## [ SECTION 2 ]

## GENERAL EDUCATION

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

Community College

## 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.

## Professional Certificate in General Education

## Communications

## 9 Hours

ENGL 101 English Composition I ENGL 102 English Composition II
COMM 101 Public Speaking

## American Institutions

| HIST 101 | U.S. History Before 1877 | 3 |
| :--- | :--- | :--- |
| HIST 102 | U.S. History Since 1877 | 3 |

HIST 102 U.S. History Since 1877
POLS 101 American/National Government
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 $1 / 2$ credit hour.

## Social Sciences

3 Hours
BADM 101 Introduction to Business
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
3

## GEOG 101 World Geography

HIST 108 World Civilization Before 1500
HIST 109 World Civilization After 1500
POLS 103 Introduction to Political Science

## Behavioral Sciences

BADM 107 Personal Finance

## 3 Hours

PSY 101 General Psychology 3
PSY 1023
PSY 104 Psychology of Personal Adjustment
SOC 100 General Sociology
SOC 102 Marriage and Family
Literature
LIT 101 Introduction to Literature
LIT 107 American Literature
LIT 109 English Literature
LIT 112 World Literature
LIT 114 Topics in Literature
Fine Arts
ART 101 Art Appreciation
ART 120 Modern Art History
MUS 101 Music Appreciation
MUS 103 Music History and Literature Before 1800
MUS 104 Music History and Literature Since 1800

3 Hours
3
3
3
3
3
3

## 3 Hours

3
3

THEA 107 Introduction to Theatre
THEA 125 Theatre History

## Humanities

AGRI 106
Global Agriculture
3 Hours
FREN 101 Elementary French I
PHIL 101 Introduction to Philosophy
PHIL 102 Ethics
thics
PHIL 104 Living Religions 3
SOC 120 American Diversity 3
SPAN 101 Elementary Spanish I

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 Physical Sciences
8 Hours
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 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
Wellness 1 Hour
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 $5-1$
WELL 119 Low Impact Aerobics 1-1.5
WELL 121 Women and Health 1
WELL 122 Applied Wellness 1

## General Education Elective <br> 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



## 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 Education Core
42 Hours

## Communications

9 Hours
ENGL 101 English Composition I
ENGL 102 English Composition II
COMM 101 Public Speaking
3
American Institutions
3 Hours

| HIST 101 | U.S. History Before 1877 | 3 |
| :--- | :--- | :--- |
| HIST 102 | U.S. History Since 1877 | 3 |
| POLS 101 | American/National Government | 3 |

POLS 101 American/National Government
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 $1 / 2$ credit hour.

## Social Sciences

## 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 15003
HIST 109 World Civilization After 1500
POLS 103 Introduction to Political Science

## Behavioral Sciences

3 Hours
BADM 107 Personal Finance
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
3 Hours
ART 101
Art Appreciation
ART 120 Modern Art History 3
MUS 1013
MUS 103 Music History and Literature Before 1800
MUS 104 Music History and Literature Since 18003

THEA 107 Introduction to Theatre

THEA 125 Theatre History 3
Humanities
3 Hours
AGRI 106 Global Agriculture
FREN 101 Elementary French I 3
PHIL 101 Introduction to Philosophy 3
PHIL 102 Ethics 3
PHIL 104 Living Religions 3
SOC 120 American Diversity 3
SPAN 101 Elementary Spanish I 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


## Associate of Arts (continued)

## Life and Physical Sciences

8 Hours
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 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

Wellness
1 Hour
EDUC 110
Introduction to Physical Education in the Elementary School
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 Hours
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

## [ SECTION 2]

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 Education Core

## 42 Hours

## Communications

9 Hours
ENGL 101 English Composition I
ENGL 102 English Composition II 3
COMM 101 Public Speaking

## American Institutions

3 Hours
HIST 101 U.S. History Before 1877
HIST $102 \quad 3$
POLS 101 American/National Government

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 $1 / 2$ credit hour.

