

**Wayne Community College
Program Review and Outcome Assessments, 2018-19**

Institutional Goal 2: Ensure Program Excellence**Institutional Goal 3: Improve Student Success**

Department Name: Industrial Systems Technology

Mission/Purpose: The mission of the Industrial Systems Technology Program is to prepare individuals to safely service, maintain, repair, or install equipment through instruction including theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Degrees, Diplomas, and Certificates Offered: List all degrees, diplomas, and certificates offered.

Associate in Applied Science Degree-Industrial Systems Technology (A50240)

Certificate in IST-Industrial Systems Certificate (C50240)

Certificate in IST-Industrial Controls Certificate (C50240IC)

Certificate in IST- Mechanical Systems Certificate (C50240MS)

Certificate in IST-Maintenance Management Certificate (C50240MM)

Certificate in IST for CCP- Industrial Systems Certificate (C50240X)

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals.

The Industrial Systems Technology Program strives to meet the educational and training needs of our local industries and employers. We do this by maintaining open dialog with our students and those that will employ them. As an open door institution, we meet the students at their skill level and provide them with the skills needed to become successful employees in their field, as well as productive members of their communities.

Activities to ensure curriculum currency (2015-16; 2016-17; 2017-18)

List program curriculum changes, revisions, deletions in table.

Course Title	Date – Updated / Revised / Deleted
PCI-264 Process Control with PLCs	Spring 2016- updated with new software and exercises
HYD-121 Hydraulics/Pneumatics II	Spring 2016 - updated with additional hardware and exercises
ELC-120 Industrial Controls	Fall 2016- Updated basic control hardware

Provide an overview of the significance of the program changes and improvements that occurred over the past three years

The technology used by industry is constantly changing. As a result, the Industrial Systems Technology Program must constantly review and look for areas to improve so that our students will have the skills needed in the modern workplace. These changes were a response to those changing needs.

Additionally, the program added an IST Diploma (D50240) and an Industrial Automation Certificate (C502401A) in Fall 2018.

Advisory Committee: dates, summary of minutes, activities (2015-16; 2016-17; 2017-18)**Summary of Advisory Committee Activities**

Year	Meeting Dates	Recommendations / Activities
2015-16	12/12/2016	Review current curriculum
2016-17	12/6/2017	Explained curriculum changes coming 2018 Catalog
2017-18	04/19/2018	Changes in effect and addition of Tech Tuesdays for Night

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.)*

Our advisory board is generally made up of local employers that have hired our graduates. This allows us to receive direct feedback on the quality of our program, as well as changes that may need to be implemented. Former students are often invited, to give a critique of how well the classes prepared them for the job that they now hold.

Analysis of trends in the field or industry

Provide narrative for analysis of trends in the field. *(Are there jobs available for your students? Is there new technology/equipment that needs to be added to your program?)*

The job out-look for entry-level technician/mechanics is very strong and shows no sign of slowing at this time. One of the most common comments, made by our advisory board, is that they need additional skilled employees in order to meet the demands of planned expansions or to maintain new, automated equipment. Another need is for techs that have the basic skills to replace mechanics that are retiring and leaving the field. We plan to update our certificates, add a diploma and revise our degree in order to better meet the needs of our local employers.

Faculty Profile**List of Faculty and Status (2015-16; 2016-17; 2017-18)**

Faculty / Name	Full-Time / Part-Time
Carter, James	FT
Imes, Kelsie	PT
Keller, Kirk	FT
King, Todd	FT
Knotts, Stephen	FT
McArthur, Bobby	FT
Reese, Steven	FT
Wall, Angela	PT
Walters, Robert	PT
White, Ernie	FT
Wilkins, William	PT

Have all the faculty credentials been verified? *(Verify required documents are in personnel files.)*

Yes, through pre-employment and SACS process.

