

AP Full Official		<i>AAS Electronics Technology</i>	
Campus	<i>PNI</i>	AP Review Submission Date	<i>9/22/2016</i>
Completed by	<i>Danilo S. Ibarrola</i>	AR Review Cycle	<i>F2014-S2016</i>

**Program Goals**

Program goals are broad statements concerning knowledge, skills, or values that the faculty members expect the graduating students to achieve.

The career and technical training divisions of COM-FSM are learning communities dedicated to creating a high quality workforce through educational excellence and student success in collaboration with its diverse communities. Students completing the program will be expected to demonstrate the following competencies:

1. *Practice safety and occupational health procedures in the work place.*
2. *Use electronics tools and test equipment competently.*
3. *Interpret schematic diagrams and waveforms.*
4. *Build electronics projects to a given specification.*
5. Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.
6. Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.

**Program History**

This section describes the history of the program. This includes the date and reason of implementation, significant milestones in the development of the program, and significant current activities.

The program was created by recommendations of Pohmpei Campus Advisory Council to offer a certificate of achievement (COA) in electronics to train local students to acquire skills in maintaining and repairing of electronic equipment and devices, which was a needed skill in the community and the local workforce.

Milestones:

- 1999 - The first course was offered with five students.
- 2000 - One full time instructor was recruited to assist in designing curriculum and offer courses
- 2001- Additional instructor was recruited and enrollment increased to 12 students
- 2003 - Substantive change report to WASC was approved to extend COA in Electronics to include Advanced Certificate and Associate of Applied Science degree in Electronic Technology. Commenced the use of computer-assisted instruction (NIDA) to improve course delivery.
- 2004 – First AAS degree graduates
- 2005–Modified Fiber Optic course to be in compliance with the Electronic Technicians Association (ETA) standards.
- 2006 –Modified courses in the Electronic Technology program to improve coursework with more hands-on training on actual equipment and devices. A course on personal computer repair was created using the standards of Cisco Networking Academy. A course on video systems and product servicing was created to improve students’ skills in maintaining and repairing video systems, including TV and monitor, VCR, DVD, and other related devices. A course on business machines servicing was created to improve students’ skills in maintaining and repairing office equipment such as printers, copy machines, cash registers, and other related equipment.
- 2008- Currently working on course modifications to improve quality and course delivery based on recommendations from program/course assessment. Course modifications include the introduction of wireless systems, radio communication equipment servicing, and audio systems servicing.
- 2012 – Establish the TECHNO club for the student in support to their hands-on training and advancement in electronics field.
- 2013 – Started the Electronics Repair shop which supplement the VEE 224 and VEE 225 courses to

enhance service, troubleshooting and repair skills of the students in consumer electronics systems and business machine.

2014 – The program were able to produce electronics signage for other CTE program in Pohnpei campus which is display the program to the community and serve as a marker.

2015 – Due to low enrollment in degree bound certificate bound students were accepted.

-Advance Certificate in Electronics Technology was removed as one of the exit point in Electronics Technology.

-Hired new full time instructor for the program.

2016 -Established the Advisory Council which will provide recommendations to ensure quality and delivery of training programs are producing graduates equipped to function as entry-level tradesman, technician and specialist in their respective areas of study; recommendation in establishing a workable system in placing graduates into the workplace; and recommendations on creating other technical training program to address the needs of the community and the local workforce.

-Received four (4) Digital Oscilloscope from Japanese Government.

- Identified the 3<sup>rd</sup> party certification body for AAS Electronics Graduate.

### Program Description

The program description describes the program, including its organization, relationship to other programs in the system, program design, degree(s) offered, and other significant features of the program, such as elements/resources for forward-looking new program contributions to the state's economy, or specialized program accreditation.

The Electronics technology program offers academic course work, technical skills training and practical experience to prepare the students for positions as technicians in this high-tech field. Students are introduced to theory and practices in troubleshooting digital systems and communication systems.