## Social Sciences

3 Hours
BADM 101 Introduction to Business 3 ECON 101 Principles of Macroeconomics ECON 102 Principles of Microeconomics 3

- 3

GEOG 101 World Geography 3
HIST 108 World Civilization Before 15003
HIST 109 World Civilization After 1500
POLS 103 Introduction to Political Science

## 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
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
ART 101 Art Appreciation ..... 3
ART 120 Modern Art 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
PHIL 104 Living Religions ..... 3
SOC 120 American Diversity ..... 3
SPAN 101 Elementary Spanish I ..... 3

## [ SECTION 2]

PROGRAM REQUIREMENTS \| ASSOCIATE OF FINE ARTS


## Associate of Fine Arts in Art

## Mathematics

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

## Life and Physical Sciences

## 8 Hours

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 | 4 |
| 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 | 5 |
| EASC 120 | Introduction to Astronomy | 3 |
| PHYS 103 | Introduction to Physical Science | 3 |
| PHYS 105 | College Physics I with Lab | 3 |
| PHYS 118 | General Physics I with Lab | 5 |
|  | Gener | 5 |

BIO 103 Human Biology ..... 3
BO 112 Widife Conservaion ..... 3
BIO 125 Biology I with Lab ..... 5
B10 ..... 5Human Physiology with LabPhysical Sciences
AGRI 119 Soils I with Lab ..... 4
CHEM 123 General Chemistry I with Lab5
EASC 101 Introduction to Earth Sciences with Lab ..... 5
EASC 118 Phyical Geologywith Lab3
EASC 120 Introduction to Astronomy ..... 3
College Physics I with Lab ..... 5
PHYS 118 General Physics I with Lab ..... 5
WellnessEDUC 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 ..... 5-1
WELL 119 Low Impact Aerobics ..... 1-1.5
WELL 121 Women and Health ..... 1
WELL 122 Applied Wellness
24 Hours
Art CoreDesign I
3
ART 103
Drawing I ..... 3
ART 112Design II3
ART 113 Drawing II ..... 3
ART 122 Sculpture I (or) ART 126 Ceramics I ..... 3
Art Electives* ..... 9

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


## 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 Education Core

## Communications

ENGL 101 English Composition I
42 Hours 9 Hours ENGL 102 English Composition II COMM 101 Public Speaking

## American Institutions

3 Hours
$\begin{array}{ll}\text { HIST } 101 & \text { U.S. History Before } 1877 \\ \text { HIST } 102 & \text { U.S. History Since } 1877 \\ \text { POLS 101 } & \text { American/National Government }\end{array}$
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 $1 / 2$ credit hour.
Social Sciences ..... 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

LIT 101
Introduction to Literature

## 3 Hours

LIT 107
American Literature

3

LIT 109
English LiteratureLIT 112World Literature3
LIT 114 Topics in Literature ..... 3
Fine Arts
MUS 103
Music History and Literature Before 18003
MUS 104 Music History and Literature Since 1800 ..... 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
PHIL 104 Living Religions ..... 3
SOC 120 American Diversity ..... 3
SPAN 101 Elementary Spanish I ..... 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


## Associate of Fine Arts in Music

## Life and Physical Sciences

8 Hours
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 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
Wellness 1 Hour
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 .5-1
WELL 119 Low Impact Aerobics 1-1.5
WELL 121 Women and Health 1
WELL 122 Applied Wellness 1
Music Core
25 Hours
MUS 100
Fundamentals of Music
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 $110 \quad$ 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 Electives* 5

Concert and Recital Attendance

## 4 Semesters

MUS 195 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


## 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 Education Core

## 42 Hours

## Communications

ENGL 101 English Composition I 9 Hours

ENGL 102 English Composition II COMM 101 Public Speaking

## American Institutions

$\begin{array}{lll}\text { HIST } 101 & \text { U.S. History Before } 1877 & 3 \\ \text { HIST } 102 & \text { U.S. History Since } 1877 & 3\end{array}$
HIST 102 U.S. History Since 1877
POLS 101 American/National Government

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 $1 / 2$ credit hour.

## Social Sciences

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

## Behavioral Sciences

3 Hours
BADM 107 Personal Finance 3
PSY 101 General Psychology 3
PSY 102 Child Psychology
PSY 104 Psychology of Personal Adjustment
SOC 100 General Sociology
3
SOC 102 Marriage and Family

## Literature

3 Hours
LIT 101
Introduction to Literature
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
THEA 125 Theatre History
Select an additional course:
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
$\begin{array}{ll}\text { MUS } 104 & \text { Music History and Literature } \\ & \text { Since 1800 }\end{array}$
Humanities 3 Hours
AGRI 106 Global Agriculture 3
FREN 101 Elementary French I 3
PHIL 101 Introduction to Philosophy 3
PHIL 102 Ethics 3
PHIL 104 Living Religions 3
SOC 120 American Diversity 3
SPAN 101 Elementary Spanish I 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