Faculty Contact and Credit Hours

Faculty / Name	Full-Time Part-Time	Summer 2015		Fall 2015		Spring 2016	
		Contact	Credit	Contact	Credit	Contact	Credit
Carter, Eddie	PT					10	15
Imes, Kelsie	PT	10	7	17	12	19	13
Keller, Kirk	FT	9	6	19	18	20	18
King, Todd	FT	14	8	11	8	11	7
Knotts, Stephen	FT	11	7	19	11	40	28
McArthur, Bobby	PT					3	9
Reese, Steven	FT	9	5	20	13	24	15
Wall, Angela	FT	4	2	24	14	18	19
Walters, Robert	PT			5	3	5	3
White, Ernie	FT	3	3	3	3	5	3
Wilkins, William	PT			6	6		

Faculty / Name	Full-Time Part-Time	Summer 2016		Fall 2016		Spring 2017	
		Contact	Credit	Contact	Credit	Contact	Credit
Carter, Eddie	FT	8	5	25	17	22	15
Imes, Kelsie	PT	5	3				
Keller, Kirk	FT	7	6	21	20	19	15
King, Todd	FT	7	4	14	8	8	5
Knotts, Stephen	FT	9	7	31	17	19	13
McArthur, Bobby	PT			4	2	18	11
Reese, Steven	FT	22	13	21	14	30	18
Walters, Robert	PT			5	3	5	3
White, Ernie	FT	3	3	8	6	5	3
Wilkins, William	PT			3	3		

Faculty / Name	Full-Time Part-Time	Summer 2017		Fall 2017		Spring 2018	
		Contact	Credit	Contact	Credit	Contact	Credit
Carter, Eddie	FT	8	5	21	15	26	18
Keller, Kirk	FT	8	5	21	20	1	1
King, Todd	FT	7	4	11	8	16	14
Knotts, Stephen	FT	15	10	18	11	19	13
McArthur, Bobby	FT			26	16	22	14
Reese, Steven	FT	5	3	31	19	24	16
Walters, Robert	PT			5	3	5	3
White, Ernie	FT	3	3	11	9	14	12

It should be noted that many of these instructors teach courses in Industrial Systems Technology, Mechanical Engineering Technology, and/or Mechatronics Engineering Technology, as some courses overlap and are part of the core requirements for each program.

Faculty Demographics (2015-16; 2016-17; 2017-18)

	# Employees	Avg. Years of Service	% of Classes Taught By
Full-Time	7	10	95%
Part-Time	3	17	5%

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

Currently with two full time instructors in the IST and other full time instructors teaching in common courses, from other programs, the program has adequate coverage. Our part-time instructors are generally utilized for common departmental courses, which gives students a choice of sections which aids in student completion and retention. If student numbers increase beyond the safety limits for lab sections, an additional FT / PT instructor may be required.

Professional development activities of faculty (2015-16; 2016-17; 2017-18)

Verify departmental professional development (PD) tracking logs are completed and filed in Program Review Professional Development folder.

PD tracking logs are contained in the Program Review Professional Development folder. The tracking logs have been verified.

Student Demographics

Gender (A50240) Unduplicated			
Academic Year	Female	Male	Total
2015-2016	2	49	51
2016-2017	3	25	28
2017-2018	1	35	36

Gender (C50240) Unduplicated			
Academic Year	Female	Male	Total
2015-2016	0	1	1
2016-2017	0	1	1
2017-2018	0	4	4

Ethnicity (A50240) Unduplicated							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	9	0	8	34	0	51
2016-2017	0	7	0	3	18	0	28
2017-2018	0	5	1	7	23	0	36

Ethnicity (C50240) Unduplicated							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	0	0	0	1	0	1
2016-2017	0	1	0	0	0	0	1
2017-2018	0	1	0	1	2	0	4

Age Groups (A50240) Unduplicated						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	0	24	11	6	10	51
2016-2017	0	13	6	2	7	28
2017-2018	0	19	10	2	5	36

Age Groups (C50240) Unduplicated						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	0	1	0	0	0	1
2016-2017	0	1	0	0	0	1
2017-2018	0	3	0	0	1	4

Provide narrative for analysis of student demographics. *(Are you satisfied with your program demographics? Do you have a diverse population of students?)*

Student demographics show racial and gender disparities typical of this career field.

