

**Wayne Community College
Program Review – 2021-2022**

Name of Program: Workforce Continuing Education Services – Occupational Extension – Advanced Manufacturing / Applied Technologies Programs

Section 1: Program Overview

Mission/Purpose: *As part of the review cycle, programs are asked to formally evaluate their mission/purpose statement.*

Please provide your current mission/purpose statement.

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.

Are you planning to revise your mission/purpose statement? If so, please provide your revised mission/purpose statement and reason for the change.

Not at this time.

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

Goals 1: The majority of our students who enroll in the Advanced Manufacturing / Applied Technologies Programs are traditional working adults. We ensure student access by offering many of our courses in the evenings. This format allows students to attend classes after work hours.

Goal 2: The Advanced Manufacturing / Applied Technologies Programs endeavor to ensure program excellence. The instructors of the program are skilled in their course area. They work to stay informed of industry changes.

Goal 3: In addition to reviewing student success in the program courses, 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.

Associates, Diplomas, Certificates, and Pathways Offered: Please list all associates, diplomas, certificates, and pathways offered in the table below.

Program Type (Associate, Diploma, Certificate, or Pathway)	Program Title
	EPA Refrigerant Certification (AHR 3128)
	Basic Welding I & II and Advanced Welding (WLD 3106)
	Truck Driver Training (TRA 3607)
	NCDMV Safety Inspection (AUT 3129)
	NCDMV On Board Diagnostics (AUT 3129)
	A & P Oral Practical (AVI 3012)

Activities to ensure program is current (2019-20; 2020-21; 2021-22 – Academic Year, Fall, Spring, Summer)

List program curriculum changes, revisions, and/or deletions.

Curriculum Changes	Date – Updated / Revised / Deleted
HVAC	Revised Fall 2021
HVAC	Revised Fall 2022

Provide an overview of the significance of the program changes 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, program degrees, certificates, diplomas, and/or delivery methods?)

The EPA Refrigerant Certification course implemented in Heating, Ventilating, and Air Conditioning (HVAC) was an attempt to offer a 96-hour class that led to a credential. The schedule was formatted to be completed in one semester. From this change, we discovered that the hour per week was too taxing on our students, so the hours decreased back to 48 in the fall of 2022.

Advisory Committee: dates, summary of minutes, activities (2019-20; 2020-21; 2021-22 – Academic Year – Fall, Spring, Summer)

Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2019-2020	NA	NA
2020-2021	NA	NA
2021-2022	NA	NA

(Ensure that Advisory Committee Meeting Minutes are filed in the IE Shared Program Folder.)

Provide narrative for analysis of trends in the field or industry (emerging needs) that contribute to maintaining program relevance. (Based on advisory committee suggestions, environmental scans, industry demands, and other sources external to the program/discipline, how well is the program/discipline responding to the current and emerging needs of the industry and/or community? What resources might your program need?)

There was no advisory committee specifically for Advanced Manufacturing/Applied Technology programs.

Section 2: Program Outcomes**Outcome #1: Enrollment (unduplicated)**

Baseline: 274 # (Average of total enrollment for the last three years –2019-20; 2020-21; 2021-22;)
Standard: 275 #
Target: 276 #

Program Enrollment

Program Enrollment (unduplicated)	
Reporting Year (Summer, Fall, Spring)	Enrollment
2019-2020	244
2020-2021	272
2021-2022	306

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Female	5	2.0%	12	4.4%	20	6.5%
American Indian/Alaskan Native, Female	1	0.4%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	14	5.7%	9	3.3%	14	4.6%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	4	1.6%	4	1.5%	1	0.3%
Two or More Races, Female	0	0.0%	0	0.0%	1	0.3%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	24	9.8%	25	9.2%	36	11.8%
African American, Male	47	19.3%	83	30.5%	85	27.8%
American Indian/Alaskan Native, Male	1	0.4%	1	0.4%	3	1.0%
Asian, Male	3	1.2%	0	0.0%	4	1.3%
Caucasian, Male	131	53.7%	123	45.2%	139	45.4%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	33	13.5%	37	13.6%	34	11.1%
Two or More Races, Male	2	0.8%	2	0.7%	3	1.0%
Unknown, Male	3	1.2%	1	0.4%	2	0.7%
Male Total	220	90.2%	247	90.8%	270	88.2%
Total	244	100.0%	272	100.0%	306	100.0%