3
5


## Associate of Fine Arts in Theatre

## Life and Physical Sciences

8 Hours
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
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 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
Wellness
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 ..... 5-1
WELL 119 Low Impact Aerobics ..... 1-1.5
WELL 121 Women and Health ..... 1
WELL 122 Applied Wellness ..... 1
22 Hours
Theatre Core
THEA 110 Stagecraft and Lighting ..... 3
THEA 111 Acting I ..... 3
THEA 119 Stage Makeup ..... 3
THEA 122 Costume Construction ..... 3
THEA 128 Introduction to Theatre Design ..... 3
THEA 131 Script Analysis ..... 3
THEA 134 Stage Voice and Movement ..... 3
THEA 190 Theatre Capstone

Degree Total 64

## 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
Courses to complete with a grade of C or higher*
EDUC 108 Introduction to the Field of Education .....  5
ENGL 101 English Composition I ..... 3
Fine Arts** ..... 3
COMM 101 Public Speaking ..... 3
GEOG 101 World Geography ..... 3
POLS 101 American/National Government ..... 3
ENGL 102 English Composition II ..... 3
Mathematics**** ..... 3
EDUC 205* Teaching Profession with Field Experience ..... 3
HIST 101 U.S. History Before 1877 (or)
HIST 102 U.S. History Since 1877 ..... 3
PSY 102 Child Psychology ..... 3
Wellness****** ..... 1
EDUC 209* Foundations of Education ..... 3
EASC 101 Introduction to Earth Scienceswith Lab (or)
EASC 106 Physical Geology with Lab (or)
PHYS 105 College Physics I with Lab ..... 5
EDUC 212* Technology for Teachers ..... 3
Literature**** ..... 3
Humanities*** ..... 3
BIO 112 Introduction to Biology with Lab (or) BIO 125 Biology I with Lab ..... 5
EDUC 220* Educational Psychology ..... 3
Suggested Electives***** ..... 9
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 ${ }^{* * * * *}$ - 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****** - Select 1 hour from EDUC 110*, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122


## 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, Humanities, 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* - 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** 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

## [ SECTION 2]

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
ENGL 102* English Composition II (or)
COMM 101* Public Speaking
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** - 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 ${ }^{* * *}$ - 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


## Associate of Applied Science General Education Requirements

## General Education Core

## Communications

ENGL 101 English Composition I ENGL 102 English Composition II ENGL 110 Business Communications ENGL 112 Technical Writing

## Mathematics

MATH 101 Business Math
MATH 107 Technical Math I
3 Hours
3
MATH 108 Technical Math II 3
MATH 110 Intermediate Algebra with Review 5
MATH 112 Intermediate Algebra 3
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
MATH 130 Calculus and Analytic Geometry I

## American Institutions

$\begin{array}{ll}\text { HIST } 101 & \text { U.S. History Before } 1877 \\ \text { HIST } 102 & \text { U.S. History Since } 1877 \\ \text { POLS 101 } & \text { American/National Government }\end{array}$
3 Hours
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 $1 / 2$ credit hour.

## Wellness <br> 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
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

WELL 119

Low Impact Aerobics

WELL 121 Women and Health

1

WELL 122 Applied Wellness

6 Hours

45-79 Hours

Degree Total 61-95
*Each AAS degree program includes six hours of general education elective courses from two of the following areas:

## Communications

COMM 101, ENGL 101, ENGL 102, ENGL 110, ENGL 112

## Mathematics

MATH 101, MATH 107, MATH 108, MATH 110, MATH 112, MATH 114, MATH 116, MATH 117, MATH 120, MATH 122, MATH 125, MATH 127. MATH 130

## Social and Behavioral Sciences

BADM 101, BADM 107, ECON 101, ECON 102, GEOG 101, HIST 108, HIST 109, POLS 103, PSY 101, PSY 102, PSY 104. SOC 100, SOC 102

Higher-Order Thinking
BADM 103, ENGL 102, SOC 120

## Valuing

PHIL 101, PHIL 104, SOC 102, SOC 120

## Managing Information

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


## 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 complete with a grade of C or higher*
ACCT 109* Applied Accounting Procedures
CAPP 125* Microcomputer Applications 3
ENGL 101 English Composition I 3
Mathematics** 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*** ..... 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


## 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.


## 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

## 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.


## 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
AGRI 131 Introduction to Agribusiness Systems
AGRI 102 Ag Leadership and Issues II
AGRI 132 Agriculture Economics

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 Education* 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 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

## [ SECTION 2]



## 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 Soil Erosion and Management 3
AGRI 127 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* 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

## 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


## 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.

## Degree Requirements

AGRI 101 Ag Leadership and Issues I 2
AGRI 108 Animal Science 3
Mathematics* 3
ENGL 101 English Composition I 3
AGRI 131 Introduction to Agribusiness Systems 3
AGRI 110 Contemporary Issues in Animal Agriculture
AGRI 137 Farm Management, Recordkeeping
BADM 107 Personal Finance
AGRI 102 Ag Leadership and Issues II
AGRI 175 Occupational Internship
BIO 112 Introduction to Biology with Lab