Maintenance, troubleshooting, repairing and modifying electronics equipment and systems is the base for a career as a technician in this high-tech field. The computer and information technologies are driving the need for more maintenance and repair services. The academic course work, technical skills training and practical experience available in this program prepare the student for positions within the industry. Training on and with the state of the art computer aided instruction system at COM-FSM will provide the technical edge needed in today's telecommunications industry. Embedded within the program are two separate exit points, Certificate of Achievement in Electronics Engineering Technology, and the Associate of Applied Science in Electronics Technology.

### Program Admission Requirements

This section describes the requirements for admission into the program and other requisites.

The admission requirements for ET programs follow the same the admission requirements for all certificates of achievement programs as offered by the College in which students must complete high school education or equivalence to enter in either program.

Students must be admitted into degree programs based on the results of the College of Micronesia-FSM Entrance Exam (COMET) to further their studies into the Associate of Applied Science degree. Students who are admitted into the programs as certificate bound status must change their status to degree bound by retaking and passing the COMET into the degree programs.

### Program Certificate/Degree Requirements

This section specifies the requirements for obtaining a certificate/degree in the program, including specific courses,, sequencing of courses, total credits, internships, practical, etc.

### *Certificate of Achievement in Electronic Engineering Technology*

<b>General Education Core Requirements</b> .....	15 credits
Mathematics (8 credits)	
MS 104 Technical Math I (4)	
MS 106 Technical Math II (4)	
Computer Applications (3 credits)	
CA 100 Computer Literacy (3)	
Natural Science (4 credits)	
Any Science with lab: [preferably SC130 Physical Science]	
<b>Technical Requirements</b> .....	22 credits
VEE 103 Electronic Fundamentals I (3)	
VSP 121 Industrial Safety (1.5)	
VEE 100 Soldering and Mechanical Termination Techniques (1.5)	
VEM 110 Workshop Fabrications (3)	
VEE 104 Electronic Fundamentals II (4)	
VEE 110 Discrete Devices I (3)	
VEE 125 Electronic Circuits (3)	
VEE 135 Digital Electronics I (3)	
<b>Total Requirements</b> .....	<b>37 credits</b>
 <i>Associate of Applied Science in Electronic Technology</i>	
<b>General Education Requirements</b> .....	7 credits
EN 123 Technical Communications (3)	
Humanities (3)	
Any course in art, music, history, language, philosophy (3)	
Physical Education (1)	
Any Physical Education course	
<b>Technical Major Requirements</b> .....	21 credits
VEE 223 PC Hardware & Software (4)	
VEE 222 Discrete Devices II (3)	
VEE 235 Digital Electronic II (3)	
VEE 224 Video Systems & Product Servicing (4)	
VEE 225 Business Machines & Servicing (4)	
VEE 240 Signal Processing (3)	
Sub Total Requirements .....	<b>28credits</b>
<b>Graduation Requirements</b> .....	<b>67 credits</b>

*Source: COM-FSM General Catalog*

### Program Courses and Enrollment

This section lists courses offered in the program, including number of sections, course enrollment, section fill rates, and redundancy of courses across the institution.

Course	Sections	Fall 14	Spring 15	Fall 15	Spring 16	Fill Rates	Redundancy
VEE222	3	13	5	7	0	55.5%	None
VEE223	2	19	0	12	0	103.33%	None
VEE224	2	0	19	0	5	80%	None
VEE225	2	0	17	0	7	80%	None
VEE235	2	21	0	16	0	123.33%	None
VEE240	4	13	14	12	6	75%	None

The table shows the courses for AAS ET and the number of students for each semester which form 1 section at Pohnpei campus for AY2014-2016..Source COM-FSM website IRPO data.

### Program Faculty

This section reports the faculty of the program, including full-time and part-time faculty. The degrees held and rank are provided for the full-time and part-time faculty. Finally, provide the faculty student ratio for the program.

