Wayne Community College
Program Review and Outcome Assessments, 2019-20
(Previous Program Review Cycle, 2016-17)

Department Name:	Workforce Continuing Education Services Occupational Extension Advanced Manufacturing/Applied Technologies Programs (WCES-OE-AT)

Section 1: Program Overview

Mission/Purpose:

The mission of Advanced Manufacturing programs is to develop marketable skills by providing certifications and training designed to meet industry needs of the community we serve.

Courses Offered: Utilizing the table below, list all courses offered, along with codes.

Program Areas & Occupational Pathways (i.e. L30 Health Occupations)	Local Government Courses (i.e. NUR3240)	Title (i.e. Nursing Aid I)	Third-Party Credentials (i.e. EKG-ECG)
H30 Construction	AHR-3131	A/C Heating & Refrigeration	N/A
H30 Construction	AHR-3128	EPA Refrigerant Cert.	Chlorofluorocarbon/Environment Protection Agency Certification
P35 Industrial Manufacturing	WLD 3106	Advanced Welding	American Welding Society
P35 Industrial Manufacturing	WLD 3106	Basic Welding I	N/A
P35 Industrial Manufacturing	WLD 3106	Basic Welding II	N/A
V80 Driver Training	TRA 3605	CDL Permit Study	N/A
V80 Driver Training	TRA 3607	Truck Driver Training	North Carolina Department of Motor Vehicles Commercial Driver Licenses
P35 Industrial/Manufacturing	ATR 3115	PLC	PM_I Tape and Rule Measurement PM_II Slide Caliper Measurement PM_III Gage Measurement PM_IV Angle Measurement PM_V Micrometer Measurement PM_I Dial Gage Measurement
V50 Motor Vehicle/DM	AUT 3129	NCDMV Safety Inspection	North Carolina Department of Transportation
V50 Motor Vehicle/DM	AUT 3129	NCDMV On Board Diagnostics	North Carolina Department of Motor Vehicles Emissions & Safety Inspections
V20 Aircraft Systems	AVI 3012	A & P Oral Practical Prep	N/A

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals. Identify which Institutional Goal(s) best aligns with your program and explain why.

        Goal 1: Increase Student Access
   **Goal 2: Ensure Program Excellence**
        Goal 3: Improve Student Success
        Goal 4: Ensure Institutional Quality

Institutional Goals 1 & 3 best align with the Advanced Manufacturing/Applied Technology Program. Many of our students are older, working adults. The majority of the courses are offered at night to allow students to attend classes after work. Also, online registration provides increased student access to register electronically. Advanced/Manufacturing/Applied Technology student success is achieved by giving students the opportunity to earn certifications in one semester. After completing these classes, students have potential opportunities for advancement in their current job or to seek new employment.

Registration (Annual Reporting Year - Summer, Fall, Spring)

Registration *(duplicated)*		
Reporting Year	**Registration #**	**3-Year Average**
2016-17	593	573
2017-18	542	547
2018-19	286	474
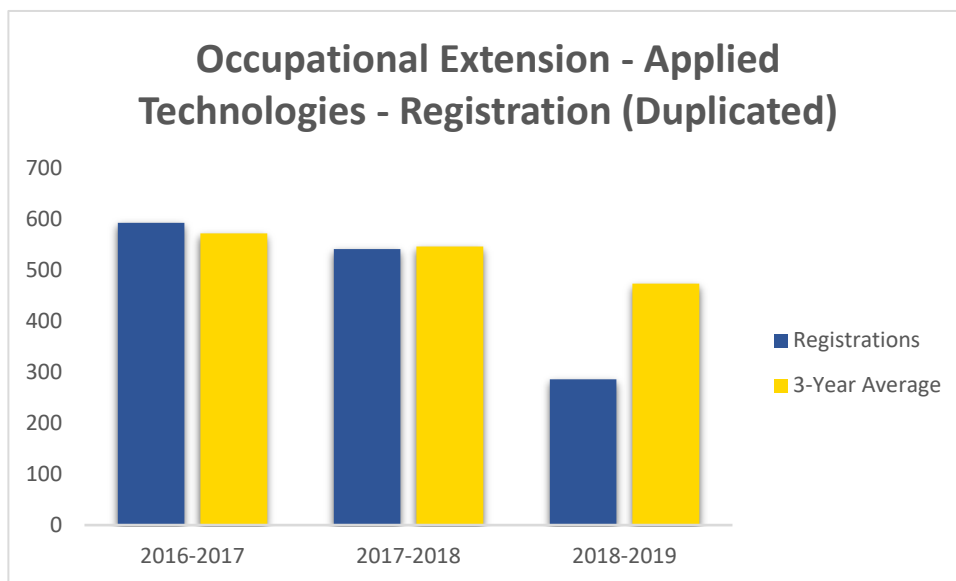
Provide narrative for analysis of registration. *(Is registration increasing or decreasing? What possible reasons for increase/decrease? Describe how you plan to address registration.)*