Program Enrollment (Fall, Spring, Summer)

Program Enrollment (A50240) Unduplicated		
Year	Enrollment	3-Year Average
2015-16	51	60
2016-17	28	47
2017-18	36	38

Program Enrollment (C50240) Unduplicated		
Year	Enrollment	3-Year Average
2015-16	1	2
2016-17	1	2
2017-18	4	2

Provide narrative for analysis of program enrollment. *(Is enrollment increasing or decreasing? What possible reasons for increase/decrease? Describe how you plan to address program enrollment.)*

After the 2015-16 year, many of the students that would have traditionally entered Industrial Systems, entered into the new Mechatronics program. This led to the large decrease in students. Personnel changes in the department during the same general time caused an interruption in the traditional recruiting activities. Enrollment has begun to increase in the program, despite a strong job market that tends to depress retraining and enrollment. We are constantly searching for opportunities to recruit students and publicize our program. As these and new venues are found and evaluated, enrollment numbers should reflect the need in the job market.

Program Outcomes

Retention

Baseline: 56% (Average of last three years – 2014-15; 2015-16; 2016-17, fall-to-fall program retention)

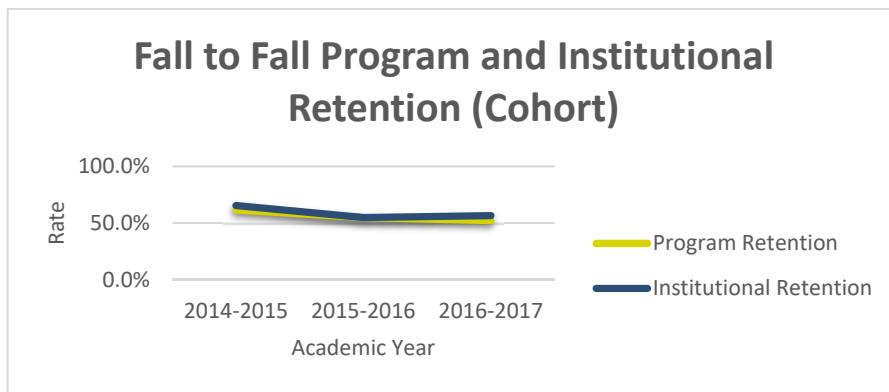
Standard: 57%

Target: 59%

Data/Results:

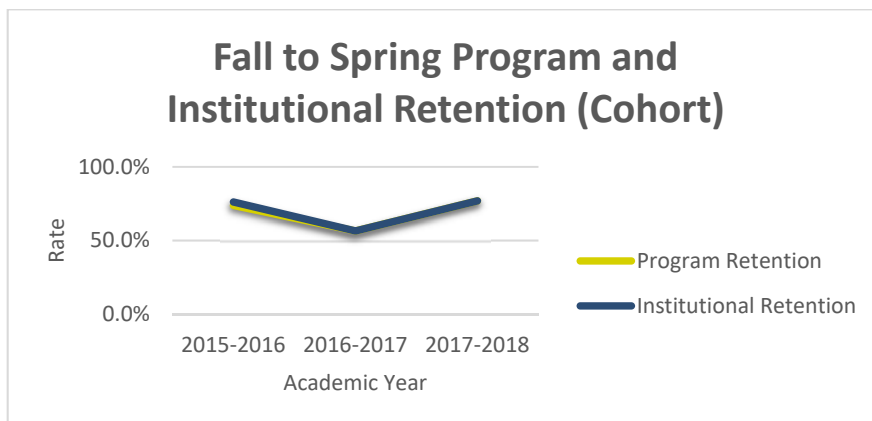
Fall-to-Fall

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2014-2015	52	10	22	18	61.5%	2	65.4%
2015-2016	42	9	14	19	54.8%	0	54.8%
2016-2017	23	4	8	10	52.2%	1	56.5%