Ethnicity & Age Range	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	1	0.3%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	2	0.8%	2	0.7%	1	0.3%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	2	0.7%	1	0.3%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	2	0.8%	4	1.5%	3	1.0%
African American, 18-24	4	1.6%	11	4.0%	25	8.2%
American Indian/Alaskan Native, 18-24	1	0.4%	0	0.0%	1	0.3%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	25	10.2%	24	8.8%	35	11.4%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	19	7.8%	17	6.3%	17	5.6%
Two or More Races, 18-24	1	0.4%	1	0.4%	3	1.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	50	20.5%	53	19.5%	81	26.5%
African American, 25-44	35	14.3%	60	22.1%	63	20.6%
American Indian/Alaskan Native, 25-44	1	0.4%	1	0.4%	2	0.7%
Asian, 25-44	2	0.8%	0	0.0%	2	0.7%
Caucasian, 25-44	68	27.9%	69	25.4%	71	23.2%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	16	6.6%	17	6.3%	12	3.9%
Two or More Races, 25-44	1	0.4%	1	0.4%	1	0.3%
Unknown, 25-44	2	0.8%	1	0.4%	2	0.7%
25-44 Total	125	51.2%	149	54.8%	153	50.0%
African American, 45-64	12	4.9%	23	8.5%	16	5.2%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	1	0.4%	0	0.0%	2	0.7%
Caucasian, 45-64	40	16.4%	31	11.4%	41	13.4%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	2	0.8%	5	1.8%	4	1.3%
Two or More Races, 45-64	1	0.4%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	56	23.0%	59	21.7%	63	20.6%
African American, 65+	1	0.4%	1	0.4%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	10	4.1%	6	2.2%	5	1.6%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	1	0.3%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	11	4.5%	7	2.6%	6	2.0%
Total	244	100.0%	272	100.0%	306	100.0%

Provide narrative for analysis of program enrollment. (*Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.*)

Enrollment for the Advanced Manufacturing / Applied Technologies program increased from Fall 2019 to Fall 2022. The Truck Driver Training program significantly contributed to the increase in enrollment overall. Due to the truck driving job opportunities, we expect higher growth in this program in the upcoming semesters.

Identify Enrollment Action Items

Item	Action Items (<i>What actions can be taken to increase enrollment in your program?</i>)	Assessment of Action Items (<i>How will you assess the results of action items?</i>)
1	Create a truck driver training advisory board	Membership of truck driver training advisory board.

Outcome #2: Course Success Rate

Baseline: 94.2 % (*Average of last three years –2019-20; 2020-21; 2021-22;*)

Standard: 95.7%

Target: 96 %

Reporting Year	Course Success Rate
2019-2020	91.0%
2020-2021	95.7%
2021-2022	95.9%

Reporting Year	Registered Students	Registered Successful Students	Course Success Rate
2019-2020	335	305	91.0%
2020-2021	324	310	95.7%
2021-2022	367	352	95.9%

Provide narrative for analysis of course success data. (*Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.*)

Our overall course success rate increased slightly over the past three years. There was a slight increase in the number of students which allowed more individuals to complete the courses.

Identify Retention Action Items

Item	Action Items (<i>What actions can be taken to increase program retention?</i>)	Assessment of Action Items (<i>How will you assess the results of action items?</i>)
1	Add additional certifications within courses and publish via marketing.	Review end of course success rate.

Outcome #3: Sections Offered

Baseline: 45 # (Average of total sections offered for the last three years – 2019-20; 2020-21; 2021-22)
Standard: 46 #
Target: 48 #

Sections Offered – Reporting Year – Summer, Fall, Spring	
Reporting Year	Total Sections Offered
2019-2020	39
2020-2021	45
2021-2022	51

Reporting Year	Course Offerings	Sections Offered
2019-2020	7	39
2020-2021	8	45
2021-2022	10	51

Provide narrative for analysis of sections offered. (Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)

Over the past three years, we were able to increase the number of course sections offered as demands for some of our courses increased. We hope this trend will continue.

Identify Completer Action Items

Item	Action Items (What actions can be taken to increase student completion in your program?)	Assessment of Action Items (How will you assess the results of action items?)
1	Implement more instructor involvement with student absentees.	Verify with instructors that they contacted students with excessive absences and explained the benefits of completing their course.

Section 3: Other Assessments

Do you use other methods of assessment to evaluate the effectiveness of your program, to include surveys, self-assessments, student licensure/certification, or third-party credentials?. If so, please explain how information collected from the(se) assessments can be used to improve the program.)

