

WCC General Education Requirements
Effective Fall 2018

Associate degree programs were updated to meet the revised WCC general education requirements below.

Course Distribution Requirements

Associate degree students must complete courses from each of six General Education content areas. The requirements vary, depending on which degree is being earned. The number of general education credit hours required for each degree is as follows.

	AA	AS	AAS
Writing/Composition	3-4 credits	3-4 credits	3-4 credits
2nd Writing/Composition or Communication	3-4 credits	3 credits	3 credits
Mathematics	3-4 credits	3-4 credits	3-4 credits
Natural Sciences ¹	7-8 credits	7-8 credits	3-4 credits
Social & Behavioral Science ²	6 credits	6 credits	3 credits
Arts and Humanities ³	6 credits	6 credits	3 credits
General Education Electives to reach 30 credits	0-2 credits	0-2 credits	N/A
Minimum	30 credits	30 credits	18 credits

¹ Two courses in Natural Science including one with laboratory experience (from two disciplines)

² From two disciplines

³ From two disciplines

Program Information Report

**Welding Technology (APWLDF)
Associate in Applied Science Degree**

Program Effective Term: Fall 2018

High Demand Occupation High Wage Occupation

The Welding Technology program offers specialized welding and fabrication instruction through theoretical, practical and technical learning objectives and strategies. The core curriculum specializes in welding and fabrication and delves into the expanses of welding technology as a whole. Students are first introduced to welding, cutting and fabrication safety; theory and fundamentals; and then transition to more advanced welding and fabrication processes and application, such as weld quality, inspection testing and repair techniques and automated welding and cutting systems and operations. Students who successfully complete this program will have learned a diverse skillset giving them opportunities to enter the workforce as entry-level welders, fabricators, field technicians and positions them for higher learning in welding engineering, welding education or materials science.

Articulation:

Eastern Michigan University, several BS degrees;
Pennsylvania College of Technology, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
<http://www.wccnet.edu/curriculum/articulation/levelone/colleges/>.

First Semester		(14 credits)
Elective	Math Elective(s)	3
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 106	Welding Print Reading	3
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
Second Semester		(13 credits)
WAF 130	Shielded Metal Arc Welding (SMAW)	4
WAF 131	Thermal Cutting, Gouging and Weld Repair	3
WAF 139	Basic Metal Fabrication	3
WAF 140	Inspection and Testing	3
Third Semester		(15 credits)
Elective	Writing Elective(s)	3
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4
Fourth Semester		(12 credits)
Elective	Speech/Comp. Elective(s)	3
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	3
WAF 233	Submerged Arc and Flux Core Arc Welding	3
Fifth Semester		(12 credits)
Elective	Arts/Human. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3
Elective	Soc. Sci. Elective(s)	3
WAF 239	Advanced Metal Fabrication	3

Minimum Credits Required for the Program: 66

Done 1/29/18

**WASHTENAW COMMUNITY COLLEGE
GENERAL EDUCATION REVISION AAS PROGRAM CHANGE FORM 2018-2019**

Program Code: APWLDF	Program Name: Welding Technology
Division Code: ATP	Department: WAF

This form is to be used only for General Education Revision Program Changes for Associate in Applied Science (AAS) programs. Any other program changes should be submitted separately using a standard Program Change Form.

Directions:

- Review each general education area under **Requested Changes** below and respond as needed.
- Attach the semester program layout showing the current program listing from the WCC catalog.
 - Indicate any changes to be made on the semester layout.
 - Draw a line through any courses that should be removed on the semester layout.
 - Write in any courses that need to be added on the semester layout.
- Submit this form and semester program layout to the Office of Curriculum and Assessment (SC 257).

Current General Education Requirements	Revised General Education Requirements 2018-2019
AAS	AAS
Writing 3-4 credits	English Composition 3 - 4 credits
Speech 3 credits	2 nd Course in English Composition or one course in Communication 3 - 4 credits
Mathematics 3 - 4 credits	Mathematics 3 - 4 credits
Natural Sciences 3 - 4 credits	Natural Sciences 3 - 5 credits
Social & Behavioral Sciences 3 credits	Social & Behavioral Sciences 3 credits
Arts & Humanities 3 credits	Arts & Humanities from 3 credits
Critical Thinking 0 credits	Total 18 credits
Computer & Information Literacy 3 credits	
Total 21-24 credits	

Please review each General Education Area in the chart below, and record the needed changes in the chart and on the attached semester program layout.

REQUESTED CHANGES	
General Education Area	
English Composition – The requirement for one writing/English composition course remains the same. No changes will be made unless specifically requested below. (Use Writing Elective or ENG 111)	
Optional Change:	NONE
2 nd Course in English Composition or one course in Communication WCC previously required both a second composition/writing course and a speech course. Your options are:	
<ol style="list-style-type: none"> Allow students to select any course that meets composition/writing or speech (<i>recommended</i>). Require students to take a specific composition course (identify course below and on semester layout). Require students to take a specific communication course (identify course below and on semester layout). 	
Requested Change:	NONE

	Mathematics – The requirement for one mathematics course remains the same. However, the courses that meet the MTA requirement have changed slightly.
	Optional Change: <i>NONE</i>
	Natural Sciences - The requirement for one natural science course remains the same. No changes will be made unless specifically requested below.
	Optional Change: <i>NONE</i>
	Social & Behavioral Sciences – The requirement for one social and behavioral science course remains the same. No changes will be made unless specifically requested below.
	Optional Change: <i>NONE</i>
	Arts & Humanities – The requirement for one arts and humanities course remains the same. No changes will be made unless specifically requested below. (Note: A COM course can be specified here if speech is not required in the area above. It can only count in one area.)
	Optional Change: <i>NONE</i>
	Computer and Information Literacy The requirement for computer and information literacy has been removed. Your options are: <ol style="list-style-type: none"> 1. Continue to require a specific computer course. If a specific course is required in your program, we will leave it there. If you previously used "Computer and Information Literacy Course," you will need to specify either a specific course or a list of courses from which to choose. 2. Remove the computer and information literacy course if the program will still meet the minimum of 60 credit hours. 3. Remove the computer and information literacy course and replace the course with elective or other credits as needed to meet the minimum of 60 credit hours.
	Required Change:

Reviewer	Print Name	Signature	Date
Initiator	<i>Amanda Scheffler</i>	<i>Amanda Scheffler</i>	<i>10-6-17</i>
Department Chair	<i>Melvin Kosz</i>	<i>Melvin Kosz</i>	<i>10-6-17</i>
Division Dean/ Administrator	<i>Brandon Tucker</i>	<i>BT</i>	<i>10/9/17</i>
Vice President for Instruction		<i>[Signature]</i>	<i>1/9/18</i>

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Entered in: Banner *1/29/18* C&A Database *1/29/18* Log File

Program Information Report

Welding Technology (APWLDF)**Associate in Applied Science Degree**Program Effective Term: **Fall 2016****High Demand Occupation High Wage Occupation**

The Welding Technology program offers specialized welding and fabrication instruction through theoretical, practical and technical learning objectives and strategies. The core curriculum specializes in welding and fabrication and delves into the expanses of welding technology as a whole. Students are first introduced to welding, cutting and fabrication safety; theory and fundamentals; and then transition to more advanced welding and fabrication processes and application, such as weld quality, inspection testing and repair techniques and automated welding and cutting systems and operations. Students who successfully complete this program will have learned a diverse skillset giving them opportunities to enter the workforce as entry-level welders, fabricators, field technicians and positions them for higher learning in welding engineering, welding education or materials science.

Articulation:

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

Copies may be obtained from the Counseling Office, a program advisor or the Curriculum and Assessment Office web site:
<http://www.wccnet.edu/curriculum/articulation/levelone/colleges/>

First Semester		(14 credits)
Elective	Math Elective(s)	3-4
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 106	Welding Print Reading	3
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
Second Semester		(16 credits)
Elective	Computer Elective(s)	3
WAF 130	Shielded Metal Arc Welding (SMAW)	4
WAF 131	Thermal Cutting, Gouging and Weld Repair	3
WAF 139	Basic Metal Fabrication	3
WAF 140	Inspection and Testing	3
Third Semester		(15 credits)
Elective	Writing Elective(s)	3-4
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4
Fourth Semester		(12 credits)
Elective	Speech Elective(s)	3
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	3
WAF 233	Submerged Arc and Flux Core Arc Welding	3
Fifth Semester		(12 credits)
Elective	Arts/Human. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3-4
Elective	Soc. Sci. Elective(s)	3
WAF 239	Advanced Metal Fabrication	3
Minimum Credits Required for the Program:		69

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: APWLDF

Program Name: ^{Welding} Technology

Effective Term: Fall 2016

Division Code: ATP Department: WAFD

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

- | | |
|--|---|
| <input type="checkbox"/> Review | <input type="checkbox"/> Program admission requirements |
| <input type="checkbox"/> Remove course(s): _____ | <input type="checkbox"/> Continuing eligibility requirements |
| <input type="checkbox"/> Add course(s): _____ | <input type="checkbox"/> Program outcomes |
| <input type="checkbox"/> Program title (title was ()) | <input type="checkbox"/> Accreditation information |
| <input checked="" type="checkbox"/> Description attached | <input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) |
| <input type="checkbox"/> Type of award | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Advisors | |
| <input type="checkbox"/> Articulation information | |

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

Revise description to better reflect program changes
recent

Financial/staffing/equipment/space implications:

None

List departments that have been consulted regarding their use of this program.

None

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	Amanda Scheffler	<i>Amanda Scheffler</i>	3-11-16
Department Chair	Glenn Kay	<i>Glenn Kay</i>	3-11-16
Division Dean/Administrator	BRANDON TUCKER	<i>[Signature]</i>	3/11/16
Vice President for Instruction	Michael Neaton	<i>[Signature]</i>	4/6/16
President	Rose Bellanca	<i>Rose Bellanca</i>	4/6/16

Do not write in shaded area. Entered in: Banner *7/18/16* C&A Database *7/18/16* Log File *7/18/16* Board Approval *4/26/16*

Please submit completed form to the Office of Curriculum and Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

Approved by BOT 4/26/16

logged 3/22/16 sj
Office of Curriculum & Assessment
done 7/18/16 MO

ACADEMICS

Welding Technology (APWLDF)

Associate in Applied Science Degree

2016 - 2017

Description

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding Technology by completing the requirements below. *See attached.*

Articulation

Eastern Michigan University, several BS degrees;
Pennsylvania College of Technology, BS degree.

Contact Information

Division: Adv Tech/Public Serv Careers
Department: Welding and Fabrication Dept
Advisors: [Bradley Clink](#)
[Bradley Hoth](#)
[Glenn Kay II](#)
[Amanda Scheffler](#)

Requirements

(Items marked in orange are available online.)

First Semester

Class	Title	Credits
WAF 106	Welding Print Reading	3
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
WAF 131	Thermal Cutting, Gouging and Weld Repair	3
Elective(s)	Math	3 - 4
Total		15 - 16

Second Semester

Class	Title	Credits
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 130	Shielded Metal Arc Welding (SMAW)	4
WAF 139	Basic Metal Fabrication	3
WAF 140	Inspection and Testing	3
	Computer Elective(s)	3
Total		15

Third Semester

Class	Title	Credits
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4
Elective(s)	Writing	3 - 4
Total		15 - 16

Fourth Semester

Class	Title	Credits
<u>WAF 150</u>	Automated Welding and Cutting	3
<u>WAF 210</u>	Welding Metallurgy	3
<u>WAF 233</u>	Submerged Arc and Flux Core Arc Welding	3
<u>Elective(s)</u>	<u>Speech</u>	3
Total		12

Fifth Semester

Class	Title	Credits
<u>WAF 239</u>	Advanced Metal Fabrication	3
<u>Elective(s)</u>	<u>Arts and Humanities</u>	3
<u>Elective(s)</u>	<u>Natural Sciences</u>	3 - 4
<u>Elective(s)</u>	<u>Social and Behavioral Science</u>	3
Total		12 - 13

Total Credits Required: 69 - 72

Welding Technology Associate in Applied Science Degree APWLDF

Description:

The Welding Technology program offers specialized welding and fabrication instruction through theoretical, practical and technical learning objectives and strategies. The core curriculum specializes in welding and fabrication and delves into the expanses of welding technology as a whole. Students are first introduced to welding, cutting, and fabrication safety; theory and fundamentals; and then transition to more advanced welding and fabrication processes and applications, such as weld quality, inspection, testing and repair techniques, and automated welding and cutting systems and operations. Students who successfully complete this program will have learned a diverse skillset giving them opportunities to enter the workforce as entry-level welders, fabricators, field technicians and positions them for higher learning in welding engineering, welding education or materials science. |

Program Information Report

Welding Technology (APWLDF)
Associate in Applied Science Degree
Program Effective Term: Fall 2016

High Demand Occupation High Wage Occupation

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding Technology by completing the requirements below.

