

Program Information Report

Welding and Fabrication Advanced Applications (CVWLDN)

Advanced Certificate

Program Effective Term: Fall 2016

High Demand Occupation High Wage Occupation

This advanced certificate combines welding fundamentals with more complex welding, cutting and fabrication techniques and applications aimed to further develop one's skills and core competencies. Students focus on welding using processes and positions common in industry, perform destructive and non-destructive testing, identify weld failures and perform root cause analysis, executive repair techniques, perform advanced fabrication techniques and execute automated welding and cutting programming and operations. Students who successfully complete this advanced certificate will have learned a broad range of essential skillsets critical to the trade and how to apply those skills to manufacturing, automotive, construction, aerospace, oil, military industry, gas and power industries.

Articulation:

Eastern Michigan University, several BS degrees.

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>.

Program Admission Requirements:

Successful completion of the Welding and Fabrication Principles Certificate (CTWLDS).

Continuing Eligibility Requirements:

WAF 233 and WAF 239 require a Math Level 2.

Major/Area Requirements		(24 credits)
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	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
WAF 233	Submerged Arc and Flux Core Arc Welding	3
WAF 239	Advanced Metal Fabrication	3

Minimum Credits Required for the Program: 24

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: CVWLDN
 Program Name: Welding and Fabrication Advanced Applications
 Division Code: ATP Department: WAFD

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 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 Schreffler	<i>Amanda Schreffler</i>	3-11-16
Department Chair	Glenn Kay	<i>Glenn Kay</i>	3-11-16
Division Dean/Administrator	BRANDON TUCKER	<i>Brandon Tucker</i>	3/11/16
Vice President for Instruction	Richard A. NEALON	<i>Richard A. Nealon</i>	4/6/16
President	Rose Bellanca	<i>Rose B. Bellanca</i>	4/6/16

Do not write in shaded area. Entered in: Banner C&A Database Log File Board Approval

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 11/16/15 sj
 Office of Curriculum & Assessment
done 7/8/16 MD

ACADEMICS

Welding and Fabrication Advanced Applications (CVWLDN)

Advanced Certificate

2016 - 2017

Description

This program prepares students for jobs as a welding maintenance mechanic where students weld metal parts together according to layouts, blueprints or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward WCC's associate degree. *See attached.*

Articulation

Eastern Michigan University, several BS degrees.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:
www4.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges

Admissions Requirements

Successful completion of the Welding and Fabrication Principles Certificate (CTWLDS).

Continuing Eligibility

WAF 233 and WAF 239 require a Math Level 2.

Contact Information

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

Requirements

(Items marked in orange are available online.)

Major/Area Requirements

Class	Title	Credits
<u>WAF 150</u>	Automated Welding and Cutting	3
<i>232</i> <u>WAF 210</u>	Welding Metallurgy	3
<u>WAF 230</u>	Advanced Shielded Metal Arc Welding (SMAW)	4
<u>WAF 231</u>	Gas Tungsten Arc Welding (GTAW)	4
<i>150</i> <u>WAF 232</u>	Semi-Automatic Welding Processes	4
<i>232</i> <u>WAF 233</u>	Submerged Arc and Flux Core Arc Welding	3
<i>232</i> <u>WAF 239</u>	Advanced Metal Fabrication	3
Total		24
Total Credits Required:		24

Welding and Fabrication Advanced Applications CVWLDN

Description:

This advanced certificate combines welding fundamentals with more complex welding, cutting and fabrication techniques and applications aimed to further develop one's skills and core competencies. Students focus on welding using processes and positions common in industry, perform destructive and non-destructive testing, identify weld failures and perform root cause analysis, execute repair techniques, perform advanced fabrication techniques and execute automated welding and cutting programming and operations. Students who successfully complete this advanced certificate will have learned a broad range of essential skillsets critical to the trade and how to apply those skills to the manufacturing, automotive, construction, aerospace, oil, military industry, gas and power industries.

Program Information Report

Welding and Fabrication Advanced Applications (CVWLDN)

Advanced Certificate

Program Effective Term: Fall 2016

High Demand Occupation High Wage Occupation

This program prepares students for jobs as a welding maintenance mechanic where students weld metal parts together according to layouts, blueprints or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward WCC's associate degree.