#### Full time faculty

1. Gardner Edgar – Division Chairman, Assistant professor  
BS in Technology, Texas University
2. Nelchor Permitez – Associate Professor  
BSIE major in Electronics  
MIST, Philippines  
Master of Education (M.Ed.) major in Educational Management  
MIST, Philippines  
Doctor of Education (Ed.D.) major in Educational Management  
EARIST, Philippines
3. Danilo S. Ibarrola – Instructor  
BSIE major in Electronics  
MIST, Philippines  
Masters in Technician Education (MTE) major in Electronics  
MIST, Philippines

Faculty to student ratio: 1:15

## Program Indicators

This section provides the data for analyzing the extent to which the program has achieved the established outcomes and criteria. This is the most important part of the program review. The data that will be collected and evaluated are the following:

### 1. Assessment of course student learning outcomes of program courses

#### AAS Electronics Technology Student Course Learning Assessment (SCLO) Summary

**Target:** Students should be able to score 70% or higher on the CLO assessment.

**N:** Number of students

<i>Course / CLO</i>	<i>Fall 14 Pass</i>	<i>Target Met (Y/N)</i>	<i>Spring 15 Pass</i>	<i>Target Met (Y/N)</i>	<i>Fall 15 Pass</i>	<i>Target Met (Y/N)</i>	<i>Spring 16 Pass</i>	<i>Target Met (Y/N)</i>
VEE 222 (Discrete Devices II)	N=13		N=11		N=7		N=0	
CLO1	10 (77%)	Y	9 (82%)	Y	5 (71%)	Y		
CLO2	11 (85%)	Y	10 (91%)	Y	7 (100%)	Y		
CLO3	12 (92%)	Y	10 (91%)	Y	7 (100%)	Y		
CLO4	12 (92%)	Y	11(100%)	Y	7 (100%)	Y		
CLO5	10 (77%)	Y	8 (73%)	Y	7 (100%)	Y		
CLO6	10 (77%)	Y	8 (73%)	Y	7 (100%)	Y		
CLO7	10 (77%)	Y	9 (82%)	Y	4 (57%)	N		
VEE 223 (PC Hardware and Software)	N=19		N=0		N=12		N=0	
CLO1	18 (95%)	Y			10 (83%)	Y		
CLO2	18 (95%)	Y			10 (83%)	Y		
CLO3	18 (95%)	Y			10 (83%)	Y		
CLO4	18 (95%)	Y			10 (83%)	Y		
CLO5	16 (84%)	Y			10 (83%)	Y		
CLO6	18 (95%)	Y			10 (83%)	Y		
CLO7	18 (95%)	Y			10 (83%)	Y		
CLO8	17 (89%)	Y			10 (83%)	Y		
CLO9	18 (95%)	Y			10 (83%)	Y		
CLO10	17 (89%)	Y			10 (83%)	Y		
VEE 224 (Video Systems and Product Servicing)	N=0		N=19		N=0		N=5	
CLO1			19(100%)	Y			5(100%)	Y
CLO2			19(100%)	Y			5(100%)	Y
CLO3			19(100%)	Y			5(100%)	Y
CLO4			19(100%)	Y			5(100%)	Y
VEE 225 (Business Machines and Servicing)	N=0		N=17		N=0		N=7	
CLO1			17(100%)	Y			7(100%)	Y

CLO2			17(100%)	Y			7(100%)	Y
CLO3			17(100%)	Y			7(100%)	Y
CLO4			17(100%)	Y			7(100%)	Y
CLO5			17(100%)	Y			7(100%)	Y
CLO6			17(100%)	Y			7(100%)	Y
VEE 235 (Digital Electronics II)	N=21		N=0		N=16		N=0	
CLO1	21(100%)	Y			16(100%)	Y		
CLO2	21(100%)	Y			16(100%)	Y		
CLO3	21(100%)	Y			15 (94%)	Y		
CLO4	21(100%)	Y			15 (94%)	Y		
CLO5	21(100%)	Y			15 (94%)	Y		
CLO6	21(100%)	Y			15 (94%)	Y		
VEE 240 (Signal Processing)	N=14		N=14		N=12		N=6	
CLO1	14(100%)	Y	10 (71%)	Y	11 (92%)	Y	6(100%)	Y
CLO2	14(100%)	Y	7 (50%)	N	12(100%)	Y	6(100%)	Y
CLO3	14(100%)	Y	8 (57%)	N	12(100%)	Y	4(67%)	N
CLO4	13(93%)	Y	7 (50%)	N	11 (92%)	Y	4(67%)	N
CLO5	13(93%)	Y	11 (79%)	Y	11 (92%)	Y	4(67%)	N
CLO6	13(93%)	Y	10 (71%)	Y	11 (92%)	Y	4(67%)	N

## 2. Assessment of Program Student Learning Outcomes

AAS Electronics measures PSLO five and six outcomes since PSLO one to four have a separate assessment, which belong to CA Electronics Engineering Program. The result from Fall 2014, Spring 2015, Fall 2015 and Spring 2016 are shown in the table below.