Articulation:

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

First Semester		(15 credits)
Elective	Math Elective(s)	3-4
WAF 106	Welding Print Reading	3
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
WAF 131	Thermal Cutting, Gouging and Weld Repair	3

Second Semester		(15 credits)
Elective	Computer Elective(s)	3
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 130	Shielded Metal Arc Welding (SMAW)	4
WAF 139	Basic Metal Fabrication	3
WAF 140	Inspection and Testing	3

Third Semester		(15 credits)
Elective	Writing Elective(s)	3-4
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4

Fourth Semester		(12 credits)
Elective	Speech Elective(s)	3
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	3
WAF 233	Submerged Arc and Flux Core Arc Welding	3

Fifth Semester		(12 credits)
Elective	Arts/Human. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3-4
Elective	Soc. Sci. Elective(s)	3
WAF 239	Advanced Metal Fabrication	3

Minimum Credits Required for the Program: 69

PROGRAM CHANGE OR DISCONTINUATION FORM

APWEDT New Code Needed APWLDF
 Program Code: ~~1460~~ Program Name: ~~Welding and Fabrication~~
 Division Code: ~~103~~ Department: WAF
 ATP Welding Technology

Effective Term: Fall 2016

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

- | | |
|---|---|
| <input type="checkbox"/> Review | <input type="checkbox"/> Program admission requirements |
| <input checked="" type="checkbox"/> Remove course(s): WAF 105, 111, 123, 200, 226, 229 | <input type="checkbox"/> Continuing eligibility requirements |
| <input checked="" type="checkbox"/> Add course(s): WAF 109, 125, 126, 130, 131, 139, 140, 150, 230, 231, 232, 233, 239, NCT 120 | <input checked="" type="checkbox"/> Program outcomes Listed on the program assessment planning form |
| <input checked="" type="checkbox"/> Program title Welding and Fabrication ^{Technology} (does not change) | <input type="checkbox"/> Accreditation information |
| <input type="checkbox"/> Description | <input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) |
| <input type="checkbox"/> Type of award Associate in Applied Science Degree | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Advisors Glenn Kay II, Amanda Scheffler, Brad Clink | |
| <input type="checkbox"/> Articulation information | |

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

The changes for this program have been discussed and recommended by the WAF Advisory Committee. This is an update for the program due to the change in welding processes and applications in the local welding industry. The new classes will better prepare WCC students to provide updated welding skills to local employers.

Financial/staffing/equipment/space implications:

The finances for the equipment ~~is~~ from a grant. Staffing does not need to change but will require some training on new equipment. There is space for all new equipment with the planned construction changes to the welding lab and due to newer equipment being smaller than it was 30 years ago.

List departments that have been consulted regarding their use of this program.

United Association of Plumbers and Pipefitters
 Iron Workers Union

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	Amanda Scheffler	<i>Amanda Scheffler</i>	10-29-15
Department Chair	Glenn Kay II	<i>Glenn Kay II</i>	10-29-15
Division Dean/Administrator	Brandon Tueler	<i>Brandon Tueler</i>	11/10/15
Vice President for Instruction		<i>Thomas C. ...</i>	11/25/15
President			

Do not write in shaded area. Entered in: Banner 2/8/16 C&A Database Log File Board Approval NA

Please submit completed form to the Office of Curriculum and Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

Welding (APWLDT)

Associate in Applied Science Degree

2013 - 2014 2014 - 2015 2015 - 2016

Description

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding by completing the requirements listed below.

Articulation

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges.

Contact Information

Division: Adv Tech/Public Serv Careers
Department: Welding and Fabrication Dept
Advisors: [Bradley Hoth](#)
 [Glenn Kay II](#)
 [Amanda Scheffler](#)

Requirements

(Items marked in orange are available online.)

First Semester

Class	Title
<u>Elective(s)</u>	<u>Math</u>
WAF 105	Introduction to Welding Processes
WAF 111	Oxy-fuel Welding
WAF 112	Shielded Metal Arc Welding
Total	

Second Semester

Class	Title
<u>Elective(s)</u>	<u>Speech Computer and Information Literacy</u>
WAF 106	Blueprint Reading for Welders
WAF 128	Advanced Oxy-fuel Welding
WAF 124	Advanced Shielded Metal Arc Welding
Total	

Third Semester

Class	Title
WAF 215	Advanced Gas Tungsten Arc Welding
WAF 288	Gas Metal Arc Welding
<u>Elective(s)</u>	<u>Art and Humanities Writing</u>
<u>Elective(s)</u>	<u>Computer and Information Literacy</u>
Total	

Fourth Semester

Class	Title
<u>Elective(s)</u>	<u>Social and Behavioral Science Speech</u>

Credits	
3-4	+ WAF 109 Welding Safety and OSHA Regulations 2 cr.
2	+ WAF 125 Introduction to Welding Processes I 2 cr.
4	+ WAF 126 Introduction to Welding Processes II 2 cr.
3	+ WAF 131 Thermal Cutting, Grinding and Weld Repair 3 cr.
13-14	
15-16	

Credits	
3	+ NCT 120 Introduction to 2D ^{CAD/CAM} Programming and Applications 2 cr.
3	+ WAF 130 Shielded ARC Metal Arc Welding (SMAW) 4 cr.
4	+ WAF 139 Basic Metal Fabrication 3 cr.
3	+ WAF 140 Inspection and Testing 3 cr.
14	
15	