Registration has decreased more than 45% over the past three years. In 2016-17 we served a high volume of students in the EPA course. One of our partners was Jackson & Son. They are now training their employees in-house. Additionally, the employment rate was higher. Wayne County unemployment rate was up in 2016-17 and 2017-18, which led to the higher number of students. Plans to increase registration are as follows:

- Seek to utilize space availability in the Ash Building (new building for autmptive programs)
- Increase Credit for Prior Learning courses through Applied Technology Division
- Offer new programs in Advanced Manufacturing (Intro to Manufacturing)

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Analysis of program budget full-time equivalent (BFTF) *(The number of full-time equivalent (FTE) student for which colleges are funded through State funding formulas. An amount of instruction that equates to an annual FTE student; one curriculum FTE equals 512 student hours.)*

The budget FTE calculation changed in 2018-19. Before that, the FTE was calculated based on a calendar year. Beginning 2018-19, FTE started to be calculated per academic year (summer, fall, spring) like curriculum programs.

FTE decreased from 2016-17 to 2017-18, by approximately 1%. In 2018-19 there was roughly a 4% increase in budget FTE from the previous year. The increase was due to the Truck Driver Training course.

Activities to ensure program / course additions (2016-17; 2017-18; 2018-19 – Reporting Year)
List program or course additions in table.

Course Title	Date – Revisions
CDL Permit Study	Fall 2019
Truck Driver Training	Fall 2019

Provide an overview of the significance of the program additions and improvements that occurred over the past three years. *(What were the program's / discipline's goals and rationale for expanding and improving student learning, including new courses, programs, and delivery methods?)*

A local industry contacted Workforce Continuing Education and requested the college offer truck driver training. The goal is to graduate students who have tested and earned their CDL's. One of the enrollment requirements is to have a commercial drivers learner's permit. The permit course prepares students to test for their permit at the DMV. In the truck training course instruction is given in the classroom, on the yard, and on the road.

Advisory Committee: dates, summary of minutes, activities (2016-17; 2017-18; 2018-19 –– Academic Year –

Fall, Spring, Summer Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2016-17	12/20/16 and 5/4/17	Community partners suggested potential training needs.
2017-18	12/19/18	Community partners suggested potential training needs.
2018-19	5/23/18	Community partners suggested potential training needs.

Describe program's participation with Advisory Committee or external organizations that contribute to maintaining program relevance. *(File Advisory Committee Meeting Minutes for past three years in Program Review Attachment folder.)*

Advanced Manufacturing/Applied Tech has no specific advisory Committee. We participate with the Occupational Extension Advisory Committee which includes all OE Programs.

Provide narrative for analysis of trends in the field (emerging needs). *(Based on environmental scans, advisory committees, and other sources external to the program/discipline, how well is the program/discipline responding to the current and emerging needs of the community? Is there new technology/equipment that needs to be added to your program?)*

Welders continue to be in high demand due to the skill diversity of welding jobs in our service area. North Carolina requires service technicians who conduct vehicle inspections to carry state certification. Technicians with an Auto Safety certification return every four years for recertification and OBD technicians return every two

3

years. We have received a slight decline in the OBD courses due to the 2017 Executive Order from the President in regards to the Clean Air Act. In the order, OBD inspections expired in Wayne and surrounding counties. Heating and Air students gain entry-level skills for a new job or upgraded skills in their current positions.