AGRI 116
AGRI 114
Animal Nutrition3

Livestock Management
3

AGRI 134
AGRI 103 Marketing Farm Commodities 3
AGRI 103 Ag Leadership and Issues III
2
BIO 210 Principles of Genetics with Lab 4
AGRI 112 Livestock and Meat Evaluation 3
AGRI 104 Ag Leadership and Issues IV 1
AGRI 141 Livestock Breeding 3
AGRI 143 Livestock Reproduction 3
Wellness** 1
HIST 101 U.S. History Before 1877 (or)
HIST 102 U.S. History Since 1877 (or)
POLS 101 American/National Government 3

## Degree Total 60

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


## 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

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 Farm Management, Recordkeeping ..... 1
AGRI 175 Occupational Internship ..... 4
BADM 107 Personal Finance ..... 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* ..... 3
AGRI 154 Greenhouse Management with Lab ..... 4
AGRI 179 Innovative Horticulture ..... 1
Degree Total 62
Mathematics* - 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


## 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 Corhigher
AUTO 100 Introduction to Automotive Technology 3
AUTO 116 Automotive Electrical System Fundamentals
AUTO 118 Advanced Automotive Electrical and Electronics
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 wwww.sfccmo.edu/automotive.


## 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


## 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
AUTO 118 Advanced Automotive Electrical and Electronics
AUTO 119 Automotive Heating and Air Conditioning

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


## 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 requirements must be completed with a grade of C or higher
AUTO 100 Introduction to Automotive Technology
AUTO 103 Manual Transmissions, Drivelines and Axles
AUTO 105 Automatic Transmissions
AUTO 116 Automotive Electrical System Fundamentals


## 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
AUTO 100 Introduction to Automotive Technology 3

AUTO 116 Automotive Electrical System Fundamentals
Fundamentals

AUTO 118 Advanced Automotive Electrical

and Electronics ..... 3
AUTO 106 Power Train ManagementAUTO 103 Manual Transmissions, Drivelinesand Axles5
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.


## AAS in Automotive Technology

The Automotive Technology program gives students the opportunity to study automotive systems in depth, beginning with fundamental principles and quickly 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 quickly 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 grade of C or higher
AUTO 100 Introduction to Automotive Technology 3
AUTO 116 Automotive Electrical System Fundamentals
AUTO 118 Advanced Automotive Electrical and Electronics3

AUTO 106 Power Train Management 5
AUTO 103 Manual Transmissions, Drivelines and Axles5
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*
Technical Science ..... 4
PHYS 125Employment Strategies1

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


## 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.


## 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 3
Mathematics**
3
BSMT 108 Principles of Management 3
ENGL 101 English Composition I 3
CAPP 125 Microcomputer Applications 3
BSMT 110 Salesmanship 3
Wellness**** 1
BSMT 106 Principles of Marketing 3
BADM 107 Personal Finance 3
ENGL 110 Business Communications (or)
COMM 101 Public Speaking 3
ACCT 101 Principles of Financial Accounting 3
BSMT 175* Business Management Internship 3
ACCT 102 Managerial Accounting 3

BADM 103 Legal Environment of Business 3
BSMT 117 Human Resource Management 3
Program Elective*** 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*** - 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


## 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

BSMT 106 Principles of Marketing 3
Mathematics** 3
CAPP 125 Microcomputer Applications 3
ENGL 101 English Composition I 3
BSMT 110 Salesmanship 3
COMM 101 Public Speaking 3
Wellness**** 1
BSMT 108 Principles of Management 3
BSMT 119 Customer Service Management 3
ENGL 110 Business Communications 3
ACCT 101 Principles of Financial Accounting 3
BSMT 175* Business Management Internship 3
BSMT 118 Retail Marketing 3
BADM 107 Personal Finance 3
BSMT 120 Advertising 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 125 | Human Relations | 3 |
| Program Elective*** | 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**** - Select 1 hour from EDUC 110, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122


## 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 Elective** 3
Program Electives*** 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:
CAPP 160* Word 3
ENGL 110* Business Communications 3
OADM 118* Transcription Skills 3
Group B:
ACCT 109* Applied Accounting Procedures 3
CAPP 166* Excel 3
MATH 101* Business Math 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.