Credits	
4	+ WAF 230 Advanced Shielded ARC Metal Arc Welding (SMAW) 4 cr.
4	+ WAF 231 Gas Tungsten Arc Welding (GTAW) 4 cr.
3-4	+ WAF 232 Semi-Automatic Welding Processes 4 cr.
3	
15-16	

Credits
3

~~WAF 200~~ Layout Theory Welding
 WAF 210 Welding Metallurgy
~~WAF 226~~ Specialized Welding Procedures
 Total

→ + WAF 150 Automated Welding and cutting 3cr.
 3
 + + WAF 233 Submerged Arc and Flux Core Arc Welding 3cr.
 → 12

Fifth Semester

Class	Title	Credits
WAF 227	Basic Fabrication	3
WAF 228	Shape Cutting Operations	3
	WAF 239 Advanced Metal Fabrication	3
Elective(s)	Natural Sciences	3 - 4
Elective(s)	Writing Arts and Humanities + Social Sciences	3 → 3
Total		12 + 3 15
	Total Credits Required:	66 - 60 69 - 72

Program Information Report

(APWLDT)

School of Advanced Manufacturing Systems

Whether your interest is in manufacturing or automation, the programs in the School of Advanced Manufacturing Systems will fit your needs. Maintain and troubleshoot the machines that make commercial goods by specializing in one or more aspects of the machining industry. Develop entry level or advanced skills in electronics, automation hydraulics or numerical controls.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate, and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, an advanced certificate (if one exists) and General Education requirements.

Other Options for Advanced Manufacturing Systems

Program Information Report

Welding (APWLDT)

Associate in Applied Science Degree

Program Effective Term: Fall 2015

High Demand Occupation High Wage Occupation

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding by completing the requirements listed below.

Articulation:

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
<http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges>.

First Semester		(13 credits)
WAF 105	Introduction to Welding Processes	2
WAF 111	Oxy-fuel Welding	4
WAF 112	Shielded Metal Arc Welding	4
	Math Elective(s)	3-4
Second Semester		(14 credits)
WAF 106	Blueprint Reading for Welders	3
WAF 123	Advanced Oxy-fuel Welding	4
WAF 124	Advanced Shielded Metal Arc Welding	4
	Speech Elective(s)	3
Third Semester		(14 credits)
WAF 215	Advanced Gas Tungsten Arc Welding	4
WAF 288	Gas Metal Arc Welding	4
	Arts/Human. Elective(s)	3
	Computer Lit. Elective(s)	3
Fourth Semester		(13 credits)
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 226	Specialized Welding Procedures	4
	Soc. Sci. Elective(s)	3
Fifth Semester		(12 credits)
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
	Nat. Sci. Elective(s)	3-4
	Writing Elective(s)	3-4
Minimum Credits Required for the Program:		66

Program Information Report**School of Automotive and Motorcycle Technology**

If you are looking for the best technical training in the automotive or motorcycle field, WCC's School of Automotive and Motorcycle Technology is the place for you. Whether your focus is finding employment as a technician, learning about performance equipment, or creating a custom look, our introductory and advanced certificate programs, as well as associate degrees, will enhance your personal and professional qualifications. These programs offer the perfect blend of classroom and hands-on education not available in many other educational settings.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate (if one exists), and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate and General Education requirements.

Other Options for Automotive and Motorcycle Technology

Program Information Report

Welding (APWLDT)

Associate in Applied Science Degree

Program Effective Term: Fall 2015

High Demand Occupation High Wage Occupation

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding by completing the requirements listed below.

Articulation:

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
<http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges>.

First Semester		(13 credits)
WAF 105	Introduction to Welding Processes	2
WAF 111	Oxy-fuel Welding	4
WAF 112	Shielded Metal Arc Welding	4
	Math Elective(s)	3-4
Second Semester		(14 credits)
WAF 106	Blueprint Reading for Welders	3
WAF 123	Advanced Oxy-fuel Welding	4
WAF 124	Advanced Shielded Metal Arc Welding	4
	Speech Elective(s)	3
Third Semester		(14 credits)
WAF 215	Advanced Gas Tungsten Arc Welding	4
WAF 288	Gas Metal Arc Welding	4
	Arts/Human. Elective(s)	3
	Computer Lit. Elective(s)	3
Fourth Semester		(13 credits)
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 226	Specialized Welding Procedures	4
	Soc. Sci. Elective(s)	3
Fifth Semester		(12 credits)
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
	Nat. Sci. Elective(s)	3-4
	Writing Elective(s)	3-4
Minimum Credits Required for the Program:		66

Program Information Report**School of Construction Technology**

Become part of the global community of skilled trades' professionals or skilled trades' managers. Design, plan, construct and complete structures for your home or for your career. You can earn a certificate or degree in Construction, Construction Management, Sustainable Building Practices or Heating, Ventilation and Air Conditioning. These programs offer the perfect blend of classroom education and hands-on training. At the Henry S. Landau Skilled Trades Center, you will be taught construction skills from the ground up. You can learn classic skills such as woodworking or modern techniques needed to maintain or improve your own structure. The HVAC program offers a wide range of training to equip high-end technicians with the knowledge and skills needed for successful entry into the field.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, an advanced certificate, and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, an advanced certificate (if one exists) and General Education requirements.

Welding and Fabrication

Learn skills from beginning welding to advanced fabrication for a career as a welding maintenance mechanic.

Program Information Report

Welding (APWLDT)**Associate in Applied Science Degree**Program Effective Term: **Fall 2015****High Demand Occupation High Wage Occupation**

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding by completing the requirements listed below.

Articulation:

Eastern Michigan University, several BS degrees;
 Pennsylvania College of Technology, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
<http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges>.