Section 2: Faculty Profile

Have all the faculty credentials been verified? (*Verify required documents are in personnel files.*)
Yes ☒   No ☐

List of Faculty and Status (2016-17; 2017-18; 2018-19 – Academic Year – Fall, Spring, Summer)

Faculty / Name	Full-Time / Part-Time	Total Years within Department/Program	Total Years at WCC
Brian Jordan	Full-Time	13	13
David Gardner	Full-Time	10	10
Chad Pate	Full-Time	11	8
Walker Bittrich	Part-Time	3	3
William Wise	Part-Time	8	9
Linden Bridgers	Part-Time	2	2
James Carter	Part-Time	2	4
Kenneth Creech	Part-Time	1	3
Ronnie Woodard	Part-Time	6	18
Servando Perez	Part-Time	14	14
Tony Hardy	Part-Time	1	1
Tony Streand	Part-Time	1	1
Noah Pederson	Part-Time	1	1
Marc Durben	Part-Time	1	1
Donald Madison	Part-Time	1	1

Provide narrative for adequacy of faculty numbers. *(Do you have enough faculty to support your program?)*

The full-time instructors that we use are also full-time curriculum instructors in the Applied Technology Division. As our truck driver training program is growing we may need a full-time instructor in the future. Preparing for the course takes a considerable amount of time and we provide that time for our part-time instructors. Advanced Manufacturing, plumbing, and electrical instructors are also needed.

Professional Development
Professional development activities of faculty (2016-17; 2017-18; 2018-19 – Fiscal Year, July 1 – June 30)
Verify departmental professional development (PD) tracking logs are completed and filed in Program Review Professional Development folder. *(Full-Time Faculty = 30 hours; Part-Time Adjunct Faculty = 6 hours recommended, but not required, for adjuncts who teach 6 or more hours per semester)*
Yes ☒   No ☐

Section 3: Student Demographics

Gender (*unduplicated*) Academic Year – Fall, Spring, Summer						
Gender	2016-17		2017-18		2018-19	
	N	%	N	%	N	%
Female	15	5%	22	6%	31	12%
Male	285	95%	378	95%	224	88%
Total	300	100%	400	100%	255	100%

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Occupational Extension - Applied Technologies - Gender (Unduplicated)
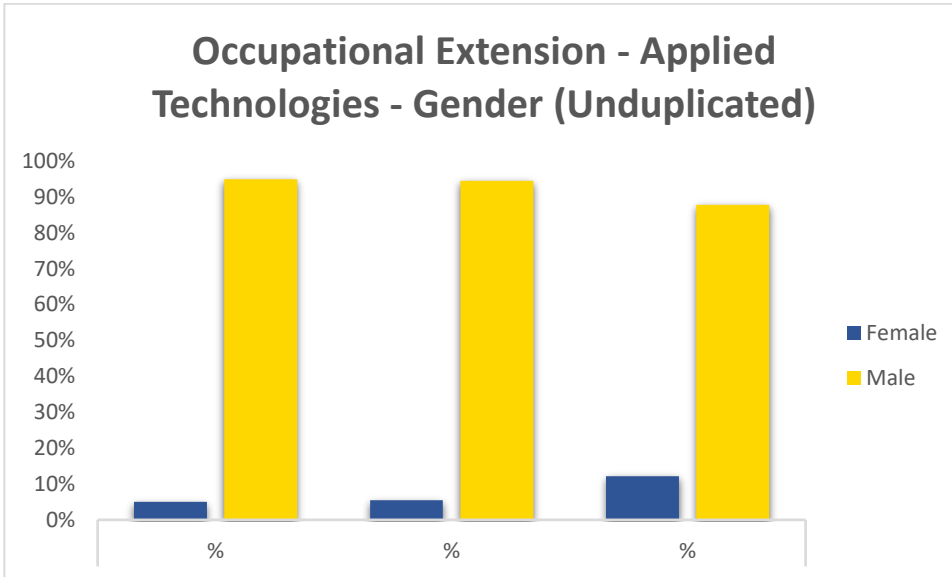
Ethnicity (Specify highest level – unduplicated) Academic Year – Fall, Spring, Summer						
Ethnicity	2016-17		2017-18		2018-19	
	N	%	N	%	N	%
American Indian	1	0%	3	1%	0	0%
Asian or Pacific Islander	3	1%	2	1%	2	1%
African American	45	15%	69	17%	58	23%
Hispanic	32	11%	48	12%	37	15%
Caucasian	215	72%	273	68%	153	60%
Other/Unknown/Multiple	4	1%	5	1%	5	2%
Total	300	100%	400	100%	255	100%