## 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 complete 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
OADM 118** Transcription Skills

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 Personal Finance 3
CAPP 166** Excel 3
OADM 121** Calculators 1
OADM 106** Document Formatting 2
OADM $127^{*}$ Skillbuilding for Office Management 1
OADM 116** Records and Database Management 3
CAPP 160** Word 3
BADM 109 Business Ethics 3
BSMT 117 Human Resource Management 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 3
BADM 103 Legal Environment of Business 3
CAPP 164** Access 3
OADM 134** Office Management 3
OADM 175** Office Management Internship 3
SS 120 Employment Strategies 1
Degree Total 69
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


## 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.


## 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

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.


## 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.
ENGL 101 English Composition I (or)ENGL 112 Technical Writing3
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


## 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 3
CIS 103* Introduction to CIS 3
CIS 124* Database Management 3
CIS 145*Visual Basic 3
CIS 161* Systems Analysis 3
$\begin{array}{ll}\text { ACCT 175* } & \text { Accounting Internship (or) } \\ \text { CIS 175* } & \text { CIS Internship }\end{array}$
CIS 185* Project Management $\quad 4$
ACCT 101* Principles of Financial Accounting 3
ACCT 102* Managerial Accounting 3
ACCT 109* Applied Accounting Procedures ..... 3
ACCT 125* Computerized Accounting Applications ..... 3
ACCT 132* Business Taxation ..... 3
Program Electives*** ..... 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*** - Select 9 hours from ACCT 137*, CIS 155*, CIS 157*, CIS 162*, CIS 163*, 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


## 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.


## 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 complete with a grade of C or higher*
CAPP 125 Microcomputer Applications
CIS 103* Introduction to CIS 3
CIS 124* Database Management 3
CIS 145* Visual Basic 3
CIS 162* Advanced Visual Basic 3
CIS 155* Programming in C\# 3
WEB 103* Introduction to Web Development 3
CIS 185* Project Management 3
ACCT 101* Principles of Financial Accounting 3
Program Electives*** 9
CIS 163* SQL Server 3
WEB 160* Portfolio Design 3

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
ENGL 110 Business Communications (or)
COMM 101 Public Speaking 3
Mathematics** 3
$\begin{array}{ll}\text { HIST } 101 & \text { U.S. History Before } 1877 \text { (or) } \\ \text { HIST } 102 & \text { U.S. History Since } 1877 \text { (or) } \\ \text { POLS 101 } & \text { American/National Government }\end{array}$
$\begin{array}{lll}\text { POLS } 101 & \text { American/National Government } & 3 \\ \text { Wellness*** } & 1\end{array}$
SS $120 \quad$ 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


## AAS in Computer Information Systems with Emphasis in Web Development

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 3
CIS 103* Introduction to CIS 3
CIS 124* Database Management 3
CIS 145* Visual Basic 3
NET 101* Introduction to Networks 3
WEB 103* Introduction to Web Development 3
Program Electives*** 6
WEB 116* Web Development 3
WEB 117* Advanced Web Development 3
CIS 158* Java 3
CIS 161* Systems Analysis 3
WEB 160* Portfolio Design 3
. 3
$\qquad$

WEB $114 *$
WEB $118 *$
WEB 120*
WEB 175*
ENGL 101
ENGL 112
ENGL 102
English Composition II (or)
ENGL 110 Business Communications (or)
COMM 101 Public Speaking
Mathematics**
3
$\begin{array}{ll}\text { HIST } 101 & \text { U.S. History Before } 1877 \text { (or) } \\ \text { HIST } 102 & \text { U.S. History Since } 1877 \text { (or) }\end{array}$
POLS 101 American/National Government 3
Wellness****
SS 120 Employment Strategies
1

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


## 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 3
EDT 111 Introduction to Engineering Design 3
CNST 101 Construction Materials and Methods I 3
CNST 113 Construction Management 3
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing
Mathematics***
Life and Physical Sciences**
CNST 103 Construction Materials and Methods II 3
CNST 162 Construction Safety 3
CAPP 125 Microcomputer Applications 3
EDT 120 Architectural Design 3
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 Elective* | 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


## 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 3
CJ 102 Introduction to Criminal Justice 3
CJ 104 Criminal Investigation 3
CJ Criminal Law 3
CJ 107 Criminology 3
CJ 109 Juvenile Delinquency 3

CJ 111 Introduction to Corrections 3
CJ 118 Criminal Justice Communications 3
CJ 115 Procedural Law 3
CJ 175 Supervised Occupational Experience in Criminal Justice 4
$\begin{array}{lll}\text { CJ } 103 & \text { Traffic Safety and Investigation (or) } \\ \text { CJ } 122 & \text { Current Events in Criminal Justice } & 3\end{array}$
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* 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 Elective** 3
CJ 124 Drugs, Society and Criminal Justice 3
Wellness*** 1
CJ $150 \quad$ Criminal Justice Seminar 1

