

Wayne Community College Program Review – 2024-2025

Name of Program: Mechatronics Engineering Technology

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 the Mechatronics Engineering Technology Program is to prepare students to use basic engineering principles and technical skills in developing, integrating and testing automated, servomechanical, and other electromechanical systems.

Provide narrative for the analysis of the mission/purpose statement. *(Are you planning to revise your mission/purpose statement? If so, please provide your revised mission/purpose statement and reason for the change.)*

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 align with your program and explain why.

- 1) **Increase Student Access:** Develop policies and practices that provide increased opportunities and remove barriers for all students to enter into, and successfully proceed through training programs or post-secondary education.
- 2) **Ensure Program Excellence:** Develop and implement effective training and academic opportunities responsive to the needs of our community and industry partners.
- 3) **Improve Student Success:** Prepare students to thrive in today's global economy by increasing the number of students leaving with workforce ready credentials, skills, and/or university transfer pathways.
- 4) **Ensure Institutional Quality:** Engage in organized, strategic, and data-informed planning to continually improve relevance and quality in all college administrative, students, and support services to ensure that the college's vision, mission and goals will be achieved.

Goal 1: The Mechatronic Engineering Technology Program ensures student access by offering a certificate and AAS degree program. The program has opened unused classrooms to allow students to use training equipment outside of the normal Lab time. This variety of program offerings accommodates students with a variety of schedules and learning styles. This allows students to have hands-on time in a manner that best suits their work and life schedules.

Goal 2: The Mechatronic Engineering Technology Program strives to ensure program excellence. The faculty of the program continuously review program retention and student success in the program courses in an effort to determine what worked well in the course and any necessary improvements. Other efforts to ensure program excellence include professional development and building relationships with industry partners to ensure the program reflects current industry needs and trends.

Goal 3: In addition to reviewing student success in the program courses, the faculty of The Mechatronic Engineering Technology Program have incorporated various techniques and updates to courses in an effort to improve student success rates. The faculty updates courses in a manner to improve course rigor and maintain the standards set by the industry in which students seek employment.

Goal 4: By achieving the previously mentioned goals toward student access, program excellence and student success; we are contributing to the goals related to institutional quality.

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
Associate	Mechatronics Engineering Technology (A40350)
Certificate	Mechatronics Engineering Technology (C40350A)

Activities to ensure program is current (2022-23; 2023-24; 2024-25 – Academic Year, Fall, Spring, Summer)

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

Curriculum Changes	Date – Updated / Revised / Deleted
None	

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 current Degree Plan is going well.

Advisory Committee: dates, summary of minutes, activities (2022-23; 2023-24; 2024-25 – Academic Year – Fall, Spring, Summer)

Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2022-2023	5/4/2023	Engineering & Manufacture Student Showcase. Highlighting the students Capstone/Design Projects
2023-2024	5/2/2024	Engineering & Manufacture Student Showcase. Highlighting the students Capstone/Design Projects
2024-2025	5/1/2025	Engineering & Manufacture Student Showcase. Highlighting the students Capstone/Design Projects

(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?)*

The Mechatronics Engineering Program and the Advisory Board members have identified multiple trends because of professional development opportunities taken by faculty as well as collaborative meetings with local industry partners and the members of the advisory committee. The Mechatronics Engineering Program and the Advisory Board members have identified multiple trends because of professional development opportunities taken by faculty as well as collaborative meetings with local industry partners and the members of the advisory committee. Soft skills continue to be one of the highest demanded skill sets. Graduates should have basic computer skills as well as the ability to learn new software. Graduates need to be flexible and adaptive in their everyday work environment. Graduates should have knowledge of software to program PLCs. Soft skills continue to be one of the highest demanded skill sets. Graduates need to be flexible and adaptive in their everyday work environment. We are beginning to work on CORE and add Employability Competencies into Mechatronics Engineering Technology.

Section 2: Program Outcomes

Outcome #1: Enrollment (*unduplicated*)

Baseline: 21 # (*Average of total enrollment for the last three years – 2021-22; 2022-23; 2023-24*)

Standard: 22 #

Target: 23 #

Program Enrollment

Program Enrollment (<i>unduplicated</i>)	
Academic Year (Fall, Spring, Summer)	Enrollment
2021-2022	25
2022-2023	21
2023-2024	16

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender Table

Ethnicity & Gender	2021-2022		2022-2023		2023-2024	
	N	%	N	%	N	%
African American, Female	2	8.0%	1	4.8%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	1	6.3%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	2	8.0%	1	4.8%	1	6.3%
African American, Male	3	12.0%	6	28.6%	3	18.8%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	13	52.0%	10	47.6%	6	37.5%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	6	24.0%	4	19.0%	5	31.3%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	1	4.0%	0	0.0%	1	6.3%
Male Total	23	92.0%	20	95.2%	15	93.8%
Total	25	100.0%	21	100.0%	16	100.0%