Occupational Extension - Applied Technologies - Ethnicity (Unduplicated)
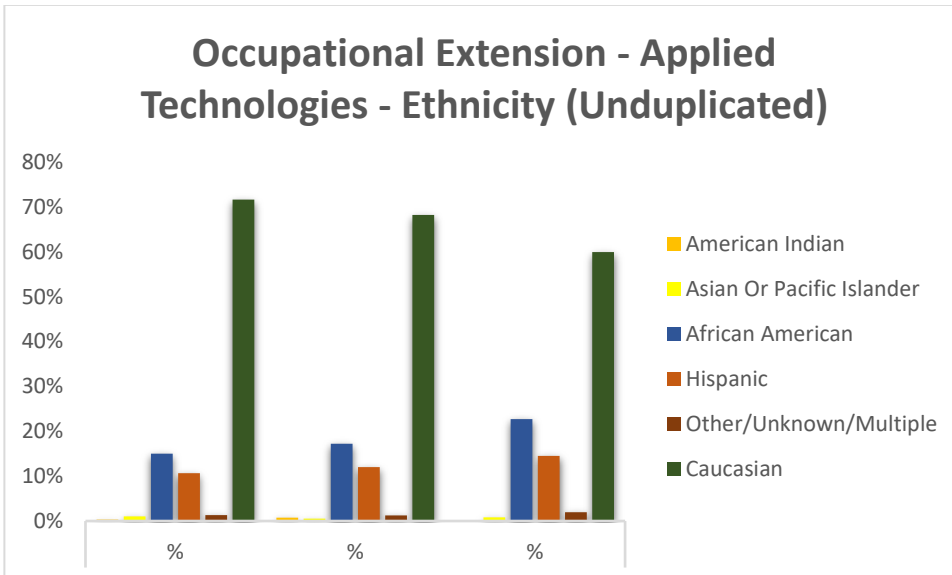
Age (Specify highest level – unduplicated) Academic Year – Fall, Spring, Summer						
Age	2016-17		2017-18		2018-19	
	N	%	N	%	N	%
18 and under	1	0%	5	1%	0	0%

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18-24 years	52	17%	60	15%	45	18%
25-34 years	69	23%	100	25%	82	32%
35-44 years	52	17%	58	15%	40	16%
45 and older	126	42%	177	44%	88	35%
Total	300	100%	400	100%	255	100%
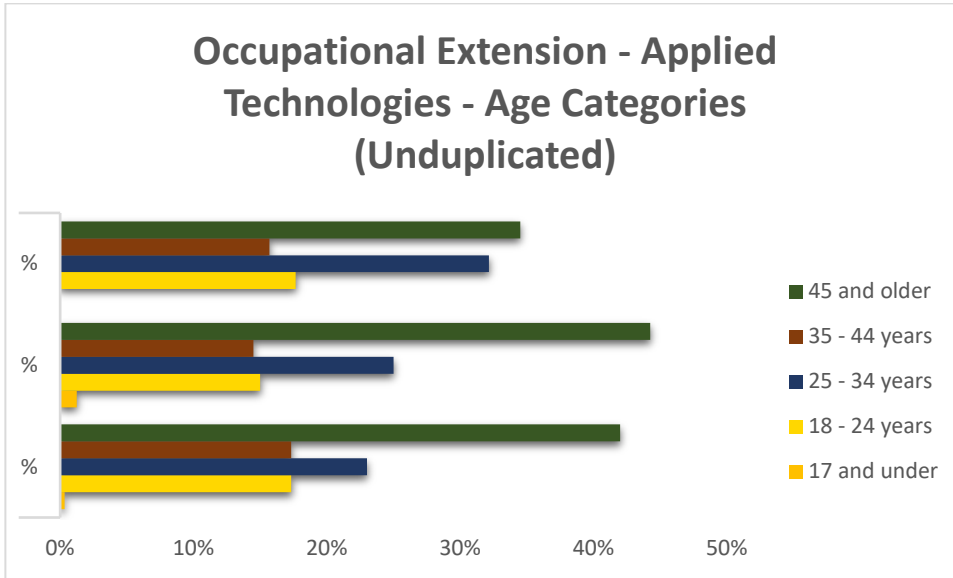
Location (*unduplicated*)						
Location	2016-17		2017-18		2018-19	
	N	%	N	%	N	%
Wayne County	195	65%	245	61%	154	60%
Outside of Wayne County	103	34%	154	39%	99	39%
Outside of North Carolina	2	1%	1	0%	2	1%
Total	300	100%	400	100%	255	100%