Fall-to-Spring

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2015-2016	42	2	29	10	73.8%	1	76.2%
2016-2017	23	1	12	10	56.5%	0	56.5%
2017-2018	26	2	18	6	76.9%	0	76.9%



Provide narrative for analysis of program retention. *(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 / increase your retention.)*

Fall to Spring retention is in line with the Institutional retention rate. Fall to Fall retention is somewhat of a catch-22 in our program. Some of our students take jobs based on skills that they have acquired in their first year. This speaks to the quality of our program, in that marketable skills are acquired early on, allowing students to begin well-paying jobs. The advantages of program completion will be addressed in EGR-110, Introduction to Engineering, and emphasized in other classes, so that students may better weigh their options.

Provide narrative for analysis of 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? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New program retention standard and target was set based on the three-year baseline data from 2014-15, 2015-16, 2016-17 to fall to fall retention.

Completions

Baseline: 10 *(Average of last three years – 2015-16; 2016-17; 2017-18)*
Standard: 11
Target: 12

Data/Results:

Number of Graduates (Completions)				
	Degree	Diploma	Certificate	Total
2015-16	9		2	11
2016-17	5		5	10
2017-18	7		2	9

Provide narrative for analysis of completions. *(Are you satisfied with your completion rates? How might you increase your completion rates?)*

We updated our certificates and added a diploma to the program in Fall 2018. This should help boost completion rates. Advising sessions will help students understand remaining requirements and paths to reach completion.

Provide narrative for analysis of 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? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

With the addition of updated certificates and a new diploma, we should see an increase in completion rates. New completion standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

Job Placement / Employment (to be provided by program)

Baseline: 97% (Average number employed and/or seeking more education from the last three years – 2015-16; 2016-17; 2017-18)
Standard: 98%
Target: 99%

Data/Results:

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education	Unknown	Other/Comments
2015-16	11	8	3	100%		
2016-17	10	4	5	90%		
2017-18	9	6	3	100%		

Provide narrative for analysis of job placement rates. (Are students finding jobs within the program of study?) (How can your program promote higher employment of students in the field?)

At this point in time our program has no formal way of tracking student employment after graduation. This data is from informal student contact, but is believed to be accurate. All of our students that were actively seeking employment, were employed with-in a month of graduation.

Provide narrative for analysis of 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? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

New employment demand standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18. Standard target was generally met and is a viable target to aspire to. At this point in time, with low numbers, one person can greatly affect percentages.

Provide narrative for analysis of Labor Market Data. (Review Labor Market Data provided and provide an assessment of the data.)

The data points to a flat, or slight decline (-6% to -7%) in the jobs growth in the near future. This is contrary to what we are hearing from our advisory committee and local employers that we have visited. As local industries update and automate, they are actively seeking employees with the skills that our program provides.

Licensure and Certification Passing Rates (if applicable)

Baseline: XX% (Average of last three years; identify last three licensure years)
Standard: XX%
Target: XX%

Data/Results: Not applicable to the Industrial Systems Technology program.

Licensure / Certification Exam – Title

Year	# Tested	% Passing
2010-11		
2012-13		
2013-14		
2014-15		
2015-16		
2016-17		

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

Not applicable

Provide narrative for analysis of 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? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

Not applicable

Third-Party Credentials (if applicable)

Baseline: 39 (Average number of completers for the last three years – 2015-16; 2016-17; 2017-18)
Standard: 50
Target: 110

Data/Results:

Third-Party Credentials

NC3 Certifications	2015-16 # Tested	2015-16 # Completers	2016-17 # Tested	2016-17 # Completers	2017-18 # Tested	2017-18 # Completers
Electrical Safety Test	NA	NA	NA	NA	30	30
Hand Tool Safety Test	NA	NA	NA	NA	19	18
575 Multimeter Certification	NA	NA	9	9	35	33
Torque Mechanical Certification	6	6	7	7	3	3
Torque Electronic Certification	1	1	1	1	4	4
Torque Theory Test	1	1	1	1	1	1

Wire Pathways - Knockouts	NA	NA	NA	NA	1	1
Wire Pathways - Rotary	NA	NA	NA	NA	1	1
Voice, Data, Video Test	NA	NA	NA	NA	1	1
Totals	8	8	18	18	95	92

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

WCC has a relationship with NC3, The National Coalition of Certification Centers. It is a value-driven organization and the future model for Career and Technical Education, creating highly-skilled, job-ready professionals through a growing network of educational partners and global industry leaders. Starting in the 2015-16 school WCC became a “Train the Trainer” site. This is allows our students to earn certifications to bolster their resumes with industry supported credentials.

Provide narrative for analysis of 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? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New third-party credential standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18. The program started with 3 NC3 courses. As instructors receive training, we are able to include more available credentials. Our goal is to award the 9 NC3 courses listed, with an additional PLC certification once our lab is approved. Our target is based on number of certifications awarded. We started the first year with just handing out 8. By the end of 2017-18 we had increased that number to 92. The future target is the give out 110 by the end of 2018-19 as we integrate the material into our courses.

Course Success

Analysis of student success in courses (2015-16; 2016-17; 2017-18)

Provide narrative for analysis of student success in courses. *(Ex – Are more students successful in online courses versus traditional? Are students more successful in certain courses?)*

Students have much better success in traditional or hybrid classes as opposed to online courses. In our program, students do better in courses with strong lab components.

Analysis of student success in distance learning courses (2015-16; 2016-17; 2017-18)

Course Success Rates by Method of Instruction				
Semester	Department	Course Number	% Success	Method of Instruction
Fall 2015	Industrial Systems	ELC-127	86%	Hybrid
Fall 2015	Industrial Systems	ELC-128	93%	Hybrid
Fall 2015	Industrial Systems	ELN-231	81%	Hybrid
Fall 2015	Industrial Systems	HYD-110	85%	Hybrid
Fall 2015	Industrial Systems	MNT-165	69%	Hybrid

Fall 2015	Industrial Systems	MNT-110	40%	Internet
Fall 2015	Industrial Systems	ELC-111	71%	Traditional
Fall 2016	Industrial Systems	ELC-127	59%	Hybrid
Fall 2016	Industrial Systems	ELC-128	90%	Hybrid
Fall 2016	Industrial Systems	ELN-231	100%	Hybrid
Fall 2016	Industrial Systems	HYD-110	83%	Hybrid
Fall 2016	Industrial Systems	MNT-165	100%	Hybrid
Fall 2016	Industrial Systems	ISC-132	89%	Internet
Fall 2016	Industrial Systems	ELC-111	78%	Traditional
Fall 2016	Industrial Systems	ELC-111	79%	Web Support/Assisted
Spring 2016	Industrial Systems	PCI-264	64%	Hybrid
Spring 2016	Industrial Systems	ISC-132	82%	Internet
Spring 2016	Industrial Systems	HYD-110	100%	Independent Study
Spring 2016	Industrial Systems	ELC-120	67%	Web Support/Assisted
Summer 2016	Industrial Systems	ELC-120	100%	Hybrid
Summer 2016	Industrial Systems	ELC-128	87%	Hybrid
Summer 2016	Industrial Systems	MNT-110	50%	Internet
Fall 2017	Industrial Systems	ELC-127	81%	Hybrid
Fall 2017	Industrial Systems	ELC-128	67%	Hybrid
Fall 2017	Industrial Systems	ELN-231	100%	Hybrid
Fall 2017	Industrial Systems	HYD-110	85%	Hybrid
Fall 2017	Industrial Systems	MNT-165	100%	Hybrid
Fall 2017	Industrial Systems	ISC-132	100%	Internet
Fall 2017	Industrial Systems	ELC-111	83%	Traditional
Spring 2017	Industrial Systems	PCI-264	93%	Hybrid
Spring 2017	Industrial Systems	ISC-132	78%	Internet
Spring 2017	Industrial Systems	ELC-120	82%	Web Support/Assisted
Summer 2017	Industrial Systems	ELC-128	100%	Hybrid
Summer 2017	Industrial Systems	MNT-110	90%	Internet
Summer 2017	Industrial Systems	PCI-264	100%	Independent Study
Summer 2017	Industrial Systems	ELC-111	100%	Traditional
Spring 2018	Industrial Systems	PCI-264	80%	Hybrid
Spring 2018	Industrial Systems	ISC-132	71%	Internet
Spring 2018	Industrial Systems	ELC-120	80%	Traditional
Summer 2018	Industrial Systems	ELC-128	71%	Hybrid
Summer 2018	Industrial Systems	MNT-110	81%	Internet
Summer 2018	Industrial Systems	ELC-111	71%	Traditional