Articulation:

Eastern Michigan University, several BS degrees.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www4.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges>.

Program Admission Requirements:

Successful completion of the Welding Certificate (CTWLDS).

Continuing Eligibility Requirements:

WAF 233 and WAF 239 require a Math Level 2.

Major/Area Requirements		(24 credits)
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	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
WAF 233	Submerged Arc and Flux Core Arc Welding	3
WAF 239	Advanced Metal Fabrication	3

Minimum Credits Required for the Program: 24

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: ~~CVWLDA~~ **CVWLDN** Program Name: ~~Welding Mechanics~~ **Welding and Fabrication Advanced Applications** 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 checked="" type="checkbox"/> Remove course(s): WAF 200, 215, 226, 227, 229, 288	<input type="checkbox"/> Continuing eligibility requirements
<input checked="" type="checkbox"/> Add course(s): WAF 150, 230, 231, 232, 233, 239	<input checked="" type="checkbox"/> Program outcomes Listed on the Program Assessment Planning Form
<input checked="" type="checkbox"/> Program title: Advanced Certificate in WAF (does not change)	<input type="checkbox"/> Accreditation information
<input type="checkbox"/> Description: Welding and Advanced Applications	<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 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		11-13-15
Department Chair	Glenn Kay		11-16-15
Division Dean/Administrator	Brandon Tucker		11/16/15
Vice President for Instruction	Michael Nealon		12/14/15
President	_____	_____	_____

Do not write in shaded area. Entered in: Banner ^{2/5/16} C&A Database Log File Board Approval

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.

ACADEMICS

Welding Maintenance Mechanic

Advanced Certificate

2013 - 2014 2014 - 2015 2015 - 2016

Description

This program prepares students for jobs as a welding maintenance mechanic where students weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward an Associate in Applied Science Degree in Welding.

Articulation

Eastern Michigan University, several BS degrees.

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.

Admissions Requirements

Successful completion of the Welding Certificate (CTWLDC)

Contact Information

Division: Adv Tech/Public Serv Careers
Department: Welding and Fabrication Dept
Advisors: [Lynn Adams](#)
[Gentry](#)
[Andrew](#)

Requirements

(Items marked in are available online.)

Major/Area Requirements

Class	Title	Credits
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 211 231	Advanced Gas Tungsten Arc Welding (GTAW)	4
WAF 220	Specialized Welding Procedures	4
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
WAF 230 232	Gas Metal Arc Welding Advanced Semi-Automatic Welding Proc.	4
Total		24
	Total Credits Required:	24

Completion Requirement Prerequisites

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- ~~WAF 150~~ **Automated Welding-Cutting I (3)**
- ~~WAF 130~~ **Advanced Shielded Metal Arc Welding (SMAW) 4**
- ~~WAF 233~~ **Submerged Arc and Flux core Arc Welding (3)**
- ~~WAF 239~~ **Advanced Metal Fabrication (3)**

24 credits

**Welding Mechanics (CVWLDA)
Advanced Certificate**

Program Effective Term: Fall 2004

This program prepares you for jobs as a welding maintenance mechanic where you weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward an Associate in Applied Science Degree in Welding.

Program Admission Requirements:

Successful completion of the Welding Certificate (CTWLDC)

Major/Area Requirements		(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: 24

**WASHTENAW COMMUNITY COLLEGE
PROGRAM CHANGE FORM**

Program Code: Program Name:

Effective Term:

CVWLDA Welding Mechanics (Advanced Certificate)

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) (<u>WAF 226</u>) | <input type="checkbox"/> Articulation Agreements |
| <input checked="" type="checkbox"/> Total Credits: Current Credits <u>20</u> After Changes <u>24</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:

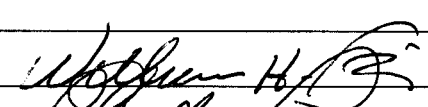
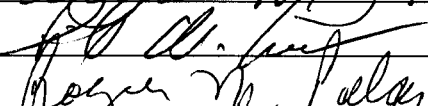
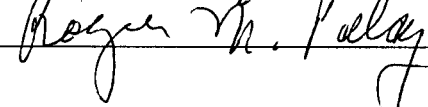
Course was removed from program and should not have been.

