



Calhoun Community College A.A.S. (Career/Technical) Academic Program Review

The academic program review process at Calhoun Community College has been developed to support on-going institutional effectiveness processes and is a vital part of institutional planning. The program review is a comprehensive, systematic method of self-evaluation and review conducted every three years within all instructional programs.

Academic Deans and Department Chairs should conduct appropriate research to supply information required in the narrative portion of the program review. Discrete data will be provided by the Office of Planning, Research and Grants 30 days prior to the due date.

Program reviews should be submitted to the Office of the Vice President for Academic Affairs and to the Office of Planning, Research and Grants by October 1 of the academic year. The Office of Planning, Research and Grants is responsible for maintaining current program review information on the College's website.

Program review information should be used internally to evaluate the effectiveness of each program. Contents of the program review should be shared with appropriate Advisory Boards, Excellence Teams, and others to enhance effective planning. Specifically, program outcome data should be used to evaluate the effectiveness of the program.

The attached template should be used in providing all program review information. Please prepare a separate template for each program and/or degree type.

Period of Review: Fall 2012 through Summer 2015

Full Official Name of Instructional Program:

Welding Technology

Completed by:

Zeb Ferguson

Submission Date of Program Review:

September 21, 2016

Name of Program Director, Chairperson or Coordinator:

Zeb Ferguson

Credentials of Program Director, Chairperson or Coordinator:

Bachelors of Science career tech post-secondary

Purpose or Mission Statement for the Instructional Program:

The Associate of Applied Science degree in Advanced Manufacturing with a major in Welding Technology prepares graduates with the applicable principles and knowledge of SMAW, GMAW, GTAW, FCAW, PAC, and OFC processes and instills a broader understanding of economic and political context of the welding Industry.

Explain how the Instructional Program Supports the Institution's Mission and Goals:

A student that Completes the Welding Technology program at Calhoun Community College is equipped to work in the welding industry not only in North Alabama but in the United States. There are many welding careers available in our area. The jobs range from entry level welding positions to advanced work in the pipe welding field.

College Mission Statement

Calhoun Community College is an institution of excellence providing quality, innovative instruction through a responsive learning environment while promoting cultural enrichment and community development.

Vision Statement

Success for every student.

Curriculum Design

Compliance with Alabama Community College System requirements:

State Board Policy 712.01: *Policy states that an Associate Degree program should be comprised of 60-64 semester credit hours; an Associate of Applied Science Degree program should be comprised of 60-76 semester credit hours; a long certificate program should be comprised of 30-60 semester credit hours; a short term certificate program should be comprised of 9-29 semester credit hours.*

2014-15 CIP Code	Program Name	Program Code	Award Type (AAS, Cert)	Number of Hours
15.0613	Manufacturing & Fabrication Welding	AAS.ADMA.WELD	AAS	67
15.0613	Basic Manufacturing & Fabrication Welding	STC.ADM.WELD	STC	24
15.0613	Advanced Manufacturing & Fabrication Welding	STC.ADMX.ADWE	STC	12
15.0613	Pipe Welding	STC.ADM.PIPE	STC	24

Enrollment and Graduates (Completed by IR Office)

Include total enrollment for courses with prefixes specific to the program.

* Duplicated students. * Includes withdrawals.

Number Enrolled

Course	2012-13	2013-14	2014-15	Average
WDT 108	N/A	N/A	48	N/A
WDT 109	N/A	N/A	37	N/A
WDT 110	N/A	N/A	97	N/A
WDT 119	N/A	N/A	78	N/A
WDT 120	N/A	N/A	7	N/A
WDT 122	N/A	N/A	46	N/A
WDT 123	N/A	N/A	22	N/A
WDT 124	N/A	N/A	31	N/A
WDT 125	N/A	N/A	7	N/A
WDT 228	N/A	N/A	7	N/A
WDT 268	N/A	N/A	7	N/A

Number of Awards (Can include duplicate students)

Award	Program Code	2012-13	2013-14	2014-15	Total	Average
		N/A	N/A	N/A	N/A	N/A

Occupational Demand

Classify the Need as Local, Regional, or National	Source of Data	Predicted Workforce Need
National	Bureau of Labor Statistics	350,000
local	ADOL	1,130