First Semester		(13 credits)
WAF 105	Introduction to Welding Processes	2
WAF 111	Oxy-fuel Welding	4
WAF 112	Shielded Metal Arc Welding	4
	Math Elective(s)	3-4
Second Semester		(14 credits)
WAF 106	Blueprint Reading for Welders	3
WAF 123	Advanced Oxy-fuel Welding	4
WAF 124	Advanced Shielded Metal Arc Welding	4
	Speech Elective(s)	3
Third Semester		(14 credits)
WAF 215	Advanced Gas Tungsten Arc Welding	4
WAF 288	Gas Metal Arc Welding	4
	Arts/Human. Elective(s)	3
	Computer Lit. Elective(s)	3
Fourth Semester		(13 credits)
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 226	Specialized Welding Procedures	4
	Soc. Sci. Elective(s)	3
Fifth Semester		(12 credits)
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
	Nat. Sci. Elective(s)	3-4
	Writing Elective(s)	3-4
Minimum Credits Required for the Program:		66

Welding (APWLDT)

Associate in Applied Science Degree

Program Effective Term: Fall 2004

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. Students can earn an AAS in Welding by completing the requirements listed below.

Continuing Eligibility Requirements:

Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

General Education Requirements (18 credits)

Writing	Elective(s)	3-4
Speech	Elective(s)	3
Math	Elective(s)*	3-4
Nat. Sci.	Elective(s)	3-4
Soc. Sci.	Elective(s)	3
Arts/Human.	Elective(s)	3

*MTH 107 is recommended.

Major/Area Requirements (45 credits)

	Complete the Welding Certificate (21 credits).	
WAF 105	Welding for Art & Engineering	2
WAF 106	Blueprint Reading for Welders	3
WAF 111	Welding I Oxy-Acetylene	4
WAF 112	Welding II Basic ARC	4
WAF 123	Welding III Advanced Oxy-Acetylene (OAW)	4
WAF 124	Welding IV Advanced ARC (SMAW)	4
	Complete the Welding Mechanics Advanced Certificate (24 credits).	
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 215	Welding V Advanced GTAW & GMAW	4
WAF 226	Specialized Welding Procedures	4
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
WAF 289	MIG Welding	4

Minimum Credits Required for the Program: 63

**WASHTENAW COMMUNITY COLLEGE
PROGRAM CHANGE FORM**

Program Code: Program Name:

Effective Term:

APWLDT Welding (Associate In Applied Science)

Fall 2003

Directions: Attach the current program listing from the WCC catalog and indicate any changes that you would like to make. Draw lines through anything that should be removed and write in any additions. Extensive narrative changes may be included on a separate sheet. Check the boxes below for each type of change being proposed. If you are making changes to courses or proposing new courses as part of this proposal, they must be approved separately using a Course-Syllabus Approval Form (CSAF).

1. Requested Changes:

- | | |
|--|--|
| <input type="checkbox"/> Remove _____ Course(s) | <input type="checkbox"/> Advisors |
| <input checked="" type="checkbox"/> Add <u>1</u> Course(s) (WAF 226) | <input type="checkbox"/> Articulation Agreements |
| <input checked="" type="checkbox"/> Total Credits: Current Credits <u>60</u> After Changes <u>64</u> | <input type="checkbox"/> Program Admission Requirements |
| <input type="checkbox"/> Course Sequencing | <input type="checkbox"/> Continuing Eligibility Requirements |
| <input type="checkbox"/> Name (new name _____) | <input type="checkbox"/> Footnotes |
| <input type="checkbox"/> Description | <input type="checkbox"/> Other _____ |

Show all changes on the attached program sheet.

2. Rationale for Proposed Changes:

Course was removed from advanced certificate program and should not have been.

3. Financial/Staffing/Equipment/Space Implications:

4. Has the department consulted with all departments that may be impacted? Yes No NA

Comments:

Signatures:

Reviewer	Print Name	Signature	Date
Program Change Initiator:			
Department Chair:	Bill Figg	<i>William H. Figg</i>	12-20-02
Division Dean:	Granville Lee	<i>Granville Lee</i>	12/20/02
Executive Vice President, Instruction	<i>Roger M. Palmy</i>	<i>Roger M. Palmy</i>	1/6/03

Processed ...

Access Program File 1/6/03 *fr* Log 1/6

Copied and Returned 12/20/02
New Listing to: Counseling, Admissions,
Office of Curriculum & Articulation Services

Welding

Welding (APWLDT) Associate in Applied Science Degree

'UNDER CONSTRUCTION'

Program Effective Term: Fall 2003

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an AAS in Welding by completing the requirements listed below.

Health and Applied Technologies Division Welding and Fabrication Department

Advisors: William Figg, Clyde Hall

Continuing Eligibility Requirements:

Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

Requirements

- | | |
|---|-------|
| 1. Complete the Welding Technology Certificate (CTWLDC). | 21 |
| 2. Complete the Welding Technology Advanced Certificate (APWLDT). | 24 |
| 3. Complete one Group I course from each of the six General Education Areas** | 18-21 |

Minimum Credits Required for the Program: 63

Footnotes:

*For Area 3: MTH 107 is recommended.

Welding (APWLDM) Associate in Applied Science Degree

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an AAS in Journeyman Industrial, by completing the requirements listed below.

Welding Department

Advisors: Bill Figg, Clyde Hall

<u>Requirement</u>	<u>Credit Hours</u>
--------------------	---------------------

General Education Requirements	(18-20 credits)
---------------------------------------	------------------------

Complete one course from each of the six General Education Areas for the AAS.

Major/Area Requirements	(43 credits)
--------------------------------	---------------------

Complete the Welding Technology Certificate.....	21
Complete the Welding Technology Advanced Certificate.....	20
Complete 2 additional credits in Welding (WAF)	2

Credits Required for the Program:.....61-63

Recommended General Education Courses:
Area 3: MTH 107

Washtenaw Community College does not discriminate on the basis of race, sex, color, religion, national origin, age, disability, height, weight, marital status, or veteran status in provision of its educational programs and services or in employment opportunities and benefits. WCC is committed to compliance in all of its activities and services with the requirements of Title IX of the Educational Amendments of 1972, Public Act 453, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964 as amended, Public Act 220, and the Americans with Disabilities Act of 1990.