## Degree Total 66

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

## 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.

## [ SECTION 2]

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*
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*
Courses to complete with a grade of C or higher**
Courses can be completed prior to the start of the program***
$\begin{array}{lll}\text { DH 131* } & \text { Introduction to Dental Hygiene Theory } & 2 \\ \text { DH 140* } & \text { Dental Hygiene Pre-Clinic I } & 4 \\ \text { DH 102** } & \text { Dental Radiography } & 2 \\ \text { DH 104* } & \text { Dental Radiography Lab } & 1 \\ \text { DH 108** } & \text { Oral Anatomy and Histology } & 3 \\ \text { DH 106* } & \text { Dental Clinic Emergencies } & 1 \\ \text { DH 133* } & \text { Dental Hygiene Theory I } & 2 \\ \text { DH 141* } & \text { Dental Hygiene Pre-Clinic II } & 2\end{array}$

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* Dental Hygiene Theory III 2
DH 144* Dental Hygiene Clinic III 6
DH122** General and Oral Pathology 3
DH 115* Community Dental Health I 2
DH 136* Dental Hygiene Theory IV 2
DH 145* Dental Hygiene Clinic IV 6
DH 113* Dental Hygiene Ethics and Legal Issues 1
DH 124** Applied Nutrition and Oral Health Education2
DH 117* Community Dental Health II ..... 5
HEOC 135** Allied Health Career Development ..... 5
ENGL 101** English Composition I*** ..... 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
PSY 101** General Psychology** ..... 3
SOC 100** General Sociology**


## 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.


## Degree Prerequisite Requirements

DMS $100 \quad \begin{aligned} & \text { Diagnostic Medical Sonography } \\ & \\ & \text { Prep Workshop }\end{aligned}$
Courses must 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
$\begin{array}{lll} & \text { Characteristics } & 3 \\ \text { ENGL 101 } & \text { English Composition I (or) } & \\ \text { ENGL 102 } & \text { English Composition II } & 3\end{array}$
Mathematics*
HEOC 120 Medical Terminology I
3
BIO 207 Human Anatomy with Lab 3
BIO 208 Human Physiology with Lab
$\begin{array}{ll}\text { Course must be completed with a grade of C or higher } \\ \text { HIST } 101 & \text { U.S. History Before } 1877 \text { (or) } \\ \text { HIST } 102 & \text { U.S. History Since } 1877 \text { (or) } \\ \text { POLS 101 } & \text { American/National Government }\end{array}$
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** $\begin{aligned} & \text { Sonography Principles and } \\ & \text { Instrumentation I }\end{aligned}$
$\begin{array}{lll}\text { PSY 101** } & \text { General Psychology (or) } \\ \text { SOC 100* } & \text { General Sociology } & 3\end{array}$
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
DMS 112* Scanning Techniques Lab II
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


## 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 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 Language Development/Early Literacy 3
COMM 101 Public Speaking 3
Mathematics** 3
Wellness**** 1
ECD 115 Child Social/Emotional Development 3
ECD 117 Creative Expression and Play 3
ECD 121 Curriculum Strategies for Early Childhood
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
ECD 175 Child Care Practicum 3
Program Elective*** 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 ${ }^{* * *}$ - 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**** - Select 1 hour from EDUC 110*, HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121, (or) WELL 122


## 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 Elective* 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.


## 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 Electives* 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.


## 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

EDT 105 Print Reading for Construction 3
EDT 111 Introduction to Engineering Design 3
CAPP 125 Microcomputer Applications 3
Mathematics*
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing 3
Wellness***
EDT 115 Advanced Engineering Design
EDT 120 Architectural Design
COMM 101 Public Speaking
ENGL 102 English Composition II (or)

ENGL 110 Business Communications 3
PHYS 105 College Physics I with Lab (or)
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 Electives** 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


## 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.


## 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* - 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.

## [ SECTION 2]

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

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 Electives** 7
ENGL 101 English Composition I 3
Mathematics*
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 Education**** 6

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


## 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


## Professional Certificate in Pharmacy Technician

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 Electives* 9

## 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.sfcemo.edu/pharmacytechnology.


## 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

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 Electives** 7
ENGL 101 English Composition I 3
Mathematics*
HIST 101 U.S. History Before 1877 (or)
HIST 102 U.S. History Since 1877 (or)
POLS 101 American/National Government
Wellness***
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 Education**** 6