**Based on Bureau of Labor Statistics [www.bls.gov], Occupational Outlook Handbook [www.bls.gov/oco/home], and Economic Modeling Systems projections. Internal surveys of local industry may also be used to supplement state and national data.*

Compliance with Alabama Department of Postsecondary Education requirements:

State Board Policy 711.01: *Policy states that colleges shall establish a program advisory committee for each AAS program. Membership of the committee will include representatives from Business and Industry, Economic Development Authorities, and Chambers of Commerce. Each member should be able to provide expertise to the program and employment assistance to the graduates. Members must be approved by the President and the College shall report membership to the Chancellor annually.*

Name of Advisory Committee Member	Member's Organization/Company	Member's Primary Area of Expertise
Willie Lafavor	CSFCO	Mechanical Welding
Jonathan Sadler	Comfort Group	Mechanical Welding
Thomas Bayne	SP&J	Structural Welding
Danny Mcgee	Torey	Maintenance
Jeff Jackson	Nucor	Maintenance

Date of Last Advisory Board Meeting	Number of Attendees
7/21/2016	8

Please attach minutes from the last Advisory Board meeting.

Program/Student/Faculty Accreditations/Licensure Passage Rates

Program Accreditations

Degree Level	Current Accrediting Agency	Last Date of Accreditation	Reaffirmation Date
AAS	National Center of Construction and Research	12/10/15	
	American Welding Society	4/10/15	

Projected or “in progress” Program Accreditations:

Degree Level	Accrediting Agency	Projected Accreditation Date

If this program has possible accrediting agencies and is not currently accredited, please state the plans to pursue accreditation or justify why accreditation is not desired:

Justification for Not Seeking Accreditation

Student Accreditations

Name of Licensure or Certification Credential	# of students who attempted	% of students who passed licensure/certification
National Center for Construction and Education	50	100
American Welding Society	0	NA

If there is a licensure/certification available and students are not seeking this credential, provide justification (cost, not required for employment, etc):

Justification for Not Seeking Licensure
<p>We have not started The American Welding Society certifications for lack of Certified Welding Inspector. We will have a Certified Welding Inspector available on 11-01-16</p>

Faculty Accreditations

Name of Licensure or Certification Credential	# of Faculty with Certification/Licensure
National Center for Construction and Education Research instructor.	3

If there is a licensure/certification available and faculty are not seeking this credential, provide justification (cost, time, not required for employment, etc):

Justification for Not Seeking Credential

Personnel (Faculty and Staff)

(Click the Yes or No box to select your answer.)

Is the number of personnel adequate to support your program area?
 YES NO

If "NO", explain below.

Do personnel possess all specialized skills or credentials required to support the program area
 YES NO

If "NO", explain below.

Is there proper documentation (transcripts, etc.) on file to show?

YES NO

If "NO", explain below.

If "YES", explain below.

Human Resources has Credentials

Are faculty and staff evaluated on an annual basis by the appropriate Dean or supervisor?

YES NO

Does the evidence exist to show that faculty members teaching in this program have involved themselves in in-service training and other professional development?

YES NO

If "NO," please explain:

Are there unmet needs for professional development among personnel in this instructional program?

YES NO

If "YES", explain below.

Yes, we attend Calhoun College Professional Development in service days. We attend All American Welding Society Meeting in the Greater Huntsville Chapter. We attend Bob Kimbrell professional Development welding seminars.

Facilities, Equipment, and Budget

(Click the Yes or No box to select your answer.)

Briefly describe the facilities occupied by your instructional program. (i.e. classrooms, offices, labs, etc.)

Are the facilities adequate to support the mission of your program for day and evening classes, if applicable?

YES NO

Briefly describe current equipment used by your program and indicate whether it is adequate or inadequate.

The majority of our welding machines are Multi process welding machines. This means that they are capable of Shielded metal arc welding, Gas Metal Arc Welding and Gas Tungsten arc welding. We only have four high frequency Tungsten Inert gas welders. We have a Bailey band saw, two line cutting torches. We also have two plasma cutting systems one for pipe and one for structural cutting. For the shear process we have a Peddiworker 1050 shearing system. With our Carl Perkins funds, we have requested two SST Gas Metal Arc Welding Machines. Our Advisory board has suggested this process to us.

Are additional facilities or equipment required to support the program?