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		12-20-02
Division Dean:	Granville Lee		12/20/02
Executive Vice President, Instruction			1/14/03

Processed . . .

JAN 13 2003

Office of Curriculum & Articulation Services

Access Program File _____

Log 1/16/03

Copied and Returned _____

Copies: Initiator, Department Chair, Dean, Curriculum File _____ New Listing to: Counseling; Admissions

Curriculum and Articulation Services:

Curriculum Development\Forms\Programs\Program Change Form 3/18/02

Document Code: Program Change Form v2002.doc

Welding

Welding Mechanics (CVWLDA) Advanced Certificate

'UNDER CONSTRUCTION'

Program Effective Term: Fall 2003

This program prepares you for jobs as a welding maintenance mechanic where you weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward an Associate in Applied Science Degree in Welding.

Health and Applied Technologies Division
Welding and Fabrication Department

Advisors: William Figg, Clyde Hall

Program Admission Requirements:

Successful completion of the Welding Certificate (CTWLDC)

Major/Area Requirements		(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:		24

**Welding Mechanics (CVWLDA)
Advanced Certificate**

Program Effective Term: Fall 2002

This program prepares you for jobs as a welding maintenance mechanic where you weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward an Associate in Applied Science Degree in Welding.

**Health and Applied Technologies Division
Welding and Fabrication Department**

Advisors: William Figg, Clyde Hall

Program Admission Requirements:

Successful completion of the Welding Certificate (CTWLDC)

Major/Area Requirements		(20 Credits)
WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 215	Welding V Advanced GTAW & GMAW	4
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations	3
WAF 289	MIG Welding	4
Minimum Credits Required for the Program:		20

Welding Mechanics (CVWLDA) Advanced Certificate

This program prepares you for jobs as a welding maintenance mechanic where you weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The credits in this program also may be applied toward an Associate in Applied Science Degree in Welding.

Welding and Fabrication Department

Advisors: William Figg, Clyde Hall

Program Admission Requirements:

- Successful completion of the Welding Certificate(WLDC)

<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>
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Major/Area Requirements

WAF 200	Layout Theory Welding	3
WAF 210	Welding Metallurgy	3
WAF 215	Welding V Advanced GTAW & GMAW	4
WAF 227	Basic Fabrication	3
WAF 229	Shape Cutting Operations.....	3
WAF 289	MIG Welding (GMAW)	4

Credits Required for the Program:.....20

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.

**Welding Maintenance Mechanics (WLDM)
Mastery Certificate**

Division(s): Technology
Department(s): Welding and Fabrication

This program prepares you for jobs as a welding maintenance mechanic in which you weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. The program also gives you courses that may be applied toward WCC's Associate in Technical Studies Degree in Welding.

Advisors: William Figg, Clyde Hall

Program Admission Requirements:
None

General Courses (6 Credits)

COM 101	Fundamentals of Speaking	3
MTH 090	Occupational Mathematics	3

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 Maintenance Mechanics

College Certificate Program: Code WLDM

Advisors: William Figg, Clyde Hall

This program provides career training as a welding maintenance mechanic. Students weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. Students perform related tasks such as frame cutting and grinding. They may also repair broken or cracked parts, fill holes and increase size of metal parts.

Course Number	Course Title	Credit Hours
First Semester		
MTH 090	Occupational Math	3
WAF 111	Basic Oxy-Acetylene Welding	4
WAF 112	Basic Arc Welding	4
WAF 200	Layout Theory For Welders	2
WAF 210	Welding Metallurgy	3
		16
Second Semester		
COM 101	Fundamentals of Speaking	3
WAF 123	Advanced Oxy-Acetylene Welding	4
WAF 124	Advanced Arc Welding	4
WAF 215	Advanced TIG and MIG Welding	4
WAF 227	Basic Fabrication	3
		18

Total credit hours for program: 34

Program: WLDM Welding Maintenance Mechanics CER (95)

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 111	Oxy-acetylene Weld					XX		XX										XX	XX	XX					
WAF 112	Arc Welding					XX													XX	XX					
WAF 200	Layout Theory Weld				XX	XX													XX	XX					
WAF 210	Weld Metalurgy					XX		XX											XX	XX					
WAF 123	Adv Oxy-acetylene	XX				XX		XX											XX	XX	XX				
WAF 124	Adv Arc Welding					XX		XX											XX	XX	XX				
WAF 215	Adv Tig Mig Weld					XX		XX											XX	XX					
WAF 227	Basic Fabrication				XX	XX		XX											XX	XX					
MTH 090	Occup Math				XX	XX	XX	XX	XX	XX	XX														
COM 101	Fund Of Speaking	XX						XX	XX	XX	XX														

