



Engineering & Manufacturing Technology

ENGINEERING GRAPHICS TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to apply advanced computer-aided design (CAD) skills to the creation of graphic representations and simulations in support of architectural and engineering projects with the aid of CAD. This program includes instruction in engineering graphics, two-dimensional and three-dimensional design, solid modeling, residential design, and commercial design.

General Education Requirements **20 Hours**

Communications		9
__English Comp I	(EG 101)	
__Public Speaking	(SP 100)	
__Technical Writing	(EG 112)	

Science and Math		8
__Trigonometry	(MA 140)	
__Gen. Physics	(PH 143)	

Social/Behavioral Science Requirement		3
__Ethics	(PL 291)	

Mechanical Option Required Courses		38 Hours
__Two-Dimensional Design	(AR 121)	3
__Engineering Graphics I	(EN 101)	3
__Engineering Graphics II	(EN 102)	3
__Manufacturing Processes	(IT 204)	3
__Engineering Concepts	(EN 115)	2
__Eng. Graphics Tech Capstone	(EN 206)	3
__AutoCAD Basics	(EN 107)	3
__AutoCAD Advanced	(EN 207)	3
__Networking Basics	(IN 134)	3
__Basic CATIA	(IT 218)	3
__3D Modeling & CAD	(EN 214)	3
__Intro. to Metrology	(IT 263)	3
__Internship I	(EN 193)	3

Related Electives **6 Hours**

Any Engineering course not listed under required or any Manufacturing Technology course.

A total of 64 credit hours are required for this degree. In addition to the 20 credit hours of general education requirements and 38 credit hours of required courses, 6 credit hours of related electives are required.

Architectural/Civil/Structural Option Required Courses **41Hours**

__Two-Dimensional Design	(AR 121)	3
__Engineering Graphics I	(EN 101)	3

__Engineering Graphics II	(EN 102)	3
__Residential Design and CAD I	(EN 103)	3
__Introduction to Surveying	(SR 104)	3
__Engineering Concepts	(EN 115)	2
__3D Modeling & CAD	(EN 214)	3
__Commercial Building Design and CAD	(EN 211)	3
__Eng. Graphics Tech Capstone	(EN 206)	3
__Structural, Civil and Pipe Design & CAD	(EN 217)	3
__AutoCAD Basics	(EN 107)	3
__AutoCAD Advanced	(EN 207)	3
__Networking Basics	(IN 134)	3
__Internship	(EN 193)	3

Related Electives **3**

__Any Manufacturing Engineering Technology (IT) Course.		
__Surveying II	(SR 204)	3
__Statics	(EN 260)	3
__PC Visual Basic Programming	(IN 108)	3
__Introduction to Programming	(IN 105)	3
__Physical Geology	(PS 102)	4
__Special Topics	(EN 253/254)	3

A total of 64 credit hours are required for this degree. In addition to the 20 credit hours of general education requirements and 41 credit hours of required courses, 3 credit hours of related electives are required.

Engineering Graphics Technology

Career Program
Degree Offered: Associate in Applied Science
Credits Required: 64
Contact: Mel Whiteside, Lead Instructor at 316.218.6135 or Becki Foster, Technical Advancement Director, at 316.322.3277

Accreditation

ABET-IAC.

Prior to Admission

Students must have appropriate ACT scores or take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math on the ASSET test.

Additional Costs

An additional \$25 lab fee is assessed to each program course and subject to change.

Recommended Course Sequence

Engineering Graphics I (EN 101) is required before upper level EN Courses

After Butler

Recent graduates hold positions as Architectural and Engineering Technicians. After finishing a bachelor's degree, graduates hold positions as aeronautical, electrical, electronic or mechanical engineers, architects, and drafters.

University Articulations

Students wishing to take advantage of articulations with WSU, KSU-Salina or most universities are advised to complete up through PH 251 Physics I, which requires several Math prerequisites.

High School Articulation Credit

High schools must have a signed, current articulation on file. Students must also maintain a 3.0 GPA in all CAD/Drafting courses. Students may be eligible for additional articulated courses. Student must submit a drawing portfolio for review by lead instructor and pass a drawing exam prior to enrollment.