N/A

Planning Objectives (2019-20; 2020-21; 2021-22 – 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
2019-20	<ol style="list-style-type: none"> 1) WCE-Advanced Manufacturing – 1-Tractor Trailer Truck without Day Cab 2) WCE-Advanced Manufacturing – 1-Tractor Trailer Truck with Day Cab 3) WCE-Advanced Manufacturing – 1-Trailer Wrapping Service 4) WCE-Public Safety - Two (2) CPR/Trauma Manikins for EMS/CPR/AED Training 5) WCE-Public Safety - One (1) Prestan Professional CPR-AED Training Manikin (Family Pak) 6) WCE-Allied Health - 2-Advanced GERI Manikins from NASCO 7) WCE-Advanced Manufacturing – 1-Gravel Parking Lot 8) WCE-Allied Health - Centrifuge 6pi Horizontal 3500rpm 9) WCE-Allied Health – EKG Monitor 10) WCE-Allied Health – Digital Vital Sign Monitor 	<ol style="list-style-type: none"> 1) Contacting local industries in pursuit of a donation option in obtaining a tractor trailer for instruction. Will continue to contact local industries in hopes that we can obtain a donation. If we are unsuccessful, we plan to resubmit the objective in the next plan/budget cycle for consideration of funding approval versus the donation option. 2) The college is in contract for leasing a tractor trailer truck for instruction. No additional report required at this time. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: The truck was purchased and put in use initially on the truck driving yard, but it is now being used for on the road training. <u>2020-21 Use of Results / Assessment</u>: 31 students have received their Class A license so far. 3) Vendor finished the trailer wrapping and returned to campus. The wrapped tractor trailer has served as an marketing tool, parked along the main parking lot facing Wayne Memorial Drive during the COVID campus shut-down. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: Received and being used for daytime and nighttime driving. <u>2020-21 Use of Results / Assessment</u>: 100% satisfied with the promotion of the TDT program and others at the College. 4) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status</u>

	<p><u>Report</u>: Received and placed into use for all classes requiring CPR training. <u>2020-21 Use of Results / Assessment</u>: 100% satisfaction has been shown by students and staff with use of this equipment. There have been 51 classes and 521 students trained with these manikins.</p> <p>5) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: Received and placed into use for all classes requiring CPR training. <u>2020-21 Use of Results / Assessment</u>: 100% satisfaction has been shown by students and staff with use of this equipment. There have been 51 classes and 521 students trained with these manikins.</p> <p>6) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: The iWorx kit has been received. However, it cannot be used due to the COVID pandemic. This is likely to remain the case until Spring 2022 at the earliest. Carry forward to the 2021-22 Plan (or beyond) to report assessment. <u>2020-21 Use of Results / Assessment</u>: The iWorx kit has been received. However, it cannot be used due to the COVID pandemic. This is likely to remain the case until Spring 2022 at the earliest. Carry forward to the 2021-22 Plan (or beyond) to report assessment. <u>2021-22 Status Report</u>: Manikins were received and are in use. <u>2021-22 Use of Results / Assessment</u>: Manikins are vital when teaching and demonstrating skills to students. COVID 19 has required use of manikins more than normal in past couple of years. These manikins are very important in instruction delivery and when assessing proficiency on each student.</p> <p>7) Not funded, no action required.</p> <p>8) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: Received Centrifuge and have demonstrated skills with it in SU2020, Fa2020 and SP2021. Student evaluations show the students find the equipment in the classroom to be adequate and meets their needs. <u>2020-21 Use of Results / Assessment</u>: Student</p>
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		<p>evaluations from SU2020, FA2020, and SP2021 show the students find the equipment in the classroom to be adequate and meets their needs.</p> <p>9) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: Received EKG monitor and was unable to access as class has not been offered due to Covid pandemic. Class is planned to be offered in Fall 2021 and will report findings then. <u>2020-21 Use of Results / Assessment</u>: Carry forward to the 2021-22 Plan to report assessment. <u>2021-22 Status Report</u>: The monitor is in place and in use. <u>2021-22 Use of Results / Assessment</u>: The EKG monitor is in place and is used to aide the instructor when teaching students how to read EKG strips and use of monitor in health care settings. We have run 2 semesters since purchase.</p> <p>10) Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u>: Received the monitor and is being used in all Nurse Aide classes. Students have not had clinical rotations due to Covid 19 pandemic but will return to clinicals SU2021 and will benefit from the training then. <u>2020-21 Use of Results / Assessment</u>: Carry forward to the 2021-22 Plan to report assessment. <u>2021-22 Status Report</u>: The Digital Vital Sign Monitor is in place and in use. <u>2021-22 Use of Results / Assessment</u>: The vital sign monitor is in use and assist the instructors when teaching electronic vitals to nurse aide students. Students must be competent in use of this equipment as it simulates the real world use when obtaining vital signs. This equipment has been beneficial for the department.</p>
2020-21	<ol style="list-style-type: none"> 1) WCE-Applied Technologies – 2014 Freightliner Tractor 2) WCE-Public Safety - Hemorrhage Control Biofeedback Kit 	<ol style="list-style-type: none"> 1) The truck is currently in use going into the third semester. We've had a few minor repairs since we purchased it. Student enrollment has been consistent with 8 - 9 students. SU2021 has the largest class so far, with twelve students. 2) Purchased complete kit October 2020. Placed in use immediately upon receipt on October 19, 2020 by the EMS faculty and students. The Biofeedback Kit has been utilized by the Basic