Prereq: 3.0 MTH 062

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					
Core Elements Not Satisfied:		XX	XX									XX	XX	XX	XX	XX	XX				XX	XX	XX	XX	XX

Total Credit Hours Required: 34.0
Prerequisite Credit Hours: 3.0 (not listed as program requirements)

Program: WLDT Welding Technology ATS (95)

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	
GRM 111	First Year German I													XX	XX										XX	
GRM 120	Conv German													XX	XX											XX
GRM 121	Inter Convers GRM													XX	XX											XX
GRM 122	First Yr GRM II													XX	XX											XX
HUM 101	Hum I-Ancient-Med							XX						XX	XX											
HUM 102	Hum II-Renaiss-Mod							XX						XX	XX											
HUM 150	Internat Cinema													XX	XX											
HUM 170	Montreal Film Fest													XX	XX										XX	
MUS 180	Music Appreciation							XX						XX	XX											
MUS 183	Music/Cult of Africa XX							XX		XX				XX	XX											
PHO 103	History of Photo							XX						XX	XX						XX					
RUS 111	First Year Russian I													XX	XX											XX
RUS 120	Conver Russian													XX	XX											XX
RUS 121	Int Conv. Russian													XX	XX											XX
RUS 122	First Year Rus II													XX	XX											XX
SPN 111	First Year Spanish													XX	XX											XX
SPN 112	Spanish Lab I													XX	XX											XX
SPN 119	SPN Lang Adventures													XX	XX											XX
SPN 120	Beg Conv Spanish													XX	XX											XX
SPN 121	Inter Conv Spanish													XX	XX											XX
SPN 122	First Year Spanish													XX	XX											XX
SPN 123	Spanish Lab II													XX	XX											XX
SPN 213	Second Year Spanish													XX	XX											XX
SPN 224	Second Year Spanish													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
 Core Elements Not Satisfied:

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

WELDING AND FABRICATION TECHNOLOGY

Welding Maintenance Mechanics College Certificate Program: Code WLDM

Advisors: William Figg and Clyde Hall

This program provides career training as a welding maintenance mechanic. Students weld metal parts together according to layouts, blueprints, or work orders using gas welding or brazing and any combination of arc-welding processes. Students perform related tasks such as frame cutting and grinding. They may also repair broken or cracked parts, fill holes and increase size of metal parts.

Course Number	Course Title	Credit Hours
First Semester		
MTH 090	Occupational Math.....	3
WAF 111	Basic Oxy-Acetylene Welding	4
WAF 112	Basic Arc Welding.....	4
WAF 200	Layout Theory For Welders	2
WAF 210	Welding Metallurgy	3
		16
Second Semester		
OCMT 101	Fundamentals of Speaking	3
WAF 123	Advanced Oxy-Acetylene Welding.....	4
WAF 124	Advanced Arc Welding	4
WAF 215	Advanced TIG and MIG Welding	4
WAF 227	Basic Fabrication.....	3
		18

Total credit hours for program: 34

Program: WLDM Welding Maintenance Mechanics CER (94)

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 111	Oxy-acetylene Weld					XX	XX											XX	XX	XX					
✓WAF 112	Arc Welding					XX													XX	XX					
✓WAF 200	Layout Theory Weld					XX	XX												XX	XX					
✓WAF 210	Weld Metalurgy					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 215	Adv Tig Mig Weld					XX													XX	XX					
✓WAF 227	Basic Fabrication					XX	XX	XX											XX	XX					
✓MTH 090	Occup Math					XX	XX	XX	XX	XX	XX														
✓COM 101	Fund Of Speaking	XX						XX			XX														

Prereq: 3.0 MTH 039

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				
Core Elements Not Satisfied:		XX	XX									XX	XX	XX	XX	XX	XX				XX	XX	XX	XX

Total Credit Hours Required: 34.0
Prerequisite Credit Hours: 3.0 (not listed as program requirements)