Median Wage for Mechanical Engineering Technicians in South Central Kansas is \$40,706 per year. (Source: Kansas Department of Human Resources Local Area IV, 2003 edition
Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)



ENGINEERING GRAPHICS TECHNOLOGY CERTIFICATE

Your Butler experience will prepare you to apply advanced computer-aided design (CAD) skills to the creation of graphic representations and simulations in support of architectural and engineering projects. With the aid of CAD, this program includes instruction in engineering graphics, two-dimensional and three-dimensional design, solid modeling, residential and commercial design.

Prior to Admission

Students must have appropriate ACT scores or take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math on the ASSET test.

Required Courses

31 Hours

__Engineering Graphics I	(EN 101)	3
__Engineering Graphics II	(EN 102)	3
__Residential Design and CAD I	(EN 103)	3
__Engineering Concepts	(EN 115)	2
__Eng. Graphics Tech Capstone	(EN 206)	2
__Commercial Building Design and CAD	(EN 211)	3
__Structural, Civil and Pipe Design & CAD	(EN 217)	3
__Math Requirement	(MA 114 or above)	3
__3D Modeling & CAD	(EN 214)	3
__Auto CAD Basics	(EN107)	3
__Auto CAD Advanced	(EN 207)	3

Certificate requires 31 credit hours.

After Butler

Career opportunities include Aerospace Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering, and Nuclear Engineering.

Median Wage for Architectural and Civil Drafters in South Central Kansas is \$34,050 per year. Median Wage for Civil Engineering Technicians is \$34,258 per year. Median Wage for Mechanical Engineering Technicians is \$40,706 per year. (Source: Kansas Department of Human Resources Local Area IV, 2003 edition.)

CAD Technician

Career Program

Certificate in CAD Technician

Credits Required: 31

Contact: Mel Whiteside, Lead Instructor, at 316.218.6135 or Becki Foster, Technical Advancement Director, at 316.322.3277

Accreditation

Currently seeking ABET-TAC accreditation.

Recommended Course Sequence

AUTOCAD Basics (EN 107) is required before upper level EN Courses

Additional Costs

An additional \$25 lab fee is assessed to each program course and subject to change.



MANUFACTURING ENGINEERING TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. This program provides instruction in machine operations, production line operations, engineering analysis, systems analysis, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

General Education Requirements

Course		18 Hours
Communications 9		
__ English Comp I	(EG 101)	
__ Public Speaking	(SP 100)	
__ One other course	(EG 102, EG 112)	
Science and Math 6		
__ Math Requirement	(MA 131)	
__ Science Requirement	(PH 109 or CH 105 or above CH 105 strongly advised)	
Social/Behavioral Science Requirement 3		
__ Sociology	(BS 105) or	
__ General Psychology	(BS 160)	

Required Courses		37 Hours
__ Machine Processes I	(IT 100)	3
__ Machine Processes II	(IT 102)	3
__ Beginning Concepts of CNC	(IT 120)	3
__ Machine Trades Print Reading	(IT 150)	1
__ Manufacturing Processes	(IT 204)	3
__ Industrial Safety	(IT 205)	3
__ Basic CATIA	(IT 218)	3
__ Advanced CATIA	(IT 219)	3
__ Adv. Automated Manufacturing with CNC	(IT 220)	3
__ Introduction to Material and	(IT 226)	3
__ Manufacturing Science	(IT 227)	3
__ Manufacturing Part Design	(IT 230)	3
__ Introduction to Quality Assurance	(IT 260)	3
__ Introduction to Metrology	(IT 263)	3

A total of 64 hours is required for this degree. In addition to the 18 credit hours of general education requirements and 37 hours of required courses, students must choose 9 credit hours from the list of related electives below:

Related Electives		9 Hours
__ Engineering Graphics I	(EN 101)	3
__ Engineering Graphics II	(EN 102)	3
__ Engineering Concepts	(EN 115)	2
__ Industrial Supervision	(IT 141)	3
__ Mechanical Devices and Sys	(IT 116)	3
__ Fluid Power	(IT 117)	3
__ Cooperative Education	(IT 197)	3
__ Basic FeatureCAM	(IT 216)	3
__ Basic Mastercam	(IT 217)	3
__ Advanced FeatureCAM	(IT 221)	3
__ Advanced Mastercam	(IT 225)	3

Manufacturing Engineering Technology

Career Program

Degree Offered: Associate in Applied Science in Manufacturing Technology

Credits Required: 64

Contact: Buford Pringle, CMFGT, Lead Instructor, at 316.218.6136 or Becki Foster, Technical Advancement Director, at 316.322.3277

Accreditation

ABET-TAC.