Provide narrative for analysis of student success in distance learning courses. *(Are distance education course success rates equivalent to the success rates for other methods of instruction?)*

DE students have a slightly lower success rate than traditional or hybrid courses. Two of our main online courses are offered during the summer semester, which could account for the lower success rate. MNT-110 will be offered as a hybrid course in summer of 2019. This will give the opportunity to directly compare online to hybrid.

Analysis of Program Learning Outcomes (PLO) (2015-16; 2016-17; 2017-18)

- Document PLO cycle for the next four years (2018-19, 2019-20, 2020-21, and 2021-22) in the table below.
- File program learning outcome reports for the past three years (2015-16, 2016-17, and 2017-18) in the Program Review Attachment folder.
- Document changes to the program learning outcomes and/or assessment cycle.

Assessment Cycle	Program Learning Outcomes
2018-19	PLO 4 (collection and analysis SP2019)
2019-20	PLO 1 (collection and analysis FA2019), PLO 3 (collection / analysis SP2020)
2020-21	PLO 2 (collection and analysis SP2020)
2021-22	PLO 4 (collection and analysis SP2021)

Program Learning Outcomes were revised for the 2016-17 cycle. The original six PLOs were revised into the following.

PLO 1: Design and install industrial control systems

PLO 2: Demonstrate basic welding skills

PLO 3: Use a mechanical print to machine an industrial part

PLO 4: Install industrial fluid systems based on schematic diagram

Other Assessments**Analysis of graduate survey data (2015-16; 2016-17; 2017-18)**

Provide narrative for analysis of program-specific graduate survey data. *(What did you learn from the results? What did your graduates indicate needed to be revised within your program?)*

For the 2017 cross tab analysis, 100% of the students were either satisfied or very satisfied in the program specific questions. Due to the general nature of the graduate survey, useful program specific data is difficult to obtain.

Analysis of employer survey data (2015-16; 2016-17; 2017-18)

Provide narrative for analysis of program-specific employer survey data. *(What did employers indicate needs improvement within your program (equipment, facilities, program offerings/certificates?)*

Employers requested an increased emphasis on basic hand tool use and identification. MNT-110, MEC-111 and EGR-110 have expanded the hand tool training and safety to satisfy their needs.

External Reviews

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 apply.

Resources

Program facilities - location and adequacy

Provide narrative for program facilities adequacy and/or needs.

Program desperately needs more room. Hocutt 140 is used for four different labs, requiring equipment to be rearranged for each class. This uses instructional and lab time just to setup and reset the room. Hocutt 250 is also a multiuse room where students must store projects so that the space is available for another class. Course scheduling is also complicated by limited lab space.

Library resources

Provide narrative for program library resources. (Are library resources adequate for your program?)