Program Student Learning Outcome	Assessment Strategy	Target	Fall 2014 Result / Target Met (Y/N)	Spring 2015 Result/ Target Met (Y/N)	Fall 2015 Result / Target Met (Y/N)	Spring 2016 Result / Target Met (Y/N)
5. Perform troubleshooting techniques to maintain and resolve hardware and software related problems in a personal computer.	Students were assessed based on written exam (on-line) and performance or skill-based exams.  Student performances are rated by instructors using a	70% passing rate on the assessment.	18 out of 19 (95%) students passed the assessment with a grade ranging from 80 to 95. These students were awarded with a certificate		10 out of 12 (83%) students passed the assessment with a grade ranging from 80 to 93. These students were awarded with a certificate	

	<p>rubric: Three levels of performance, Exemplary, Developing, and Unacceptable.</p> <ul style="list-style-type: none"> <li>• Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or minimum assistance from instructor to successfully complete assigned tasks.</li> <li>• Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.</li> <li>• Unacceptable – students who failed</li> </ul>		<p>from Cisco and also a letter to show that they have successfully completed the Cisco IT Essentials Certification.</p> <p>Note: students who achieved a score of 85 or higher on the Cisco online final exam will receive a certificate and a letter from the Cisco CEO. Students who achieve a score between 72 and 84 will only receive a certificate.</p>		<p>from Cisco and also a letter to show that they have successfully completed the Cisco IT Essentials Certification.</p> <p>Note: students who achieved a score of 85 or higher on the Cisco online final exam will receive a certificate and a letter from the Cisco CEO. Students who achieve a score between 72 and 84 will only receive a certificate.</p>	
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	[60 or below] written exams and performed poorly in completing tasks or never completed tasks.					
6. Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment.	Given a defective CRT/LCD Television, computer monitor, VCR, CD and DVD player, Fax machine, printer, cash register, microwave oven and photo copier machine, the student will service, troubleshoot and repair the system. The student will be assess using a using a rubric	70% passing rate on the assessment.		100% of the students pass the assessment (VTE 224, VTE 225) <i>Target met:(Y)</i>		100% of the students pass the assessment (VTE 224, VTE 225) <i>Target met:(Y)</i>

**3. Program enrollment (historical enrollment patterns, student credits by major)**

	Fa14	Sp15	Fa15	SP16
<b>Number of students</b>	44	45	34	20
<b>Number of credits</b>	506.5	500	307	241



<b>Average number of credits</b>	11.5	11.11	9.03	12.05
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The table shows the number of students on AAS ET program for AY 2014-2016 fall and spring semester. Also the average credit enrolled for each semester including the number of credits. *Source COM-FSM website IRPO data.*

#### 4. Average class size

AAS ET Program section, enrollment ratio and average class size.

Program	Term	Section	Enrollment Max	Enrollment	Enrollment ratio	Ave Class Size
AAS ET	Fall2014	8	137	97	70.8%	12.1
AAS ET	Fall 2015	8	148	77	52.0%	9.6
AAS ET	Spring2015	5	102	80	78.4%	16.0
AAS ET	Spring2016	6	100	34	34.0%	5.7

The table shows the AAS Electronic Technology data on each semester term, section, maximum enrollment, enrollment, enrollment ratio and average class size. *Source COM-FSM website IRPO data.*

#### 5. Course completion rate

Term	Enrolled	Withdraw	ABC or P	Withdrawal %	CC %
Fall 2014	107	8	95	7.5%	88.8%
Fall 2015	58	4	50	6.9 %	86.2 %
Spring 2015	86	6	73	0.0 %	84.9 %
Spring 2016	34	0	31	0.0 %	91.2%

The table shows the AAS ET course completion for each term from Fall – Spring 2014-2016, number of students, the percentage of students who got ABC or P grade, the number of students who got ABCD or P grade and the withdrawal percentage.