Inquiries concerning programs and services under Title IX and Section 504, and the Americans with Disabilities Act should be directed to the Office of the Dean of Student Services; Room 225A, Student Center Building, 734- 973-3536. Inquiries regarding compliance in employment should be directed to the College Affirmative Action Officer in the Office of Human Resource Management, Room 120, Business Education Building, 934- 973-3497. Inquiries concerning access to facilities should be directed to the Director of Plant Operations, Plant Operations Building, 734- 677-5300.

**Washtenaw Community College
Program Change Request Form**

Program Code: WLDT Program Title: Welding Technology

Effective Year: Fall 2000

1. Course Related Program Changes:

Course	Course Title	Elective Group (if applicable)	Credit	Sem	Change(s)
	See Attached Sheet				Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)
					Remove <input type="checkbox"/> Add <input type="checkbox"/> Change Title <input type="checkbox"/> <input type="checkbox"/> Change Credit (was: _____) <input type="checkbox"/> Shift in Sequence (was: _____)

2. Total Credit Hours for Program: Before Proposed Changes: _____ After Proposed Changes: _____

Non-Course Related Program Changes: (description, advisors, admission criteria, title, etc.) Change degree from Associate in Technical Studies degree to Associate in Applied Science degree.

4. Rationale for Proposed Changes: Reconfigure program to meet General Education Requirements. No longer have the ATS degree option.

5. Financial/Staffing/Equipment/Space Implications:

6. Has the department consulted with all departments that may be impacted? Yes No NA

7. Signatures:

Reviewer	Print Name	Signature	Date
Program Change Initiator:			
Department Chair:	William Figg		
Division Dean:	Roger Bertoia		
VP, Instruction/Student Services:	Dr. Guy Altieri		

If significant changes are proposed, please attach a copy of the most recent program listing from the College Bulletin with changes marked on it. If courses are being changed as part of this proposal, course changes must be approved using the Course/Syllabus Approval Form.

Program Specialty Courses	(28 Credits)
WAF 111 Welding I Oxy-Acetylene.....	4
WAF 112 Welding II Basic ARC.....	4
WAF 123 Welding III Advanced OAW.....	4
WAF 124 Welding IV Advanced SMAW.....	4
WAF 200 Layout Theory Welding.....	2
WAF 210 Welding Metallurgy.....	3
WAF 215 Welding V Advanced GTAW & GMAW.....	4
WAF 227 Basic Fabrication.....	3
Minimum Credits Required:	34

Welding Technology (WLDT)

~~Associate in Technical Studies Degree~~

AAS

This program prepares you for jobs as a welding and fabrication technician or positions as a foreman, sales representative, or specialist. You'll apply your welding skills to the assembly of a variety of structures, from machinery frames, tanks, and pressure vessels to furnace shells and building and bridge parts.

Advisors: William Figg, Clyde Hall

Program Admission Requirements:

One year of high school algebra (Algebra I), or MTH 097, or equivalent score on math placement test

<u>Course Number</u>	<u>Course Title</u>	<u>Credit Hours</u>
General Courses		(17 Credits)
CIS 100	Introduction to Computers.....	3
MTH 177	Triangle Trigonometry.....	3
PLS 112	Introduction to American Government.....	3
PSY 100	Introductory Psychology.....	3
Elective	Select one course: ENG 100 or ENG 111.....	4
Elective *	Humanities Elective.....	1

KEEP
* NEED ASO SPEECH

Technical Edu

Trade Related In

Apprentice and

Apprenticeship training combines classroom instruction to ensure confidence and precision. Many apprenticeships to train workers in a ship program are hired in jobs paid a percentage of the job (an apprenticeship) rate, until as skills are mastered. The experienced worker and also

The purpose of the Trade Related employers with the opportunity that assist their employees provides related instruction for of Technical Training will visiting firms to meet their requirements has been approved by the Federal the U.S. Department of Labor the Director of Technical Training participate.

Pre-Apprenticeship Training

If you would like to enter a program passed the required entrance Director of Technical Training curriculum can be arranged to entrance examinations. Please the mutual discretion of entering representing the involved skill

Mechanics

Welding maintenance together according to lay-welding or brazing and any program also gives you Associate in Technical

Program Specialty Courses

(38 Credits)

WAF 106	Blueprint Reading for Welders.....	3
WAF 111	Welding I Oxy-Acetylene.....	4
WAF 112	Welding II Basic ARC.....	4
WAF 123	Welding III Advanced OAW.....	4
WAF 124	Welding IV Advanced SMAW.....	4
WAF 200	Layout Theory Welding.....	2
WAF 210	Welding Metallurgy.....	3
WAF 215	Welding V Advanced GTAW & GMAW.....	4
WAF 226	Specialized Welding Procedures.....	4
WAF 227	Basic Fabrication.....	3
WAF 229	Shape Cutting Operations.....	3

Program Related Courses

(16.5 Credits)

FLP 111	Fluid Power Fundamentals.....	4
HSC 131A	Community CPR.....	0.5
IND 100	Technical Drawing.....	4
IND 112	Descriptive Geometry.....	4
MTT 100	Machine Shop Theory.....	4

Minimum Credits Required:

71.5

*Choose from list of humanities courses in the WCC Catalog that meet core elements 13 and 14 (see p. 60).

DELETE

Credit Hours

(6 Credits)

.....3
.....3

(28 Credits)

.....4
.....4
.....4
.....4
.....2
.....3
.....4
& GMAW.....4
.....3

34

Technical Education Department

Trade Related Instruction

Apprentice and Employee Training

Apprenticeship training combines on-the-job training with related classroom instruction to ensure that apprentices master skills with confidence and precision. More than 300 occupational areas use

**WASHTENAW COMMUNITY COLLEGE
PROGRAM CHANGE REQUEST**

(1) Program Title: Welding Technology Program Number: WLDT Effective Term: Fall 93
 (2) Change Information:

Current Program Course Requirements:			Proposed Program Course Requirements		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
				see attached sheet	
Current Total Credits:			Proposed Total Credits:		
Non-Course Program Requirements:			Non-Course Program Requirements:		

(3) Rationale for Proposed Changes: to meet core curriculum

(4) Financial/Staffing/Resource Implications of Change

(5) Has this program change been reviewed by all affected instructional departments? yes _____ no _____

(6) Signatures	Comments	Signature	Date
Program Change Initiator			
Department Chair(s) or Area Director(s)			
Dean(s)			
VP for Instruction/Student Services			

CORE CURRICULUM PROGRAM ASSESSMENT

To be used to complete Core Curriculum Project and to be included in the 1993-94 College Catalog.