Ethnicity & Age Range Table

Ethnicity & Age Range	2021-2022		2022-2023		2023-2024	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
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%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	2	8.0%	3	14.3%	3	18.8%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	9	36.0%	9	42.9%	3	18.8%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	4	16.0%	3	14.3%	5	31.3%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	1	4.0%	0	0.0%	0	0.0%
18-24 Total	16	64.0%	15	71.4%	11	68.8%
African American, 25-44	3	12.0%	3	14.3%	0	0.0%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	3	12.0%	1	4.8%	2	12.5%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	1	4.8%	0	0.0%
Two or More Races, 25-44	2	8.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	1	6.3%
25-44 Total	8	32.0%	5	23.8%	3	18.8%
African American, 45-64	0	0.0%	1	4.8%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	4.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	1	4.0%	1	4.8%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	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+	0	0.0%	0	0.0%	1	6.3%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	1	6.3%
Total	25	100.0%	21	100.0%	15	93.8%

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 is increasing due to the high demand for trade-style jobs. The economy is also doing well. This has increased the demand for many more Mechatronics jobs over the last 2-3 years. The Mechatronics program has also tried to make a seamless schedule, benefiting the students who are getting jobs. Our Industrial partners are working with employees to allow for Classes.

2025-2026 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	Schedule high school tours to come through Labs and classrooms	Compare numbers from previous years to if the enrollment is up

Outcome #2: Retention

Baseline: 60.6 % (Average of last three years – 2021-22; 2022-23; 2023-24; program retention)
Standard: 62 %
Target: 63 %

Year	Program Retention Rate
Fall 2021 to Fall 2022	78.0%
Fall 2022 to Fall 2023	50.0%
Fall 2023 to Fall 2024	53.8%

Retention by Ethnicity, Gender, and Age

Ethnicity & Gender Table

Ethnicity & Gender	Fall 2021 to Fall 2022		Fall 2022 to Fall 2023		Fall 2023 to Fall 2024	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	3	21.4%	1	10.0%	1	14.3%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	9	64.3%	5	50.0%	3	42.9%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	14.3%	4	40.0%	2	28.6%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	1	14.3%
Male Total	14	100.0%	10	100.0%	7	100.0%
Total	14	100.0%	10	100.0%	7	100.0%

Ethnicity & Age Range Table

Ethnicity & Age Range	Fall 2021 to Fall 2022		Fall 2022 to Fall 2023		Fall 2023 to Fall 2024	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
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%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	2	14.3%	1	10.0%	1	14.3%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	6	42.9%	5	50.0%	3	42.9%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	1	7.1%	3	30.0%	2	28.6%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	9	64.3%	9	90.0%	6	85.7%
African American, 25-44	1	7.1%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	2	14.3%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	7.1%	1	10.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	1	14.3%
25-44 Total	4	28.6%	1	10.0%	1	14.3%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	0	0.0%	0	0.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	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+	1	7.1%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
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	1	7.1%	0	0.0%	0	0.0%
Total	14	100.0%	10	100.0%	7	100.0%

Provide narrative for analysis of program retention 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.)*

The Mechatronics program has been leveling out for the past 3 years. Constant growth is beginning to be seen across all Engineering and Manufacturing. The retention data showed that I needed to revise the retention rate. We will continue to encourage students to work hard and push through to the finish line to gain a diploma.

2025-2026 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	Help advise CCP students better	Compare numbers from previous years to see if retention increases
2	Encourage students to complete the diploma	Compare numbers from previous years to see if retention increases

Outcome #3: Completers (*unduplicated*) (*Degree level, highest level of attainment*)

Baseline: 7 # (*Average of total completers for the last three years – 2022-23; 2023-24; 2024-25*)
Standard: 8 #
Target: 9 #

Number of Completers (<i>unduplicated</i>) – Graduation Year – Summer, Fall, Spring	
Graduation Year	Total Completers
2022-2023	9
2023-2024	4
2024-2025	7

Completers by Ethnicity, Gender, and Age

Ethnicity & Gender Table

Ethnicity & Gender	2022-2023		2023-2024		2024-2025	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	2	22.2%	1	25.0%	2	28.6%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	5	55.6%	1	25.0%	1	14.3%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	22.2%	2	50.0%	3	42.9%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	1	14.3%
Male Total	9	100.0%	4	100.0%	7	100.0%
Total	9	100.0%	4	100.0%	7	100.0%