Prior to Admission

Students must have appropriate ACT scores or take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math on the ASSET test.

Recommended Course Sequence

Semester 1: IT 100, IT 102, IT 204, IT 120, IT 218

Semester 2: IT 220, IT 141, MA 131,

Semester 3: IT 226, IT 227, IT 228

Semester 4: IT 117, IT 215, IT 205, Advanced Programming Course

University Articulations

Students wishing to take advantage of articulations with WSU, KSU-Salina or most universities are advised to complete up through PH 251 Physics I, which requires several Math prerequisites.

High School Articulation Credit

High schools must have a signed current articulation on file.

Students must also maintain a 3.0 GPA in all Manufacturing courses.

Additional Costs

Courses with labs have a \$50 lab fee and are subject to change. CATIA Courses have a \$150 lab fee.

After Butler

Recent graduates hold positions in manufacturing, manufacturing Engineering, machining, CNC (Computer Numerical Control) operation and Industrial Engineering.

Median Wage for Computer-Controlled Machine Tool Operators in South Central Kansas is \$37,523 per year. Median Wage for Numerical Tool and Process Control Programmers in South Central Kansas is \$44,357 per year. Median Wage for a Manufacturing Technologist in South Central Kansas is \$42,220 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)



MANUFACTURING ENGINEERING TECHNOLOGY CERTIFICATE

Your Butler experience will prepare you to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. This program provides instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

Prior to Admission

Students are required to take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math.

Required Courses

		34 Hours
__Machine Processes I	(IT 100)	3
__Machine Processes II	(IT 102)	3
__Beginning Concepts of CNC	(IT 120)	3
__Machine Trades Print Reading	(IT 150)	1
__Manufacturing Processes	(IT 204)	3
__Advanced CATIA	(IT 219)	3
__Introduction to Quality Assurance	(IT 260)	3
__Introduction to Metrology	(IT 263)	3
__Industrial Safety	(IT 205)	3
__Basic CATIA	(IT 218)	3
__Adv. Automated Manufacturing with CNC	(IT 220)	3
__Intro to Material and Manufacturing Science	(IT 226)	3

Students must have 3 hours of related electives from the following:

Related Electives

		Hours
__Engineering Graphics I	(EN 101)	3
__Engineering Graphics II	(EN 102)	3
__Mechanical Devices and Systems	(IT 116)	3
__Fluid Power	(IT 117)	3
__Geo. Dimensioning & Tolerancing	(IT 212)	3
__Basic Feature CAM	(IT 216)	3
__Advanced Feature CAM	(IT 221)	3
__Advanced Mastercam	(IT 225)	3
__Manufacturing Part Design	(IT 228)	3

Certificate requires 37 credit hours.

Manufacturing Engineering Technology

Career Program

Certificate in Manufacturing Technology and eligibility to take the Society of Manufacturing Engineers (SME) certification test

Credits Required: 37

Contact: Buford Pringle, CMFGT, Lead Instructor, at 316.218.6136 or Becki Foster, Technical Advancement Director, at 316.322.3277

Accreditation

ABET-TAC

Prior to Admissions

Students must have appropriate ACT scores or take the ASSET test.

Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math on the ASSET test..

Recommended Course Sequence

Semester 1:

IT 100, IT 102, IT 204, IT 120, IT 205

Semester 2:

IT 220, IT 141, EN 101, MA 131,

Semester 3:

IT 226, IT 227, IT 228

Semester 4:

IT 117, IT 215, Advance Programming

High School Articulation Credit

High Schools must have a signed current articulation on file. Students must also maintain a 3.0 GPA in all Manufacturing courses.