Welding Technology Associate in Technical Studies Degree Program: Code WLDT

Full-Time Sequence*	Course Title	Credit Hours
------------------------	--------------	-----------------

First Semester

BPR 106	Blueprint Reading for Welders.....	3
ENG	Restricted ENG Requirement (601, 100 or 111).....	4
MET 100	Machine Shop Theory	3
WAF 111	Basic Oxy-Acetylene Welding.....	4
WAF 112	Basic Arc Welding	<u>4</u>
		18

Second Semester

IND 100	Technical Drawing.....	4
MTH 177	Triangle Trigonometry.....	3
WAF 123	Advanced Oxy-Acetylene Welding	4
WAF 124	Advanced Arc Welding	4
WAF 200	Layout for Welders	<u>2</u>
		17

Spring/Summer Semester

SCI 100	Intro to Natural Sciences or	
HSC 131	CPR/FPR and First Aid.....	1.5
Elective	Restricted Humanities Elective *.....	<u>1-3</u>
		2-4

1.5 COURSE TO BE
REVIEWED
JULY 29

Third Semester

IND 112	Descriptive Geometry	4
PSY 150	Industrial Psychology.....	3
WAF 210	Welding Metallurgy.....	3
WAF 215	Advanced TIG and MIG Welding	4
WAF 227	Basic Fabrication.....	<u>3</u>
		17


Fourth Semester

CIS 100	Intro to Computers	3
FLP 111	Fluid Power Fundamentals	4
PLS 108	Government and Society.....	3
WAF 226	Specialized Welding Procedures	4
WAF 229	Shape Cutting Operations	<u>3</u>
		17

Total credit hours for program: 71-73

*An advisor or counselor can suggest a part-time sequence.

Signatures

Department Chair	Date
	7/22/93
Dean	Date

memo3

Welding Technology

Associate in Technical Studies Degree Program: Code WLDT

Advisors: William Figg and Clyde Hall

This program provides career training as a welding and fabrication technician. Persons planning careers as welders or cutters need manual dexterity, good eyesight, and good coordination. They should be able to concentrate on detailed work for long periods. These technicians position, fit, and weld fabricated, cast, and forged components to assemble structural forms such as machinery frames, tanks, pressure vessels, furnace shells, and building and bridge parts according to blueprints and knowledge of welding characteristics of metal. They also select equipment and plan layout, assembly and welding, and apply their knowledge of geometry, physical properties of metal, effects of heat, allowances for thicknesses, machining weld shrinkage, and welding techniques. They lay out, position, align, and fit components together and secure parts in position for welding. They set up equipment and welding parts using arc, gas-shielded arc, TIG and MIG, or gas-welding equipment. Assembling and repairing parts or products by using a cutting torch, straightening press and handbrake are also components of this technician's job. Upon completion of this program, students can also be foremen, sales representatives, or specialists.

Course Number	Course Title	Credit Hours
First Semester		
WAF 106	Blueprint Reading for Welders	3
ENG	Restricted ENG Requirement (100 or 111)	4
MET 100	Machine Shop Theory	3
WAF 111	Basic Oxy-Acetylene Welding	4
WAF 112	Basic Arc Welding	4
		18
Second Semester		
IND 100	Technical Drawing	4
MTH 177	Triangle Trigonometry	3
WAF 123	Advanced Oxy-Acetylene Welding	4
WAF 124	Advanced Arc Welding	4
WAF 200	Layout for Welders	2
		17
Spring/Summer Semester		
HSC 131A	CPR/EPR and First Aid <i>Community CPR</i>	1.5
Elective	Restricted Humanities Elective *	1-3
		2-4
		1.5-3.5
Third Semester		
IND 112	Descriptive Geometry	4
PSY 150	Industrial Psychology	3
WAF 210	Welding Metallurgy	3
WAF 215	Advanced TIG and MIG Welding	4
WAF 227	Basic Fabrication	3
		17
Fourth Semester		
CIS 100	Intro to Computers	3
FLP 111	Fluid Power Fundamentals	4
PLS 108	Government and Society	3
WAF 226	Specialized Welding Procedures	4
WAF 229	Shape Cutting Operations	3
		17
70.5-72.5		
Total credit hours for program: 71-73		

Program: WLDT Welding Technology ATS (93)

Additional Courses
Required for Element #

Course #	Title	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WAF 106	BPR for Welders																								
MET 100	Machine Shop Theory																								
WAF 111	Oxy-acetylene Weld					XX		XX										XX	XX	XX					
WAF 112	Arc Welding					XX														XX	XX				
IND 100	Technical Drawing								XX	XX	XX														
WAF 123	Adv Oxy-acetylene	XX				XX															XX	XX			
WAF 124	Adv Arc Welding					XX		XX												XX	XX	XX			
WAF 200	Layout Theory Weld				XX	XX															XX	XX			
IND 112	Descriptive Geom					XX		XX		XX															
WAF 210	Weld Metalurgy					XX		XX													XX	XX			
WAF 215	Adv Tig Mig Weld					XX															XX	XX			
WAF 227	Basic Fabrication				XX	XX		XX													XX	XX			
FLP 111	Fluid Power Fund					XX															XX	XX			
WAF 226	Special Weld Proced					XX		XX													XX	XX			
WAF 229	Shape Cutting Oper																								
Select from among:																									
ENG 100	Communication Skills	XX	XX	XX						XX	XX	XX													
ENG 111	Composition I	XX	XX	XX						XX	XX	XX	XX												
MTH 177	Triangle Trig				XX	XX				XX	XX	XX													
HSC 131A	Community CPR									XX							XX								
PSY 150	Industrial Psych							XX	XX							XX						XX			
CIS 100	Intro To Comp							XX			XX	XX								XX	XX	XX			
PLS 108	Gov And Society	XX						XX														XX	XX	XX	XX
HUM ELEC	1.0 CR required																								

