

**Program Outcome and Assessment(s)**  
**2019-2020 Program Outcome Assessments Year-End Reporting Form**  
**Program Review Cycle - 2018-19**

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

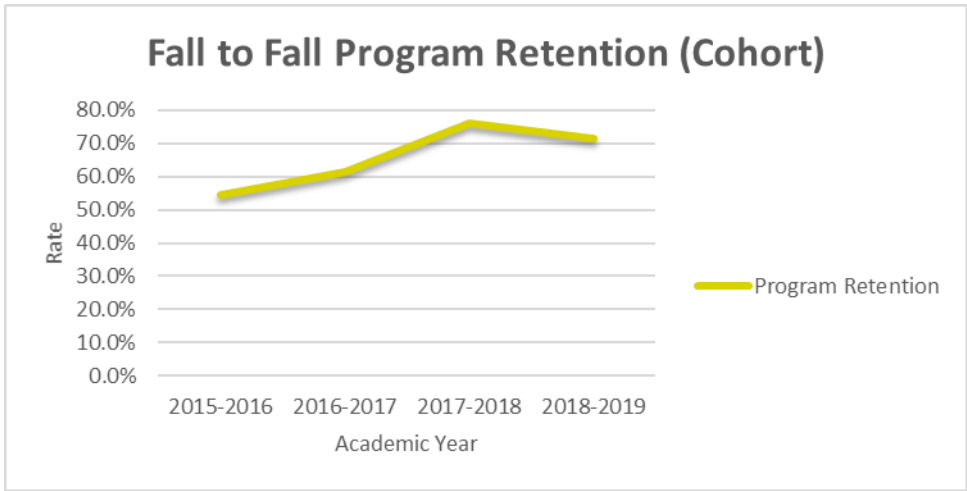
**Program Outcome #1: Program Retention, Fall to Fall**

**Baseline:** 58 % (Average of two years – 2015-16; 2016-17; fall-to-fall program retention)  
**Standard:** 60 % Fall to Fall  
**Target:** 62 % Fall to Fall

**2019-2020 Action / Strategy Items:**

Item #	Action / Strategy Items: (Actions / strategies identified in the 2018-19 program review.)	Results / Use of Results: (Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)
1	Outcome: Inform students of the benefits of staying in the program. Action/Assess: Dedicate part of EGR-110, Intro to Engineering Tech, to explain the benefits of program completion and how that will affect the students long term earnings goal. Spend time explaining the services available through WCC’s Student Services to make students are aware of available resources. We will then compare retention rates and assess this strategy.	The expansion of the EGR-110 program to include the benefits of program completion in Mechatronics appears to have been successful in that we have realized a marked increase in program completion as well as a marginal number of students changing or declaring a second major to the program.

Year (Fall to Fall)	Program Fall Enrollment Cohort	Program Completers	Program Returners	Program Non-Completers	Program Transfers	Program Retention
Fall 2015-Fall 2016	11	0	6	2	3	54.5%
Fall 2016-Fall 2017	26	5	11	10	0	61.5%
Fall 2017-Fall 2018	21	5	11	2	3	76.2%
Fall 2018-Fall 2019	21	4	11	6	0	71.4%



**Provide narrative for analysis of program retention data** *(Based on the data, provide a narrative of your analysis of fall to fall retention. Indicate factors that may have affected your retention. State any changes you plan to address for next year that may affect retention.)*

The majority of students in the Mechatronics program are preparing to seek employment in industrial engineering fields or are enhancing their skill level so as to be more qualified for promotion in their current employment. We are seeing an increase in industry representative’s interest in our graduates thus adding to the overall increase in program completion.

**Provide narrative for analysis of program retention 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?)*

The standard/target was met and will be increased from the standard of 75% to a target to 78%.

**2020-2021 Action / Strategy Items:**

*(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)*

Item	Action / Strategy Items <i>(Identify action items as a result of your program outcome assessment.)</i>	Target Date <i>(Identify your projected target date for completion of action items.)</i>	Assessment of Action Items <i>(State the method of assessment; how you plan to evaluate/assess the results of the action items.)</i>
1	Continue to address the benefits of program completion as well as introducing the program to high school students through campus visits.	Fall 2021	From retention data provided.