Additional Costs

Courses with labs have a \$50 lab fee and are subject to change.

After Butler

Recent graduates hold positions in manufacturing, machining and CNC (Computer Numerical Control) operation, Manufacturing Engineering, and Industrial Engineering.

Median Wage for Computer-Controlled Machine Tool Operators in South Central Kansas is \$37,523 per year. Median Wage for Numerical Tool and Process Control Programmers in South Central Kansas is \$44,357 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)



SURVEYING TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE

Butler Community College’s Associate of Applied Science in Surveying Technology degree is designed to prepare students for necessary training for future licensure as a land surveyor in Kansas. All 50 states and all U.S. territories license surveyors. The program consists of topics including field surveying techniques, surveying laws and ethics, Global Position Systems (GPS), Geographic Information Systems (GIS), land information systems, safety, drafting, and records research. The two-year Associate of Applied Science in Surveying Technology degree is designed to provide necessary training for future licensure as a land surveyor in Kansas.

General Education Requirements 24 Hours

Communications		12
__English Comp I	(EG 101)	
__English Comp II	(EG 102)	
__Public Speaking	(SP 100)	
__Technical Writing	(EG 112)	

Science and Math 9

__College Algebra w/Review or	(MA 131) or	
__College Algebra	(MA 135)	
__Trigonometry	(MA 140)	
__Applied Physics or	(PH109) or	
__Basic Physics I	(PH 130)	

Social/Behavioral Science 3

__US History I or	(HS 131)	
__US History II	(HS 132)	

Required Courses 39 Hours

__Introduction to Surveying	(SR 104)	3
__AutoCAD Basics	(EN 107)	3
__Introduction to GIS/GPS	(SR 110)	3
__Accounting I	(BA 126)	3
__Surveying II	(SR 204)	3
__Advanced GIS/GPS	(SR 210)	3
__Principles of Management	(BA 210)	3
__Boundary Control	(SR 220)	3
__Business Ethics	(BA 220)	3
__Survey Law	(SR 222)	3
__Legal Descriptions	(SR 224)	2
__Subdivision Planning and Design	(SR 112)	3
__Route Surveying	(SR 226)	3
__Internship	(SR 193)	1

A total of 63 credit hours is required for this degree; 24 hours of general education and 39 hours of technical courses.

Students who have completed the general education requirement and have previously earned an Associates Degree or a Bachelors degree may complete a Certificate of Completion in Surveying Technology by completing the 39 hours of required technical courses.

Surveying Technology

Career Program
Degree Offered: Associate in Applied Science
Credits Required: 63
Contact: Mel Whiteside, Lead Instructor at 316.218.6135 or Becki Foster, Technical Advancement Director, at 316.322.3277

Prior to Admission

Students are required to take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math.

Additional Costs

An additional \$25 lab fee is assessed to each program course and subject to change.

Recommended Course Sequence

Semester 1: EG 101, MA 131 or MA 135, SR 104, EN 107, SR 110.
Semester 2: EG 102, PH 109 or PH 130, SR 204, HS 131 or HS 132, MA 140.
Semester 3: SP 100, BA 126, SR 220, SR 210, SR 222, EG 112.
Semester 4: SR 224, BA 210, BA 220, SR 112, SR 226, SR 193.

Median Wage for Surveyors in South Central Kansas is \$36,400 per year. (Source: Kansas Wage Survey, 2007.)

SURVEYING TECHNOLOGY CERTIFICATE

Your Butler experience will prepare you for future licensure as a land surveyor in Kansas.

Prior to Admission

Students are required to take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math.

Required Courses 39 Hours

__Introduction to Surveying	(SR 104)	3
__AutoCAD Basics	(EN 107)	3
__Introduction to GIS/GPS	(SR 110)	3
__Accounting I	(BA 126)	3
__Surveying II	(SR 204)	3
__Advanced GIS/GPS	(SR 210)	3
__Principles of Management	(BA 210)	3
__Boundary Control	(SR 220)	3
__Business Ethics	(BA 220)	3
__Survey Law	(SR 222)	3
__Legal Descriptions	(SR 224)	2
__Subdivision Planning and Design	(SR 112)	3
__Route Surveying	(SR 226)	3
__Internship	(SR 193)	1

Certificate requires 39 credit hours.