Library resources are adequate for the program.

Planning Objectives (2015-16; 2016-17; 2017-18)

- Verify previous year's prioritized planning objectives end-of-year status reports are filed in Program Review Planning Objective EOY (End of Year) Status Reports folder.
- 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	Objective(s) Submitted	Use of Results
2015-16	PowerFlex Drive 70 Industrial Drives	They are being used in the electrical/hydraulics lab in HOC 140/AMC for use by the Industrial Systems Technology, Electronics Engineering, and Mechatronics programs.
2016-17	Four power base options to double the capacity of the Festo/Labvolt mechanical trainers	Helps accommodate more students in a MNT-165/MEC-130 labs on quality training equipment.
2017-18	Two additional base model mechanical trainers from Festo/Labvolt	Not Funded.

Overall analysis of the strengths of the program

Provide narrative for analysis of the strengths of the program.

The Industrial Systems program has had excellent success in employment of our students. The basic skills that are learned in the program are in high demand. Program feedback, both formal and informal, from our local employers has been quite positive. Students are generally comfortable speaking with instructors about problems that may be interfering with their course work. Many times solutions can be found that allow the students to continue their educational goals.

Overall analysis of the weaknesses of the program

Provide narrative for analysis of the weaknesses of the program.

In an ever changing technological landscape keeping up with the latest technology and trends is difficult. Proper utilization of new equipment is often hampered by the lack of space to properly instruct our students. Constant setup and tear down routines tax the time allotment of quality lab usage. Students are unable to leave projects setup till next meeting, meaning they have to rebuild on every return to lab. Additional lab space would help to reduce this weakness.

Recommendations

- Complete 2018-2019 Program/Service Review/Outcome Assessment Recommendation Worksheet to address action items from program review and outcome analysis with target date; and methods to assess action items.
- File Review/Outcome and Assessment Recommendation Worksheet in Recommendation and Follow-Up folder.
- Recommendation follow-up reports to be addressed spring semester following review year (2019-20 and 2020-21).

Outcomes Recommendations from Program Review and Outcome Assessments
Name of Program: Industrial Systems Technology

2018-2019 Program Review and Outcome Assessments Recommendations

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

Outcome <i>(Identify projected outcomes as a result of your program/service review.)</i>	Target Date <i>(Identify your projected target date for completion of action items.)</i>	Actions/strategies to achieve outcomes and how you will assess the action/strategy
Retention – Inform students of the benefits of staying in the program. Baseline is set at 56% Standard is 57% Target is 59%	Spring 2020	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 in 2022.
Completions – Update certificates and add a diploma to the program to allow more paths to completion. Baseline is set at 10 students Standard is 11 students Target is 12 students	Catalog changes were implemented with the Fall 18-19 catalog. Initial effects should be seen by Summer 2020.	Program pathways have been updated and is being stressed to new or potential students. 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.
Job Placement – 1) Continue visiting and speaking to area employers to strengthen the bond with WCC.	Ongoing.	1) 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>2) Implement an Alumni Database to track student success.</p> <p>Baseline is set at 97% Standard is 98% Target is 99%</p>	<p>Spring 2019</p>	<p>2) 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>Licensure/Certification Passing Rates (if applicable) –</p> <p>Not applicable</p>	<p>N/A</p>	<p>N/A</p>
<p>Third-Party Credentials – (if applicable)</p> <p>Add new NC3 certificates as training and equipment become available. 3rd-party certification:</p> <p>Baseline = 39 certifications Standard = 50 certifications Target = 110 certifications</p>	<p>Fall 2020</p>	<p>Cross train instructors in order to integrate various NC3 certificates into more classes. We can compare certificate completions at the end of each semester.</p>

Approvals

- 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 Service Review and Outcome Assessment and Recommendations as submitted.

IE Acceptance / Date: Dorothy Moore 6/8/2020

Administrator Approval / Date: Patty Pfeiffer 6/8/2020