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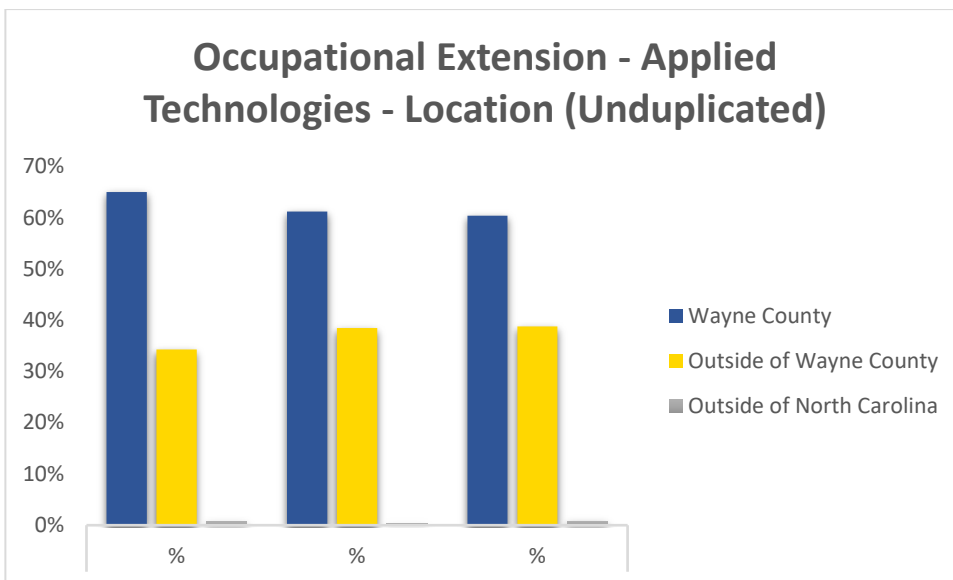
Provide narrative for analysis of student demographics. *(What are you doing to recruit / retain a diverse student population? Do you have a diverse population of students?)*

The majority of our students live in Wayne County. For the past three years, this population has been consistently over 55%. Caucasian and risen to 23% African-American. Over 48% of our students ranged from ages 25 - 44 with the largest age group being 45 years and older over the three years. Additionally, over 60% of these students live in Wayne County and 39% are from outside of Wayne County. Chad Pate, David Gardner, and Brian Jordan are advocates for the Adv. Manfu. & Applied Technology courses. We believe we will see an increase in our overall student demographics and diversity within the program as the desire for individuals with these specific skills increases.

Section 4: Program Outcomes

Outcome #1: Course Section Offerings (all delivery methods) (*Course Offerings tab*)

Baseline: 46 # (*Average course section offerings for the last three years – 2016-17; 2017-18; 2018-19*)
Standard: 48 #
Target: 50 #

Reporting Year	Course Offerings	Sections Offered
2016-17	8	47
2017-18	12	49
2018-19	13	44

Provide narrative for analysis of course section offerings. *(Ex – Are courses being offered based on the sections needed for enrollment?)*

An average of forty-eight courses are offered based a semester schedule. On occasions, industry-specific training is requested from local businesses.

Provide narrative for analysis of course section offerings standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target?*

New course section offerings standard and target was set based on the three-year baseline data from 2016-17, 2017-18, and 2018-19.