#### 6. Student Persistence Data

Student persistence rate (semester to semester)

Major/Description	Degree	New Fall 2014 FT	Persisted Spring 2015	Retained Fall 2015	Persistence Spring 2015	Retention Fall 2015
Electronics Technology	AAS	3	4	2	133.3%	66.7%

Major/Description	Degree	New Fall 2015 FT	Persisted Spring 2016	Retained Fall 2016	Persistence Spring 2016	Retention Fall 2016
Electronics Technology	AAS	3	2	2	100.0%	0.0%

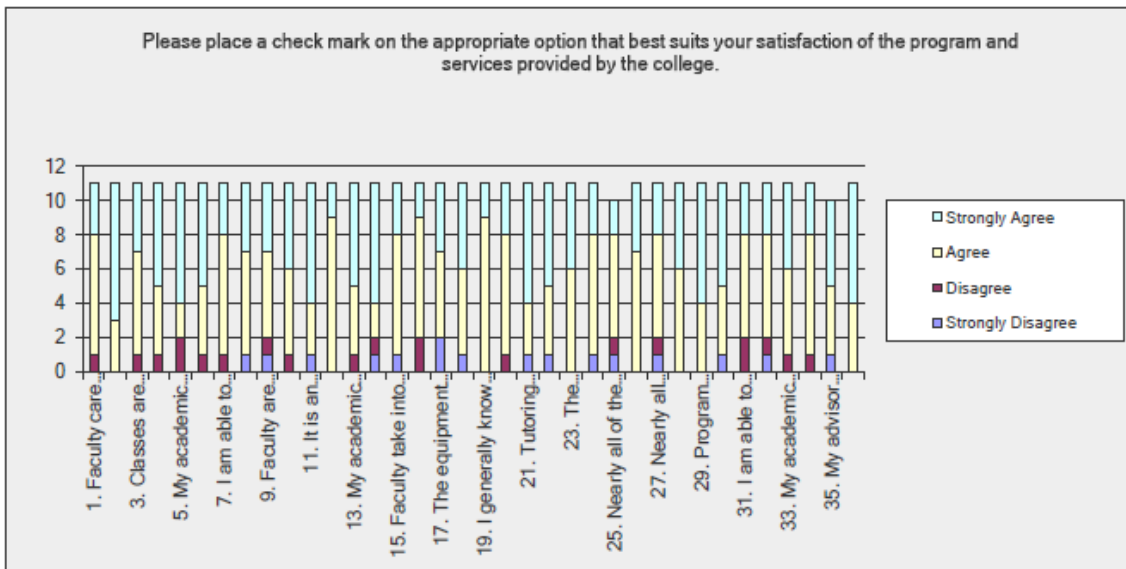
AAS ET persistence rate for Fall 2014 to Spring 2015 is 133.3%. *Source COM-FSM website IRPO data.*