Students who have completed the general education requirement and have previously earned an Associates Degree or a Bachelors degree may complete a Certificate of Completion in Surveying Technology by completing the 39 hours of required technical courses.



PRE-ENGINEERING ASSOCIATE IN SCIENCE

Course	Hours
Communications	9
__English Comp I (EG 101)	
__English Comp II (EG 102)	
__Public Speaking or Interpersonal Communication (SP 100) (SP102)	
Science and Math	15
__Calculus I with Analytic Geometry (MA 151)	
__College Chemistry I (CH 110)	
__Calculus II w/Analytic Geometry (MA 152)	
* Social/Behavioral Science	6
__Social Science Requirement	
__Behavioral Science Requirement	
Humanities/Fine Arts	6
__Humanities Requirement	
__Fine Arts Requirement	
Physical Education	1
__Physical Education Requirement	

A minimum of 62 credit hours is required for the Associate in Science degree. In addition to general education requirements, coursework to complete this Associate in Science degree is listed below:

Required Courses	Hours
__Calculus III with Analytic Geometry (MA 253)	3
__Differential Equations (MA 260)	3
__Physics I (PH 251)	5
__Physics II (PH 252)	5
__Engineering Graphics I or College Chemistry II (EN 101 or CH 115)	3-5*
__Engineering Concepts (EN 115)	2
__Statics (EN 260)	3

Related Electives **3-5**

*Some related elective hours are met with extra hours in Math and Science above.

*Students interested in civil, electrical, industrial and mechanical options of pre-engineering need Engineering Graphics I. Students interested in chemical, nuclear and petroleum options of pre-engineering should enroll in Chemistry II. Advisement in either course for any option should be verified by future university of choice. Also see "Engineering Graphics Technology."

Program Information

Courses available range from basic math and algebra to calculus, differential equations and statistics. Butler has agreements with the state universities for course transfer.

Pre-Engineering - Career Program

Degree Offered: Associate in Science

Credits Required: 62

Contact: Larry Friesen, Lead Mathematics/Engineering Instructor, at 316.322.3138

Requirements - see Program of Study

Recommended Course Sequence

Semester 1: EG 101, MA 151, CH 110, EN 115, Physical Education

Requirement Semester 2: EG 102, MA 152, EN 101 or CH 115, Semester

3: MA 253, PH 251, SP 100, Humanities Requirement, or Electives

Semester 4: MA 260, PH 252, EN 260, Behavioral Science Requirement, Fine Arts Requirement

Recommended Electives

Any IN Programming course; Any IT Manufacturing Engineering

Technology course, Engineering Graphics I & II, EC200



WELDING TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in various welding and cutting processes, blueprint reading, and metallurgy, all as applied to both ferrous and non-ferrous metals.

General Education Requirements **15 Hours** **Communications 6**

__English Comp I	(EG 101)
__Public Speaking	(SP 100)

Science, Math and Computer Science **9**

__Math Requirement	(MA 114 or above)
__Science Requirement	(PH 109 or CH 105 or above)
__Computer Science Requirement	

Social/Behavioral Science **3**

__Sociology	(BS 105) or
__General Psychology	(BS 160)

Required Courses **35 Hours**

Fall

__OxyFuel Gas Welding	(WE 112)	2
__Cutting Operations	(WE 113)	2
__Welding Methods	(WE 114)	2
__Shielded Arc Welding	(WE 116)	3
__Blueprint Reading Welding	(WE 119)	3
__Fundamentals of Welding I	(WE 121)	3
__Gas Tungsten Arc Welding	(WE 215)	3

Spring

__Welding Survey	(WE 111)	3
__Fundamentals of Welding II	(WE 122)	3
__Automatic Arc & Inert Gas welding	(WE 212)	2
__Welding and Pipefitting	(WE 213)	2
__Welding Problems	(WE 216)	2
__Gas Metal Arc Welding	(WE 219)	2
__Metallurgy	(WE 220)	3

Related Electives **9**

__Intro to Business	(BA 110)	3
__Personal Finance	(BA 112)	3
__Business Law I	(BA 115)	3
__Accounting I	(BA 126)	3
__Personal Selling	(BA 215)	3
__Principles of Management	(BA 210)	3
__Industrial Supervision	(IT 141)	3
__Industrial Safety	(IT 205)	3
__Cooperative Education I, II, III, IV	(WE 197, 198, 297, 298)	2-5

A total of 62 credit hours is required for this degree. In addition to the 18 credit hours of general education requirements and 35 credit hours of required courses, you must choose 9 credit hours from the list of related electives.

