	
Music Appreciation (or)	
Introduction to Theatre	3
Creative Expression and Play	3
Public Speaking	3
General Psychology	3
5*	3
Teaching Profession with Field	
Experience	3
	English Composition I Art Appreciation (or) Music Appreciation (or) Introduction to Theatre Creative Expression and Play Public Speaking General Psychology

HIST 101 HIST 102 HLTH 102 PSY 102 Program Ele EDUC 209 BIO 112 CHEM 101		3 2 3 3 3
EASC 101	Introduction to Earth Sciences with Lab (or)	
EASC 106 POLS 101 EDUC 212 EDUC 110 HLTH 101	Physical Geology with Lab American/National Government Technology for Teachers Introduction to Physical Education in the Elementary School (or) Personal Health and Fitness (or)	5 3 3
WELL 122 EDUC 228	Applied Wellness Education of the Exceptional	1
EDUC 218 EDUC 250 EDUC 220 SOC 120 SS 120	Learners pre K-12 Children's Literature Paraprofessional Educator Practicum Educational Psychology American Diversity Employment Strategies	3 3 3 3 1

#### Degree Total 63.5

 $Mathematics^{\ast}$  - Select 3 hours from MATH 110, MATH 112, MATH 114, (or) MATH 117

*Program Elective\*\** - Select 3 hours from ATSM 105, ATSM 110, ATSM 115, ATSM 120, COMM 105, ECD 115, ECD 121, ECD 127, GEOG 101, LIT 101, (or) PSY 104

### PROGRAM REQUIREMENTS | RADIOLOGIC TECHNOLOGY

# **AAS in Radiologic Technology**

The Radiologic Technology program is dedicated to serving the rural communities of western Missouri through the preparation of highly competent, registry-eligible medical imaging professionals. The program provides a solid educational base and a thorough professional preparation that will allow graduates to competitively enter the workforce, continue their education in advanced imaging technologies, and/or transfer into baccalaureate degree programs in imaging science. Radiologic technologists are educated in image production, radiation protection and image evaluation. Although an interdisciplinary team of radiologists, radiologic technologists and support staff plays a critical role in the delivery of health services, it is the radiologic technologist who performs the radiologic examination that creates the images needed for diagnosis. Admission to the program is selective and an informational packet with an application to the program is www.sfccmo.edu/applications.

Note: If a student has taken an Anatomy and Physiology I (A/P) (4 credit hours) or Anatomy and Physiology II course (A/P) (4 credit hours) from an accredited higher education institution, this does not satisfy the requirements of either Anatomy or Physiology courses that are required by this program. If a student's transcript indicates BOTH A/P I and A/P II courses with a grade of B or higher, this will satisfy the Anatomy and Physiology requirements of this program. If a student takes A/PI and A/PII and one of the grades for these is lower than a grade of B, the student must repeat that course or take State Fair Community College's separate Anatomy and Physiology courses. All required (including prerequisites for the program) science courses must meet the requirement of having been completed within the last 10 years at the time of application to the SFCC Radiologic Technology program.

**Note:** To apply to the program a student must have a 2.75 overall GPA for all college-level course work.

#### **Program Prerequisite Requirements**

Course to complete with a grade of B or higher by the end of the spring semester in which the student is applying<sup>\*</sup> Courses to complete with a grade of C or higher by the end of the spring semester in which the student is applying<sup>\*\*</sup>

,	Human Anatomy with Lab English Composition I (or)	4
ENGL 102**	English Composition II	3
Mathematics	***	3
HEOC 120**	Medical Terminology I	3
RAD 100	Radiologic Technology Prep Workshop (by invitation only - part of the application	
	process)	.5

Mathematics\*\*\* - Select 3 hours from MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, (or) MATH 127

#### **Degree Requirements**

All degree requirements require a grade of C or higher Courses can be completed prior to the start of the program\*

courses curr	be completed prior to the start of the program	'
RAD 102	Orientation to Radiologic Technology	2
RAD 120	Radiographic Procedures I	3
RAD 122	Radiographic Procedures II	3
RAD 128	Patient Care	3
RAD 136	Radiation Protection	2
BIO 208	Human Physiology with Lab*	4
RAD 106	Clinical Education I	3
RAD 124	Radiographic Procedures III	3
RAD 142	Trauma and Advanced Imaging	3
RAD 134	Radiographic Exposures and	
	Quality Control	3
RAD 146	Imaging Equipment	3
RAD 108	Clinical Education II	3
RAD 110	Clinical Education III	3
HIST 101	U.S. History Before 1877 <sup>*</sup> (or)	
HIST 102	U.S. History Since 1877 <sup>*</sup> (or)	
POLS 101	American/National Government*	3
RAD 112	Clinical Education IV	3
RAD 130	Radiation Production and	
	Characteristics	3
RAD 140	Radiologic Pharmacology	3
RAD 154	Sectional Anatomy	3
COMM 101	Public Speaking*	3
RAD 114	Clinical Education V	3
RAD 144	Radiation Biology	2
RAD 150	Radiographic Pathology	3
RAD 152	Image Analysis	3
RAD 170	Preparing for Professionalism	3

Degree Total 83.5