YES NO

Is so, please list and explain.

Equipment is inadequate for the future and current expansion of the welding technology program. At the current rate of growth in our class sizes and amount of classes made available the program is becoming increasingly difficult to maintain with the equipment we have. The welding machines are fairly new, however more weld stations and machines would greatly benefit the program as we are seeing more and more classes being carried out simultaneously. We consistently are forced to piece together equipment and consumables to multiple classes across a broad area making it difficult to designate students to their specific class and weld process. Also, an update of reliable, quality welding

ventilation would address a much needed safety precaution for all students. Another safety precaution we must take is to update and advance our consumable gases storage to industry standards. The welding technology program is also in need of an overhaul of its oxy-fuel and plasma arc cutting processes. Another area of expansion we are lacking in is the Gas Tungsten Arc Welding (GTAW) process. The welding technology program at this point in time only has four GTAW welding machine capable of Advanced GTAW processes such as pulse and high frequency Alternating Current. If we look to stay with current technology, we must increase this number significantly to match other schools in our state. Other advanced processes such as STT metal inert gas are also an area where we must continue to grow.

The facilities in use by the program while adequate in the past are now a disadvantage to welding technologies. The top priority for the continued success of this program should be to obtain brand new facilities with substantial room to designate specific lab areas for each individual process, including a separate lab for advanced and cutting edge processes and welding technology (High frequency Gas tungsten arc welding, STT gas metal arc welding and Short Circuit Gas Metal Arc Welding, etc.). The welding facilities would also benefit greatly from multiple larger sized classrooms, as well as an outdoor grinding and cutting facility. With new facilities, updated ventilation, and larger classroom spaces the welding technology program would be able to thrive in an area where skilled welding labor is greatly needed.

Does the institution operate and maintain physical facilities that are adequate to serve the needs of this educational program?

YES NO

Does the institution take reasonable steps to provide a healthy, safe, and secure environment for this educational program?

YES NO

Are the physical facilities (classrooms, laboratories, etc.) accessible to students with disabilities? If no, please identify below what is needed to make your area accessible.

YES NO N/A

Is the instructional equipment used in this program similar to that used in the workplace or at a higher level of instruction?

YES NO N/A

Is the budget information available to program heads?

YES NO

Is adequate financial support available to meet the needs of this program?

YES NO

If "NO", please explain.

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Findings, Conclusions and Recommendations

Identify Strengths of the Program:

Strengths of the Program
1. Students and Instructors have good professional relationships.
2. 90% of our students achieve employment in the welding industry.
3. Instructors backgrounds in industry complement each other.

Identify Weaknesses of the Program and Plans to Improve:

Weaknesses of Program	
Identified Weakness	Plans to Improve
1. Do not have a Certified Welding Inspector as required by American Welding Society credentials	Plans for staff member to achieve Certified Welding Inspector status to administer weld test.
2. Welding shop needs more plasma cutting processes	Applied for a grant through the Office of Workforce Development
3.	

Provide an overview of significant results, honors, awards, and milestones achieved, as well as enhancements made to this program over the past three years.

We have started offering the AAS major in welding. We have partnered with Decatur City schools for a 500,000 dollar grant for welding equipment. We have the highest dual enrollment program. We also have

a welding shop on the Hartselle city school campus. The program has grown so much that we have added faculty, staff, and increased the number of class times offered.

Advisory Board Meeting

7/21/2016

1. Introductions in The Aerospace Training Center (John Holley)
2. Dr. Klauber Spoke to the industry about the vision Calhoun has and the strategic plan.
3. Dr. Calatrello spoke to the industry on Quality Matters, learning outcomes and ethics.
4. Diane Peck told the industry about co-op opportunities and how they can work for them.
5. Lunch
6. Breakout session to individual departments.
7. Instructors and Lab assistants gave a tour of the shop and pointed out progress from last advisory meeting.
8. Jonathan Sadler from the comfort group talked about having student's co-op students. He also showed interest in hiring some of our student for full time work in Huntsville.
9. Jeff Jackson from Nucor made a safety walk thru in our shop and gave us advise on extreme temperatures and heat exhaustion.

10. The welding Industry talked about how we need to move forward with the new welding process STT.
11. Industry also inquired about the American welding society testing facility. Zeb gave an update on where we were at with the accreditation.