Ethnicity & Age Range Table

Ethnicity & Age Range Table	2022-2023		2023-2024		2024-2025	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
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%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	1	11.1%	1	25.0%	1	14.3%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	2	22.2%	0	0.0%	1	14.3%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	1	11.1%	2	50.0%	1	14.3%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	4	44.4%	3	75.0%	3	42.9%
African American, 25-44	1	11.1%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	2	22.2%	1	25.0%	0	0.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	11.1%	0	0.0%	2	28.6%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	1	14.3%
25-44 Total	4	44.4%	1	25.0%	3	42.9%
African American, 45-64	0	0.0%	0	0.0%	1	14.3%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	11.1%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	1	11.1%	0	0.0%	1	14.3%
African American, 65+	0	0.0%	0	0.0%	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+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
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	0	0.0%	0	0.0%	0	0.0%
Total	9	100.0%	4	100.0%	7	100.0%

Provide narrative for analysis of completers. *(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?)*

The number in completers is always going to fluctuate. The reason it's this way is because lots of my students are already working, and work schedules affect when students take classes. Students that have trouble with higher level Math and Physics requirements. A student on track to complete this degree or certificate may switch to the Industrial Systems Technologies Programs which do not require Physics. Steven Reese is now teaching the Physics in the CITE Building. We are seeing higher grades in Mr. Reese's Physics Class. Last Program Review we identify the physics as being the biggest roadblock.

2025-2026 Action Items:

Item	Action Items <i>(What actions can be taken to increase student completion in your program?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Communicate with students the importance of completing the diploma	Compare numbers from previous years to see if completers increase
2	Communicate to students, all the potential jobs we can assist them with getting, if they complete the program	Compare numbers from previous years to see if completers increase

Outcome #4: Budget FTE (Official Budget FTE by Academic Program – Across Budget FTE Semesters Dashboard; all levels)

Baseline: 15.508 # (Average of program budget FTE for the last three years – 2022-23; 2023-24; 2024-25)
Standard: 17 #
Target: 22 #

Budget FTE Year	Budget FTE
2022-2023	20.203
2023-2024	10.250
2024-2025	16.070

All Levels

Provide narrative for 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.) (Based on the data, provide a narrative of your analysis of program budget FTE. Indicate factors that may have affected your budget FTE. How might you increase FTE in your program?)*

Budget FTE is increasing in the Mechatronics program. This all goes back to the long hours spent recruiting and talking with people in the community to help them understand what welding is. The more recruiting we do and the more interest we get, the higher enrollment will be. The higher the enrollment and retention, the higher the budget FTE we will continue to see. We had a big dip in the 2023-2024, but we have started to rebound on the FTE.

2025-2026 Action Items:

Item	Action Items (What actions can be taken to increase budget FTE in your program?)	Assessment of Action Items (How will you assess the results of action items?)
1	Schedule high school tours to come through shops and classrooms	Compare numbers from previous years to see if Budget FTE is up.
2	Utilize recruiting strategies to ensure the knowledge of Mechatronics	Compare numbers from previous years to see if Budget FTE is up.

Outcome #5: Career Development (COOP-Final WBL-110 Grade Rosters and WCC’s Final Headcount Datasets)

According to the Office of Institutional Effectiveness, the program did not offer WBL-110 for academic years 2021-2024.

Academic Year	Enrolled	Completed
2021-2022	0	0
2022-2023	0	0
2023-2024	0	0

All Levels

WCC’s Quality Enhancement Plan, addresses career development in Goal 3: “The college will implement integrated career development within their academic programs.”; Action Item #3: “All CTE programs will implement a career development related Program Outcome.”

Provide narrative for analysis of WBL-110 completers and report on how your program can increase or expand the focus on career development. (Based on the data, provide a narrative of your analysis of WBL completions. Indicate factors that may have affected your completions. **If your program does not offer WBL-110, explain why not and how you can increase or expand the focus on career development.**)

The Mechatronics Technology program does not offer WBL-110. While WBL is a great method for teaching students career readiness, it is not always obtainable for students to embark down this avenue. Instead, we will be increasing career development skills by using the WCC Career Readiness services. We will schedule a day in the late fall and a day in the late spring when one of WCC Career coaches can come speak to our students. Along with our speaker, we will be assessing our students throughout the timeline of our first and second semester courses. The evaluation we will use is called Employability Competencies. Employability Competencies is a method that gives a written guideline of expectations that we have for our students. These guidelines will be shared with students on the first day of class as well as throughout the timeline it takes for them to complete their degree. We will integrate Toolingu.com that covers Workforce Essentials. We also teach Resume Writing in ELC-127 Software for technician. Not only do we want to teach our students a trade. We want to teach them how to be prepared when entering the workforce. We want to mold students into great employees that will be on time, hardworking, and ready to complete the task assigned to them. We want our students to be proud that they attended Wayne Community College.