		<p>EMT and Paramedic class as well as several monthly CE training classes dealing with hemorrhage control. The Biofeedback Kit was also taken to the Goldsboro F.D. for training firefighters on hemorrhage control. This biofeedback kit has provided the opportunity for us to offer training on hemorrhage control to approximately 125 students since the purchase. 100% of the students and faculty have shown satisfaction with the use of this new equipment.</p>
<p>2021-22</p>	<ol style="list-style-type: none"> 1) WCE-Public Safety – SimMan ALS Dark Skin Manikin 2) WCE-Allied Health - New Nasco phlebotomy arms for practicing blood draws 3) WCE-Public Safety - Airway Management Bundle for EMS 	<ol style="list-style-type: none"> 1) Not all items have been received allowing for the mannequin to be placed into service. Carry forward to 2022-23 Plan to report assessment. 2) All IV Training Arms received as of 1/3/2022. Allied Health Phlebotomy program will utilize the training arms while instructing students on blood drawing and IV procedures. They will aide students prior to drawing blood room a live person. 3) Approximately 45 EMS students, as well as instructors have enhanced their skills by being able to utilize the purchased equipment. The addition of the upgraded equipment has allowed the EMS students more time to practice on more realistic training tools.

What planning objectives (equipment, supplies, software, etc.) do you anticipate needing over the next three years? Justify the need.

Additional equipment for truck driver training will be needed as the course demand increases. This would include additional tractors/trailers and related supplies. If we obtain additional tractors and/or trailers, we would also need a planning objective to get the trailer wrapped or signage put on the tractor(s).

Also, as the College breaks ground on a new building to house Applied Tech related programs in the Spring of 2023, there will be a need for additional equipment to support those programs. One major area, would be construction-related equipment to provide short-term training in this area.

What positions (faculty and/or staff) do you anticipate needing over the next three years? Justify the need.

In order to expand the truck driver training program additional instructors are needed. Additionally, a full time instructor position is needed to help with the continuity of the program. It is difficult running the program with all part-time instructors.

Provide narrative for your program facility needs over the next three years. If facilities are adequate, please confirm.

Facilities will be better in the next 2 years as the new building is built and is able to house the Applied Tech related programs to include manufacturing.

Provide narrative for academic / student support services needs over the next three years. (Are services adequate for your program/service?)

Currently, services are adequate to meet our needs.

The Advanced Manufacturing programs offer competent training for entry-level jobs in the manufacturing industry. The instructors are skilled in their craft and provide sustainable instruction. Classroom space for more hands-on training is not available to expand the programs. The scheduling of evening classes allows non-traditional working students to attend the classes.

Lisa D. Newkirk, Coordinator, Adv. Mfg., Applied Tech, Self-Supporting/Leisure and Recreation Programs

Approvals

1. Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Review when completed by the responsible program/service personnel.
2. Using DocuSign (electronic signature), appropriate Division Dean, Director, or AVP is asked to read and approve the Review.
3. Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to read and approve the Review.

IE Acceptance / Date: <u>Dorothy Moore</u>	11/28/2022
Dean, Director, or AVP / Date: <u>Renita Dawson</u>	11/28/2022
Administrator Approval / Date: <u>Renita Dawson</u>	11/28/2022