Identify Course Section Offerings Action Items
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action Items *(Identify action items as a result of your program outcome assessment.)*	Target Date *(Identify your projected target date for completion of action items.)*	Assessment of Action Items *(State the method of assessment; how you plan to evaluate/assess the results of the action items.)*
1	Offer additional sections of truck driver training each semester	1/30/20201	Review number of sections offered
2			

Outcome #2: Course Success Rate (all delivery methods) (*Course Success Rate tab*)

Baseline: 95 % (*Average course success rate for the last three years – 2016-17; 2017-18; 2018-19*)
Standard: 97 %
Target: 99 %

Reporting Year	Registered Students	Registered Success Students	Course Success Rate
2016-17	593	565	95%
2017-18	542	514	95%
2018-19	286	273	95%

Provide narrative for analysis of course success rates. *(Ex – Are students more successful in courses; face to face, online, hybrid, or blended methods of course delivery? In evaluating the methods of delivery, should certain methods of delivery be considered for deletion or modification?)*

Our students have been very successful in their courses. Face-to-Face courses are the best method of delivery since many of our courses require hands on skills with special equipment. No modification is necessary at this time.

Provide narrative for analysis of course success rate standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target?*

New course success rate standard and target was set based on the three-year baseline data from 2016-17, 2017-18, and 2018-19.

Identify Course Success Rate Action Items
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action Items *(Identify action items as a result of your program outcome assessment.)*	Target Date *(Identify your projected target date for completion of action items.)*	Assessment of Action Items *(State the method of assessment; how you plan to evaluate/assess the results of the action items.)*
1	Continue offering face to face courses	Spring 20201	Data of the number of courses offered
2			

Outcome #3: Licensure and Certification Passing Rates (if applicable) Not applicable.

Baseline: N/A % (*Average of last three years; identify last three licensure years*)
Standard: N/A %
Target: N/A %

Licensure / Certification Exam – Title

NCCCS Report	Exam Year	# Tested	# Passed	% Passing
2016	2014-15	N/A	N/A	N/A
2017	2015-16			
2018	2016-17			
2019	2017-18			

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Provide narrative for analysis of licensure / certification passing rates. *(Are you satisfied with your program licensure rates?)*

Licensure and certification passing rate outcome does not apply to these programs.

Provide narrative for analysis of licensure and certification passing rates standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target?)*

Licensure and certification passing rate outcome does not apply to these programs.

Identify Licensure and Certification Passing Rates Action Items
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action Items *(Identify action items as a result of your program outcome assessment.)*	Target Date *(Identify your projected target date for completion of action items.)*	Assessment of Action Items *(State the method of assessment; how you plan to evaluate/assess the results of the action items.)*
1	N/A		

Outcome #4: Third-Party Credentials (if applicable)

Baseline: *(Average number credentials earned for the last three years – 2016-17; 2017-18; 2018-19)*
Standard:
Target:

Third-Party Credentials

Year	Credentials for Courses	# Tested *(duplicated)*	# Passed
2016-17	OSHA Safety 10	18	18
	NCDMV Auto Safety	105	100
	NCDMV On Board Diagnostics	130	120
	EPA Refrigerant Certification	32	32
2017-18			
	NCDMV Auto Safety	103	100
	NCDMV On Board Diagnostics	143	139
	EPA Refrigerant Certification	12	12
2018-19			
	Truck Driver Training	6	6
	NCDMV Auto Safety	155	150
	NCDMV On Board Diagnostics	148	145
	EPA Refrigerant Certification	15	15

Provide narrative for analysis of third-party credentials. *(Are there other industry-recognized credentials that need to be addressed for the program of study?) (What are other means to promote program third-party credentials?)*

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Baselines, standards, and targets have been set based upon the third-party credentials that have been offered consistently for the last three years, to include: NCDMV Auto Safety, NCDMV On Board Diagnostics, and EPA Refrigerant Certification. Therefore, the following baselines, standards and targets have been set:

NCDMV Auto Safety

Baseline: 117   (*Average number credentials earned for the last three years – 2016-17; 2017-18; 2018-19*)

Standard: 120

Target: 125

NCDMV On Board Diagnostics

Baseline: 135   (*Average number credentials earned for the last three years – 2016-17; 2017-18; 2018-19*)

Standard: 140

Target: 150

EPA Refrigerant Certification:

Baseline: 20   (*Average number credentials earned for the last three years – 2016-17; 2017-18; 2018-19*)

Standard: 25

Target: 30

Provide narrative for analysis of third-party credentials standard/target. (*As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target?*

New third-party credential standard and target was set based on the three-year baseline data from 2016-17, 2017-18, and 2018-19.