Prereq: 4.0 MTH 097
HSC 131B 07
HSC 131B 16

Select from among:

+
HUM LIST XX XX

Core Element -----> 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
 Core Elements Satisfied: XX
 Core Elements Not Satisfied:

Total Credit Hours Required: 70.5
 Prerequisite Credit Hours: 4.0 (not listed as program requirements)

Program: WLDT Welding Technology ATS (93)

Additional Courses
Required for Element #

Course #	Title	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
MET 100	Machine Shop Theory																									
WAF 111	Oxy-acetylene Weld					XX		XX											XX	XX	XX					
WAF 112	Arc Welding					XX															XX	XX				
IND 100	Technical Drawing							XX	XX	XX																
WAF 123	Adv Oxy-acetylene	XX				XX		XX													XX	XX				
WAF 124	Adv Arc Welding					XX		XX													XX	XX	XX			
WAF 200	Layout Theory Weld					XX	XX															XX	XX			
IND 112	Descriptive Geom					XX		XX		XX																
WAF 210	Weld Metalurgy					XX		XX														XX	XX			
WAF 215	Adv Tig Mig Weld					XX																XX	XX			
WAF 227	Basic Fabrication					XX	XX		XX													XX	XX			
FLP 111	Fluid Power Fund					XX																XX	XX			
WAF 226	Special Weld Proced					XX		XX															XX	XX		
WAF 229	Shape Cutting Oper																									

Select from among:

ENG 100	Communication Skills	XX	XX	XX								XX	XX														
ENG 111	Composition I	XX	XX	XX								XX	XX	XX	XX												
MTH 177	Triangle Trig				XX	XX				XX	XX	XX															
HSC 131	Cardio Pulm Resus																										
PSY 150	Industrial Psych							XX	XX																		
CIS 100	Intro To Comp									XX		XX	XX									XX	XX	XX			
PLS 108	Gov And Society	XX								XX																	

Prereq: 4.0 MTH 097

Select from among:

+																												
HUM LIST																												

Core Element ----->	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Core Elements Satisfied:	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Core Elements Not Satisfied:																									

Total Credit Hours Required: 71.0
 Prerequisite Credit Hours: 4.0 (not listed as program requirements)

Program: WLDT Welding Technology ATS (93)

Additional Courses
Required for Element #

Course #	Title	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MET 100	Machine Shop Theory																								
WAF 111	Oxy-acetylene Weld					XX		XX											XX	XX	XX				
WAF 112	Arc Welding					XX														XX	XX				
IND 100	Technical Drawing								XX	XX	XX														
MTH 177	Triangle Trig				XX	XX			XX	XX	XX														
WAF 123	Adv Oxy-acetylene	XX				XX		XX												XX	XX				
WAF 124	Adv Arc Welding					XX		XX												XX	XX	XX			
WAF 200	Layout Theory Weld				XX	XX															XX	XX			
IND 112	Descriptive Geom					XX		XX		XX															
PSY 150	Industrial Psych						XX	XX								XX						XX			
WAF 210	Weld Metalurgy					XX		XX												XX	XX				
WAF 215	Adv Tig Mig Weld					XX														XX	XX				
WAF 227	Basic Fabrication				XX	XX		XX												XX	XX				
FLP 111	Fluid Power Fund					XX														XX	XX				
PLS 108	Gov And Society	XX						XX														XX	XX	XX	XX
WAF 226	Special Weld Proced					XX		XX												XX	XX				
WAF 229	Shape Cutting Oper																								

Prereq: 4.0 MTH 097

Select from among:

ENG 091	Writing Fundamental	XX	XX					XX																	
ENG 100	Communication Skills	XX	XX	XX					XX	XX															
ENG 111	Composition I	XX	XX	XX				XX	XX	XX	XX														

Core Element ----->	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Core Elements Satisfied:	XX		XX	XX	XX	XX	XX	XX	XX						XX		XX	XX	XX		XX	XX	XX	XX
Core Elements Not Satisfied:		XX								XX	XX	XX	XX	XX		XX								

Total Credit Hours Required: 66.0
Prerequisite Credit Hours: 4.0 (not listed as program requirements)

Program: WLDT Welding Technology ATS (93)

Additional Courses
Required for Element #

Course #	Title	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MET 100	Machine Shop Theory																								
WAF 111	Oxy-acetylene Weld					XX		XX											XX	XX	XX				
WAF 112	Arc Welding					XX														XX	XX				
IND 100	Technical Drawing								XX	XX	XX														
MTH 177	Triangle Trig				XX	XX			XX	XX	XX														
WAF 123	Adv Oxy-acetylene	XX				XX		XX												XX	XX				
WAF 124	Adv Arc Welding					XX		XX												XX	XX	XX			
WAF 200	Layout Theory Weld				XX	XX															XX	XX			
IND 112	Descriptive Geom					XX		XX		XX															
PSY 150	Industrial Psych						XX	XX								XX						XX			
WAF 210	Weld Metalurgy					XX		XX													XX	XX			
WAF 215	Adv Tig Mig Weld					XX															XX	XX			
WAF 227	Basic Fabrication				XX	XX		XX													XX	XX			
FLP 111	Fluid Power Fund					XX															XX	XX			
PLS 108	Gov And Society	XX						XX														XX	XX	XX	XX
WAF 226	Special Weld Proced					XX		XX													XX	XX			
WAF 229	Shape Cutting Oper																								

Prereq: 4.0 MTH 097

Select from among:

ENG 091	Writing Fundamental	XX	XX					XX																	
ENG 100	Communication Skills	XX	XX	XX					XX	XX															
ENG 111	Composition I	XX	XX	XX					XX	XX	XX	XX													

Core Element ----->	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Core Elements Satisfied:	XX	XX	XX	XX	XX	XX	XX	XX	XX						XX		XX	XX	XX	XX	XX	XX	XX	XX	XX
Core Elements Not Satisfied:		XX									XX	XX	XX	XX	XX	XX									XX

Total Credit Hours Required: 66.0

Prerequisite Credit Hours: 4.0 (not listed as program requirements)