Welding Technology

Career Program

Degree Offered: Associate in Applied Science

Credits Required: 62

Contact: Matt Galbraith, Lead Instructor, at 316.323.6824 or Becki Foster, Technical Advancement Director, at 316.322.3277

Recommendations

These classes are in high demand and fill quickly. Enrollment is limited.

Accreditation

All Instructors are AWS Certified Welding educators.

The Welding Department is a certified participating organization in the AWS SENCE Program.

Additional Costs/Tool Requirement

An additional \$25 lab fee is assessed to each program course and subject to change.

High School Articulation Credit

High Schools must have a signed current articulation on file. Students must also maintain a 3.0 GPA in all Welding courses.

Recommended Course Sequence

Semester 1:

WE 121, WE 112, WE 116, WE 113, WE 114, WE 119, WE 215

Semester 2:

WE 122, WE 220, WE 111, WE 219, WE 216, WE 212, WE 213

Semester 3:

General Education Classes

Semester 4:

General Education Classes

After Butler

Recent graduates hold positions as welders, welding inspectors or supervisors, and welding sales representatives.

Median Wage for Welders, Cutters, Solderers, and Brazers in South Central Kansas is \$30,905 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)



WELDING TECHNOLOGY CERTIFICATE

Your Butler experience will prepare you to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in various welding and cutting processes, blueprint reading, and metallurgy, all as applied to both ferrous and non-ferrous metals.

Prior to Admission

Students must have appropriate ACT scores or take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math on the ASSET test.

Required Courses

35 Hours

Fall

__OxyFuel Gas Welding	(WE 112)	2
__Cutting Operations	(WE 113)	2
__Welding Methods	(WE 114)	2
__Shielded Arc Welding	(WE 116)	3
__Blueprint Reading (Welding)	(WE 119)	3
__Fundamentals of Welding I	(WE 121)	3
__Gas Tungsten Arc Welding	(WE 215)	3

Spring

__Welding Survey	(WE 111)	3
__Fundamentals of Welding II	(WE 122)	3
__Auto. Arc & Inert Gas Welding	(WE 212)	2
__Welding and Pipefitting	(WE 213)	2
__Welding Problems	(WE 216)	2
__Gas Metal Arc Welding (MIG)	(WE 219)	2
__Metallurgy	(WE 220)	3

Certificate requires 35 credit hours.

Welding Technology

Career Program

Certificate in Welding Technology

Credits Required: 35

Contact: Matt Galbraith, Lead Instructor, at 316.323.6824 or Becki Foster, Technical Advancement Director, at 316.322.3277

Recommendations

These classes are in high demand and fill quickly. Enrollment is limited.

Accreditation

All Instructors are AWS Certified Welding educators.

The Welding Department is a certified participating organization in the AWS SENCE Program

High School Articulation Credit

High Schools must have a signed current articulation on file. Students must also maintain a 3.0 GPA in all Welding courses.

Additional Costs/Tool Requirement

An additional \$25 lab fee is assessed to each program course and subject to change.

Prior to Admission

Students are required to take the ASSET test. Students must score a minimum of 37 Reading, 35 Writing, and 35 Numerical Math.

Recommended Course Sequence

Semester 1: WE 121, WE 112, WE 116, WE 113, WE 114, WE 111, WE 215

Semester 2: WE 122, WE 220, WE 119, WE 219, WE 216, WE 212, WE 213

After Butler

Recent graduates hold positions as welders, welding inspectors or supervisors, and welding sales representatives

Median Wage for Welders, Cutters, Solderers, and Brazers in South

Central Kansas is \$30,905 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)