Identify Third-Party Credentials Action Items
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action Items *(Identify action items as a result of your program outcome assessment.)*	Target Date *(Identify your projected target date for completion of action items.)*	Assessment of Action Items *(State the method of assessment; how you plan to evaluate/assess the results of the action items.)*
1	Increase hours of Basic Welding	2021	Review hours of course
2			

Section 5: Other Assessments

In addition to SACSCOC, is there an accrediting body specifically related to the program? If so, please name the professional organization, describe the program's current status, and most recent date of accreditation.

None

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Analysis of other assessments. *(Have you performed other assessments to evaluate the effectiveness of your program, to include surveys, self-assessments, or other assessment used to evaluate the program. If so, please explain how information collected from the(se) assessments will be used to improve the program.)*

Evaluation's from students and annual self-assessments are utilized.

Identify Other Assessment(s) Action Items *(if applicable)*
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action Items *(Identify action items as a result of your program outcome assessment.)*	Target Date *(Identify your projected target date for completion of action items.)*	Assessment of Action Items *(State the method of assessment; how you plan to evaluate/assess the results of the action items.)*
1	Schedule an Advisory Committee Meeting	2021	
2			

Provide narrative for program facilities adequacy and/or needs. If facilities are adequate, please confirm.

The Truck Driving Training course needs one additional tractor-trailer and a paved asphalt yard to improve the program. An additional truck would allow more students to participate in the course by increasing driving time. Welding courses are limited by space during the day due curriculum courses. Electrical and plumbing courses are being investigated for future offerings. Qualified instructors will also be need for these courses.

Provide narrative for academic / student support services. *(Are services adequate for your program?)*

Student services provides adequate service for programs in our area. Students are able to access services as needed.

Planning Objectives (2016-17; 2017-18; 2018-19 – Fiscal Year, July 1-June 30)
Provide a summary of planning objectives submitted for the last three years, including the use of results, of the planning objectives in the table provided.

Summary of Planning Objectives

Planning Year (Fiscal Year – July 1-June 30)	Objective(s) Submitted	Use of Results
2016-17	No planning objective(s) submitted.	N/A
2017-18	No planning objective(s) submitted.	N/A
2018-19	No planning objective(s) submitted.	N/A

Provide narrative for analysis of the program's / discipline's strengths, weaknesses, and opportunities.

Strengths – Strong collaboration with Curriculum Applied Technology Division. Current state of the art equipment and resources are available for courses offered by Workforce Continuing Education. We have had a good partnership with WCE HRD to offer soft skills to our students. Also, we have dedicated instructors and great local

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partnerships (Goldsboro Milling, Jackson & Sons, Wayne UNC Healthcare, Beacon Building Products and Butterball)

Weaknesses – Not enough space to offer additional courses. Welding students leave the program with minimal field experience for job placement.

Opportunities – As the unemployment rate increases due to COVID-19, enrollment predications suggest the college will experience enrollment increases. Also, the pandemic has forced the college to limit class size to no more than ten students per class. Smaller courses could allow instructors more direct instruction with students.

Threats – If the pandemic continues our course offerings may have to be offered 100% online. North Carolina does not allow online instruction for the NCDMV classes. Therefore, the majority of the courses in the program are primarily "hands-on" courses. 100% online courses are not the best method for these types of classes.

Section 6: Outcomes Follow-Up and Approvals

Outcomes follow-up to be addressed spring semester following review year (2020-21 and 2021-22).

Review prepared and submitted by: (*Please list name(s) and titles*)

Lisa Newkirk, Coordinator

Approvals
- Using DocuSign (electronic signature), appropriate Division Dean is asked to review and approve the Review and Outcome Assessment as submitted.
- Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review the Program/Service Review and Outcome Assessments when completed by the responsible program/service personnel. The Office of Institutional Effectiveness will forward the review documents to the appropriate administrator upon completion.
- Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to review and approve the Review and Outcome Assessment and Recommendations as submitted.

Dean Acceptance / Date: _Renita Dawson_____ 8/13/2020

IE Acceptance / Date: _____Dorothy Moore_____ 8/13/2020

Administrator Approval / Date: _____Renita Dawson_____ 8/13/2020