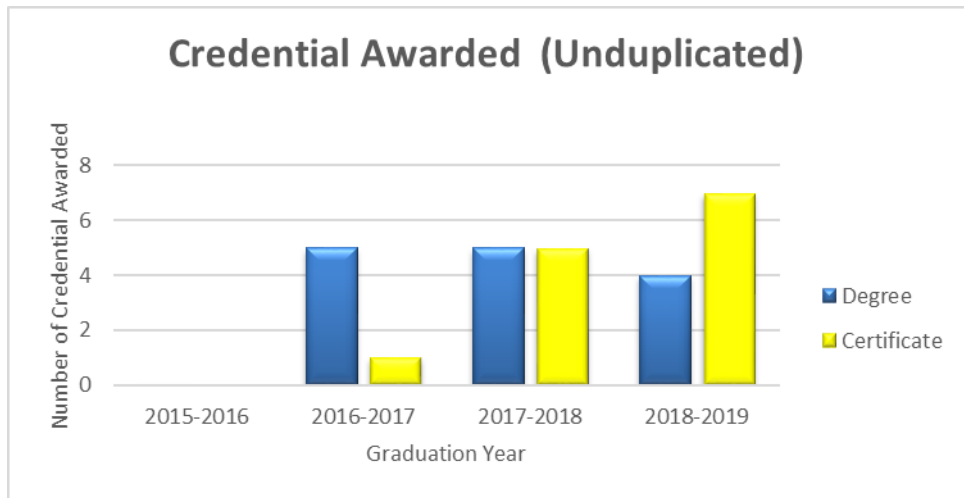
**Program Outcome #2: Completions (Graduation) (unduplicated)**

**Baseline:** 8 # (Average of two years – 2016-17; 2017-18)  
**Standard:** 10 #  
**Target:** 12 #

**2019-2020 Action / Strategy Items:**

Item #	Action / Strategy Items: (Actions / strategies identified in the 2018-19 program review.)	Results / Use of Results: (Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)
1	<p>Outcome: Update certificates and add a diploma to the program to allow more paths to completion.</p> <p>Action/Assess: Program pathways have been updated and is being stressed to new or potential students.</p> <p>Evening classes are being offered geared toward specific certificates. We will review completion rates during the first two years of the change compared to the previous two years.</p>	<p>Both Degree &amp; Certificate completers increased. We will continue this Action Item.</p>

<b>Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring</b>				
Graduation Year	Degree	Diploma	Certificate	Total
2015-2016				
2016-2017	5		1	6
2017-2018	5		5	10
2018-2019	4		7	11



**Provide narrative for analysis of completion data** (*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?)*

This action item was introduced to make students aware of the hiring process for our graduates and which type of student will be more likely to get hired. This also applies to students that transfer to other schools and take on more leadership opportunities at those schools with the education they learn from our program.

**Provide narrative for analysis of completion 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?)*

There were 11 completions in the program which was below the expected standard but retention remained higher. As a relative new program, interest continues to grow.

**2020-2021 Action / Strategy Items:**

*(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)*

<b>Item</b>	<b>Action / Strategy Items</b> ( <i>Identify action items as a result of your program outcome assessment.</i> )	<b>Target Date</b> ( <i>Identify your projected target date for completion of action items.</i> )	<b>Assessment of Action Items</b> ( <i>State the method of assessment; how you plan to evaluate/assess the results of the action items.</i> )
1	Provide students with clear expectations of the work and effort needed to be successful in the program and to be able to gain employment	Fall 2021	From the completion data

**Program Outcome #3: Job Placement / Employment**

**Baseline:** 118 # (Average of two years – 2016-17; 2017-18 employed/more education)  
**Standard:** 120 #  
**Target:** 125 #

**2019-2020 Action / Strategy Items:**

Item #	Action / Strategy Items: (Actions / strategies identified in the 2018-19 program review.)	Results / Use of Results: (Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)
1	<p>Outcome: Continue visiting and speaking to area employers to strengthen the bond with WCC.</p> <p>Action/Assess: Visit local employers, as well as invite them to visit our labs and meet our students. Opening the lines of communication allows us to hear of job opportunities and builds trust, when we recommend a student for employment.</p>	<p>Our advisory board and local business partners have a great impact on our students and their employment.</p>
2	<p>Outcome: Implement an Alumni Database to track student success.</p> <p>Action/Assess: By being able to contact our alumni, we can get valuable feedback, as well having “a person inside” when facilities are searching for employees.</p>	<p>Students that have completed the program and have successfully been employed have recommended and influenced the placement of our graduates into their industries.</p>