2025-2026 Action Items:

Item	Action Items (What actions can be taken to increase or expand the focus on career development. i.e. presentations in classes; development of professional development modules; or other ways the program can implement the focus in their programs.)	Assessment of Action Items (How will you assess the results of action items?)
1	Adding in Employability Competencies	Review with each class

Section 3: Other Assessments

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

Wayne Community College partners with The National Coalition of Certification Centers (NC3) in offering certifications which can be applied across multiple industries creating flexible, stackable, and relevant credtials to students and employers. NC3 certifications are built to be integrated into an existing technical program to enhance what was already being taught.

Provided below highlights those certifications provided in the Mechatronics Engineering Technology program.

Certifications by Class	Classes Certifications are taught.	
Fanuc Robotics CERT Cell Programming	ATR-280	Fanuc Test
Festo Fundamentals of Industry 4.0	ELC-127	NC3 Course
Festo Fundamentals of PLCs Allen Bradley	ELC-127	NC3 Course
Festo Fundamentals of Electricity DC	ELC-111	NC3 Course
Festo Fundamentals of Electricity AC	ELC-111	NC3 Course
Festo Fundamentals of Mechanical Systems	MEC-130	NC3 Course
Festo Fundamentals of Fluid Power Pneumatics	HYD-110	NC3 Course
Festo Fundamentals of Fluid Power Hydraulics	HYD-110	NC3 Course
Festo Introduction to Mechatronics	ATR-218	NC3 Course
Festo Fundamentals of Sensor Technology	ATR-112	NC3 Course
Snap On Hand Tool Safety	ELC-120	NC3 Course
Snap On Electrical Safety	ELC-120	NC3 Course
Snap-On 575 Multimeter	ELC-120	NC3 Course
If ALL 9 Festo Certs are Passed, then you can take		
Industry 4.0 Certified Associate	Only 4 schools can provide this in USA. Only school in NC!	

Planning Objectives (2022-23; 2024-25 – Fiscal Year, July 1-June 30)

Provide a summary of planning objectives submitted for the last two planning cycles, 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
2022-23	1. (QTY 4) - Double-sided Workbench with TP 501 American Hydraulics and TP601 American Electro-hydraulics Trainers with curriculum 2. ABB CRB 15000 Collaborative Robot integrated into existing MPS/Automation Lab CITE 201	1. Not approved for funding. 2. Not approved for funding.
2024-25	1. 1qty ELEMENT PLUS CART 30,CG Laptop Cart with 20qty DELL Mobile Precision 3591 Laptops (Mechanical, Industrial, Mechatronics, and Machining) 2. 4) Double-sided Workbench with TP 501 American Hydraulics and TP601 American Electro-hydraulics Trainers with curriculum	1. Even though the objective was approved initially, some funds have become available from the Foundation. The laptop cart is being purchased and is awaiting installation. The cart will be used at the Wayne School of Engineering in Fall 2025. 2. Based on limited funds, this objective was not approved for funding. Not approved, but remains a priority and will be requested the following cycle.

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

Mechatronics/Industrial Systems need to replace most of the electronic components with newer ones. The Components we have are from the 80s and 90s.

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

We would like to see our 9-Month employee move to be 12 months.

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

The new CITE Building has improved our room and lab spaces.

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

Academic/student support services are adequate for the program.

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

Every student who has sought employment in the Mechatronics Program has been successful in finding gainful employment. Mechatronic students leave the program with limited field experience, but local manufacturing has maintained its strength and support of the Mechatronics Program and has offered many job opportunities to students completing courses and the program. Most students have a job before they graduate.

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

Steven Reese, Bobby McArthur, Paul Casey

Approvals

- 1. The program/service faculty/staff conducting the Review must notify their appropriate Division Dean, Director, or AVP to let them know their Review is ready for review and feedback.
- 2. The appropriate Division Dean, Director, or AVP is asked to read the Review from the IE SharePoint directory and provide feedback and/or suggested improvements to the faculty/staff conducting the Review.
- 3. Once the Review has been reviewed by the Division Dean, Director, or AVP, it is their responsibility to contact IE to inform them that the Review is ready for IE’s review.
- 4. 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. IE will upload the Review and will send it to the appropriate Division Dean, Director, or AVP, and Vice President/Associate Vice President for their signatures.

IE Acceptance / Date:	<u>Dorothy Moore</u>	11/10/2025
Dean, Director, or AVP / Date:	<u>Steven Reese</u>	11/10/2025
Administrator Approval / Date:	<u>Dr. Ernie White</u>	11/10/2025