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

Degree Total 61

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## 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

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

## 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 $w w w . s f c c m o$. edu/healthinformation.


## 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

Courses to complete with a grade of C or higher*
HEOC 120* Medical Terminology I 3
$\mathrm{BIO} 207^{*}$ Human Anatomy with Lab 4
$\begin{array}{ll}\text { HIT 100* Introduction to Health Information } \\ & \text { Technology }\end{array}$
HIT 115* Health Care and the Law* 3
HEOC 122* Medical Terminology II 3
Mathematics** 3
BIO 208* Human Physiology with Lab 4
CAPP 125* Microcomputer Applications 3
ENGL 112 Technical Writing 3
$\begin{array}{ll}\text { HIT 200* } & \begin{array}{l}\text { Health Care Statistics and Quality } \\ \text { Management }\end{array}\end{array}$
CAPP 164 Access 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
$\begin{array}{ll}\text { HIT 215* } & \begin{array}{l}\text { Principles of Health Care } \\ \text { Reimbursement }\end{array}\end{array}$
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***
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


## 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
IEM 102 Electric Fundamentals 3
IEM 104 Electrical Power 3
IEM 112 Control Circuit Troubleshooting 3
IEM 1143
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 Elective* 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.


## 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 Corhigher
IEM 106 Industrial Mechanics 3
IEM 108 Fluid Power Technology 3
IEM 1023
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.sfcemo.edu/industrialtechnology.


## 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

Courses to complete 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
Mathematics**
3
Technical Science
Wellness****
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 Electives*** 12
IEM Electives**** 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***** Select 18 hours from any of the four groups Control Technology 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 Installations Group
IEM 136 General NEC Requirements 3
IEM 138 Power Distribution 3
IEM 140 Transformers and Motors 3
Safety and Management Group
IEM 126 Industrial Safety 3
IEM 128 Maintenance Management 3
IEM 146 Quality Management and Control 3


## 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

Courses to complete with a grade of C or higher*
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing
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
MATH 108* Technical Math II 3
PHYS 125 Technical Science 4
Wellness** 1
RETS 102* 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
RETB 125* 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


## 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 Corhigher
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.

## 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

Courses to complete with a grade of C or higher*
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing
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
MATH 108* Technical Math II 3
PHYS 125 Technical Science 4
Wellness** 1
RETS 102* Introduction to Renewable Energy 3
RETS 126* Solar PV Instrumentation and Metrology 4
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
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
RETS 175* Solar PV Internship 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


## 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 complete with a grade of C or higher*
MACH 106* CNC Machining
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 Levell 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 complete 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.


## 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 complete 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 complete 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
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.


## 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, quality, 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

Courses to complete with a grade of C or higher*
MACH 101* Introduction to Machining
MACH 102* Lathe and Milling Machine Operations 4
$\begin{array}{ll}\text { MACH 103* } & \text { Milling and Grinding Machine } \\ \text { Applications }\end{array}$
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
EDT 134 Computer Aided Manufacturing 3
Mathematics** 3
CNST 162 Construction Safety (or)
IEM 126 Industrial Safety 3
PHYS 125 Technical Science 4
SS 120 Employment Strategies 1
Program Electives*** 6
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing
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

## 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* 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 $2 \mathrm{G}, 5 \mathrm{G}$, and 6 G 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* 3
Certificate Total 32
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.


## 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

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.


## 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

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

## [ SECTION 2]

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

Courses to be taken from State Fair Community College
ENGL 101 English Composition I (or)
ENGL 112 Technical Writing
Mathematics*
HIST 101 U.S. History Before 1877 (or)
HIST 102 U.S. History Since 1877 (or)
POLS 101 American/National Government

Wellness**
PHYS 125
Technical Science

BADM 101 Introduction to Business (or)
ECON 101 Principles of Macroeconomics (or)
PSY 101 General Psychology (or)
COMM 101 Public Speaking
Courses available for articulation from the Lake Career and Technical Center
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
$\begin{array}{ll}\text { MRN } 113 & \text { Marine Engine Component and } \\ & \text { Precision Measuring }\end{array}$
MRN 115 Marine Shop Procedures and
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

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

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


## 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.


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 complete with a grade B or higher*
Courses to complete with a grade of C or higher**
BIO 207* Human Anatomy with Lab
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*
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
$\begin{array}{ll}\text { NURS } 134 & \begin{array}{l}\text { Nursing Care for the } \\ \text { Childbearing Family }\end{array}\end{array}$
NURS 136 Childbearing Family Clinical 1.5
$\begin{array}{ll}\text { NURS } 140 & \begin{array}{l}\text { Nursing Care for the Child } \\ \\ \text { Rearing Family }\end{array}\end{array}$
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 $\mathrm{W} w w . \mathrm{sfccmo}$. edu/practicalnursing.