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education (add # employed and # seeking more education and divide by # of graduates)	Unknown	Other/Comments
2015-16	0	0	0	0%		
2016-17	6	4	3	117%		
2017-18	10	5	7	120%		
2018-19	11	8	1	82%		

**Provide narrative for analysis of job placement/employment data** *(Based on the data, provide a narrative of your analysis of job placement / employment. Indicate factors that may have affected job placement / employment. How can your program promote higher employment of students in the field?)*

We are very satisfied with the number of students that get employed through our program. If students want to work, and if they do well in the coursework, then they can get a job during the recent economies. Many of the students are desiring to seek more education, which we also promote.

**Provide narrative for analysis of job placement/employment 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?)*

We did not achieve our standard or target. We recommend retaining our standard and target as indicated.

**2020-2021 Action / Strategy Items:**

*(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)*

<b>Item</b>	<b>Action / Strategy Items</b> <i>(Identify action items as a result of your program outcome assessment.)</i>	<b>Target Date</b> <i>(Identify your projected target date for completion of action items.)</i>	<b>Assessment of Action Items</b> <i>(State the method of assessment; how you plan to evaluate/assess the results of the action items.)</i>
1	Continue to work with advisory committee members and industry employers to place students into jobs	Fall 2021	From the job placement data.

**Program Outcome #4: Licensure and Certification Passing Rates (if applicable) Not applicable.**

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

**2019-2020 Action / Strategy Items:**

Item #	Action / Strategy Items: (Actions / strategies identified in the 2018-19 program review.)	Results / Use of Results: (Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)
1	Not applicable.	

**Licensure / Certification Exam – Title**

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

**Provide narrative for analysis of licensure / certification passing rates data** (Based on the data, provide a narrative of your analysis of licensure / certification. Are you satisfied with your program licensure rates? State any changes you plan to address for licensure/certification passing rates.)

Not applicable.

**Provide narrative for analysis of licensure / 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?)

Not applicable.

**2020-2021 Action / Strategy Items:**

(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action / Strategy 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	Not applicable.		

**Program Outcome #5: Third-Party Credentials (if applicable)**

**Baseline:** 14 # (Average of three years – 2015-16,; 2016-17; 2017-18)  
**Standard:** 18 #  
**Target:** 22 #

**2019-2020 Action / Strategy Items:**

Item #	Action / Strategy Items: (Actions / strategies identified in the 2018-19 program review.)	Results / Use of Results: (Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)
1	Add new NC3 certificates as training and equipment become available.	This has significantly increased the number of earned certificates by students.

**Third-Party Credentials**

Academic Year Fall, Spring, Summer	Credentials for Program of Study	# Tested (duplicated)	# Passed
2016-2017	FANUC Robotics Certification	14	14
2017-2018	FANUC Robotics Certification, Snap-On Torque and Meter Certifications	12	12
2018-2019	FANUC Robotics Certification, Snap-On Torque and Meter Certifications and FESTO PLC Certification.	18	18

**Provide narrative for analysis of third-party credentials data** (Based on the data, provide a narrative of your 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.)

The number of third party credentials available to program students continues to increase as instructors become recognized trainers by third party certification providers.

**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?)

11 students attempted and received third party certifications for a total of 28 earned certificates.

**2020-2021 Action / Strategy Items:**

(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Item	Action / Strategy 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	Add advanced classes in industry related subjects.	2021	Encourage student to participate in the certifications program.



**Program Outcome #6: Other Assessment (if applicable)**

**2019-2020 Action / Strategy Items:**

<b>Item #</b>	<b>Action / Strategy Items:</b> <i>(Actions / strategies identified in the 2018-19 program review.)</i>	<b>Results / Use of Results:</b> <i>(Provide results of the action / strategy identified. Was the action / strategy successful? If not, did you want to continue this action / strategy going forward? If so, please include this action / strategy in the 2020-21 action / strategies table below.)</i>
1	Not applicable.	

**2020-2021 Action / Strategy Items:**

*(Identify and address outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)*

<b>Item</b>	<b>Action / Strategy Items</b> <i>(Identify action items as a result of your program outcome assessment.)</i>	<b>Target Date</b> <i>(Identify your projected target date for completion of action items.)</i>	<b>Assessment of Action Items</b> <i>(State the method of assessment; how you plan to evaluate/assess the results of the action items.)</i>
1	Not applicable.		