

**Program Outcomes Assessment Follow-Up
2022-2023 Program Outcome (PO) Year End Reporting Form**

In response to SACSCOC 8.2, *“The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results ...”*

Name of Program: Mechatronics Engineering Technology

Outcome #1: Enrollment (*unduplicated*)

Action Items from Program Review:

Item #	Action Items: <i>(Action item identified in the 2021-22 program review.)</i>	Results / Use of Results: <i>(Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)</i>
1	Increase outreach for recruitment (Assessed by: Work with the office of communication to create recruitment materials.)	New Program Flyers have been created by Office of Communication. Those are posted near our offices and provided during any events.

Baseline: 25 # *(Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)*

Standard: 27 #

Target: 28 #

Program Enrollment

Program Enrollment (<i>unduplicated</i>)	
Academic Year (Fall, Spring, Summer)	Enrollment
2019-2020	29
2020-2021	22
2021-2022	25

All Levels

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	2	8.0%
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%	2	8.0%
African American, Male	4	13.8%	3	13.6%	3	12.0%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	3.4%	0	0.0%	0	0.0%
Caucasian, Male	14	48.3%	10	45.5%	13	52.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	8	27.6%	7	31.8%	6	24.0%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	2	6.9%	2	9.1%	1	4.0%
Male Total	29	100.0%	22	100.0%	23	92.0%
Total	29	100.0%	22	100.0%	25	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%	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	1	3.4%	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	1	3.4%	0	0.0%	0	0.0%
African American, 18-24	1	3.4%	0	0.0%	2	8.0%
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	5	17.2%	6	27.3%	9	36.0%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	3	10.3%	2	9.1%	4	16.0%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	1	4.5%	1	4.0%
18-24 Total	9	31.0%	9	40.9%	16	64.0%
African American, 25-44	2	6.9%	2	9.1%	3	12.0%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	1	3.4%	0	0.0%	0	0.0%
Caucasian, 25-44	7	24.1%	3	13.6%	3	12.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	5	17.2%	5	22.7%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	2	8.0%
Unknown, 25-44	2	6.9%	1	4.5%	0	0.0%
25-44 Total	17	58.6%	11	50.0%	8	32.0%
African American, 45-64	1	3.4%	1	4.5%	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	3.4%	0	0.0%	1	4.0%
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	2	6.9%	1	4.5%	1	4.0%
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%	1	4.5%	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%	1	4.5%	0	0.0%
Total	29	100.0%	22	100.0%	25	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.)*

Numbers for the Mechatronics Engineering Students have stayed at a stable level through the 2022 year. We are seeing a drop in Mechatronics Students as we herded students towards the new Apprenticeship programs for Industrial Systems Technology Program. This provided the Journeyman certificate for the students.

2023-2025 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	Work with Executive Director of Apprenticeships and Career Development, to create an Apprenticeship for Mechatronics.	Track enrollment.

Outcome #2: Retention**Action Items from Program Review:**

Item #	Action Items: <i>(Action item identified in the 2021-22 program review.)</i>	Results / Use of Results: <i>(Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)</i>
1	Increase student communication (Assessed by: Emails, Phone Calls, Face to Face meetings)	Created a Google Voice Number. This allows students to call and text me, without them having my real Phone number

Baseline: 65.9 % *(Average of last three years – 2018-19; 2019-20; 2020-21; program retention)*

Standard: 67 %

Target: 69 %

Fall to Fall	Retention Rate
Fall 2019 to Fall 2020	47.6%
Fall 2020 to Fall 2021	81.8%
Fall 2021 to Fall 2022	78.0%

All Levels

Retention by Ethnicity, Gender, and Age

Ethnicity & Gender	Fall 2019 to Fall 2020		Fall 2020 to Fall 2021		Fall 2021 to Fall 2022	
	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	0	0.0%	1	11.1%	3	21.4%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	10.0%	0	0.0%	0	0.0%
Caucasian, Male	6	60.0%	5	55.6%	9	64.3%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	3	30.0%	3	33.3%	2	14.3%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	10	100.0%	9	100.0%	14	100.0%
Total	10	100.0%	9	100.0%	14	100.0%

Ethnicity & Age Range	Fall 2019 to Fall 2020		Fall 2020 to Fall 2021		Fall 2021 to Fall 2022	
	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	0	0.0%	0	0.0%	2	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	3	30.0%	3	33.3%	6	42.9%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	1	10.0%	1	11.1%	1	7.1%
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	40.0%	4	44.4%	9	64.3%
African American, 25-44	1	10.0%	1	11.1%	1	7.1%
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	30.0%	2	22.2%	2	14.3%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	2	20.0%	2	22.2%	1	7.1%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	6	60.0%	5	55.6%	4	28.6%
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+	0	0.0%	0	0.0%	1	7.1%
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	7.1%
Total	10	100.0%	9	100.0%	14	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.)*

There was a 4% drop in retention. The drop is due to students not being able to pass MAT-121 and/or PHY-131. Are then advised to shift to the Industrial Systems Technology program which only requires MAT-110 and no PHY-131.

2023-2025 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	Involve the Academic Skills Center to aid students.	Track number of student going to Academic Skills Center.

Outcome #3: Completers (unduplicated by highest level of attainment)**Action Items from Program Review:**

Item #	Action Items: (Action item identified in the 2021-22 program review.)	Results / Use of Results: (Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)
1	Communication with students to complete degree or certificate (Assessed by: Number of students completing program.)	Made student to Admissions and sign up for certificates they are eligible. They are allowed to also get the Industrial Systems Industrial Automation Certificate.
2	Student services adding Physics Tutors or new Instructors (Assessed by: Students scoring at least "C's".)	If student could not complete Mechatronics Program due to Math or Physics requirements, they were advise to switch to Industrial Systems Program.

Baseline: 7 # (Average of total completers for the last three years – 2019-20; 2020-21; 2021-22)

Standard: 8 #

Target: 9 #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring	
Graduation Year	Total Completers
2020-2021	7
2021-2022	7
2022-2023	9

All Levels

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Completers by Ethnicity, Gender, and Age

Ethnicity & Gender	2020-2021		2021-2022		2022-2023	
	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	1	14.3%	1	14.3%	2	22.2%
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	4	57.1%	3	42.9%	5	55.6%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	28.6%	2	28.6%	2	22.2%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	7	100.0%	6	85.7%	9	100.0%
Total	7	100.0%	6	85.7%	9	100.0%

Ethnicity & Age Range Table	2020-2021		2021-2022		2022-2023	
	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	14.3%	0	0.0%	1	11.1%
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	28.6%	1	14.3%	2	22.2%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	1	14.3%	2	28.6%	1	11.1%
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	57.1%	3	42.9%	4	44.4%
African American, 25-44	0	0.0%	1	14.3%	1	11.1%
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	28.6%	2	28.6%	2	22.2%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	14.3%	0	0.0%	1	11.1%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	1	14.3%	0	0.0%
25-44 Total	3	42.9%	4	57.1%	4	44.4%
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%	1	11.1%
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%	1	11.1%
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	7	100.0%	7	100.0%	9	100.0%