## 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
ENGL 101** English Composition I (or)
ENGL 102** English Composition II
Mathematics***
NURS 102 CPR for Health Care Providers (AHA) $\quad .5$
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*
BIO 121* Microbiology for Allied Health with Lab 4
NURS 213 Introduction to Professional Nursing 2
NURS 227 Complex Health: Family 3
NURS 228 Complex Health: Family Clinical 1
NURS 230 Complex Health: Adult Clinical I 1
NURS 215 Complex Health: Mental Health 2.5
NURS 216 Complex Health: Mental Health Clinical 2
NURS 221 Complex Health: Nutrition/Metabolic 2.5
NURS 231 Complex Health: Adult Clinical II 1
NURS 233 Complex Health: Adult Clinical III 3
NURS 234 Complex Health: Activity and Rest 3
NURS 237 Complex Health: Cognitive/Perceptual 3
NURS 219 Complex Health: Elimination 3
NURS 243 Professional Nursing Capstone Clinical 2.5
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

## 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/C300-99/3350000066.HTM.


## Occupational Therapy Assistant

The Occupational Therapy Assistant program is a one-plus-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.


## 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*
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* Medical Terminology I 3
Mathematics** 3
$\begin{array}{lll}\text { HIST } 101^{*} & \text { U.S. History Before } 1877 \text { (or) } & \\ \text { HIST } 102^{*} & \text { U.S. History Since } 1877 \text { (or) } & \\ \text { POLS 101* } & \text { American/National Government } & 3 \\ \text { General Education Elective* } & 3\end{array}$
SOC 100 is recommended
Mathematics** - Select 3 hours from MATH 110, MATH 112,
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

OTA 200 Foundations of Occupational Therapy 4
$\begin{array}{ll}\text { OTA } 205 & \begin{array}{l}\text { Medical Conditions in Occupational } \\ \text { Therapy }\end{array}\end{array}$
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


## 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
EDUC 108 Introduction to the Field of Education . 5
ENGL 101 English Composition I 3
ART 101 Art Appreciation (or)
MUS 101 Music Appreciation (or)
THEA 107 Introduction to Theatre 3
ECD 117 Creative Expression and Play 3
COMM 101 Public Speaking 3
PSY 101 General Psychology 3
Mathematics* 3
EDUC 205 Teaching Profession with Field Experience
$\begin{array}{ll}\text { HIST } 101 & \text { U.S. History Before } 1877 \text { (or) } \\ \text { HIST } 102 & \text { U.S. History Since } 1877\end{array}$
HLTH 102 First Aid 2
PSY 102 Child Psychology 3
Program Elective** 3
EDUC 209 Foundations of Education 3
BIO 112 Introduction to Biology with Lab (or)
CHEM 101 Introduction to Chemistry with Lab (or)
EASC 101 Introduction to Earth Sciences with Lab (or)
EASC 106 Physical Geology with Lab 5
POLS 101 American/National Government 3
EDUC 212 Technology for Teachers 3
EDUC 110 Introduction to Physical Education in the Elementary School (or)
HLTH 101 Personal Health and Fitness (or)
WELL 122 Applied Wellness
EDUC 228 Education of the Exceptional
Learners pre K-12
EDUC 218 Children's Literature 3
EDUC 250 Paraprofessional Educator Practicum 3
EDUC 220 Educational Psychology 3
SOC 120 American Diversity 3
SS 120 Employment Strategies 1

## Degree Total 63.5

Mathematics* - 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

## 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 $w w w . s f c c m o . e d u / a p p l i c a t i o n s . ~$

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/P I and A/P II 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* Courses to complete with a grade of C or higher by the end of the spring semester in which the student is applying**

| BIO 207** | Human Anatomy with Lab | 4 |
| :--- | :--- | :--- |
| ENGL 101** | English Composition I (or) |  |
| ENGL 102** | English Composition II | 3 |
| Mathematic**** | 3 |  |
| HEOC 120** | Medical Terminology I 3 <br> RAD 100 Radiologic Technology Prep Workshop <br> (by invitation only - part of the application <br>  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*
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* (or)
HIST 102 U.S. History Since 1877* (or)
POLS 101 American/National Government* 3
RAD 112 Clinical Education IV 3
RAD $130 \quad \begin{aligned} & \text { Radiation Production and } \\ & \text { Characteristics }\end{aligned}$
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


[^0]:    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.