<p><b>7. Student retention rate</b> (Fall-to-Fall for two-year programs; Fall-to-Spring for one-year programs)</p>	<p><b>Student Retention Data</b></p> <p>The retention rate of AAS ET for Fall2015 and Fall2015 is 66.70%.<i>Source COM-FSM website IRPO data.</i></p>										
<p><b>8. Success rates on licensing or certification exams</b> (CTE, TP, Nursing, etc.)</p>	<p>Currently there is no certification or licensing exams in place in FSM however the courses are currently in process aligning the competency skills requirements to pass on Electronics Technician Association (ETA) in United States to meet the current industry standards set forth by the association.</p> <p>Students taking VEE 223 is awarded a certificate of completion and letter from Cisco CEO if they achieved a score of 85 or higher. The letter shows that they have successfully completed the Cisco IT Essentials Certification. Students who achieve a score between 72 and 84 will only receive a certificate.</p>										
<p><b>9. Graduation rate based on yearly number</b></p>											
<table border="1"> <thead> <tr> <th></th> <th>Fa14</th> <th>Sp15</th> <th>Fa15</th> <th>SP16</th> </tr> </thead> <tbody> <tr> <td>Number of students</td> <td>10</td> <td>5</td> <td>11</td> <td>5</td> </tr> </tbody> </table>			Fa14	Sp15	Fa15	SP16	Number of students	10	5	11	5
	Fa14	Sp15	Fa15	SP16							
Number of students	10	5	11	5							
<p>The table shows that there were 10 students graduated in Fall 2014, 5 in Spring 2015, 11 in Fall 2015 and students graduated in Spring 2016 for AAS ET in AY 2014-2016. <i>Source COM-FSM Pohnpei campus OAR.</i></p>											
<p><b>10. Student seat cost</b></p> <p>No information or data available for student seat cost.</p>											
<p><b>11. Cost of duplicate or redundant courses, programs or services</b></p>	<p>No duplicate or redundant courses being offered in CET program.</p>										
<p><b>12. Students' satisfaction rate</b></p>											

**Student Satisfaction Survey for Major**

Please place a check mark on the appropriate option that best suits your satisfaction of the program and services provided by the college.

Answer Options	Strongly Agree	Agree	Disagree	Strongly Disagree	Response Count
1. Faculty care about me as an individual.	3	7	1	0	11
2. My academic advisor is approachable.	8	3	0	0	11
3. Classes are scheduled at times that are convenient for	4	6	1	0	11
4. Internships or practical experiences are provided in my	6	4	2	0	11
5. My academic advisor helps me set goals to work	7	2	1	0	11
6. Library resources and services are adequate.	6	4	1	0	11
7. I am able to register for classes I need with few	6	7	1	0	11
8. The quality of instruction I receive in most of my	4	6	0	1	11
9. Faculty are understanding of students' unique life	4	5	1	1	11
10. My academic advisor is concerned about my success	5	5	1	0	11
11. It is an enjoyable experience to be a student on this	7	3	0	1	11
12. Faculty are fair and unbiased in their treatment of	2	9	0	0	11
13. My academic advisor is knowledgeable about my	6	4	1	0	11
14. Students are made to feel welcome on this campus.	7	2	1	1	11
15. Faculty take into consideration student differences as	3	7	0	1	11
16. My academic advisor is knowledgeable about the	2	7	2	0	11
17. The equipment in the lab facilities is kept up to date.	4	5	0	2	11
18. Class change (drop/add) policies are reasonable.	5	5	0	1	11
19. I generally know what's happening on campus.	2	9	0	0	11
20. Faculty provide timely feedback about student	3	7	1	0	11
21. Tutoring services are readily available.	7	3	1	0	11
22. This school does whatever it can to help me reach	6	4	0	1	11
23. The assessment and course placement procedures	5	6	0	0	11
24. Faculty are interested in my academic problems.	3	7	0	1	11
25. Nearly all of the faculty are knowledgeable in their	2	6	1	1	10
26. Faculty are usually available after class and during	3	6	0	0	11
27. Nearly all classes deal with practical experiences and	3	6	1	1	11
28. Students are notified early in the term if they are	5	6	0	0	11
29. Program requirements are clear and reasonable.	6	4	0	0	11
30. There is a good variety of courses suitable for my	7	4	0	0	11
31. I am able to experience intellectual growth here.	6	6	0	0	11
32. The campus faculty/staff are caring and helpful.	3	6	1	1	11
33. My academic advisor is available when I need help.	5	5	1	0	11
34. I am able to register for classes I need with few	3	7	1	0	11
35. My advisor helps me apply my program of study to	5	4	0	1	10
36. Computer labs are adequate and accessible.	7	4	0	0	11
	answered question				11
	skipped question				0



**13. Alumni data**

A list of graduates from Fall 2014 to Spring 2016 was reviewed and attempts were made to determine the whereabouts and current status of each graduate. The table below summarizes the data obtained from this review.

Year	Number of Graduates	Pursue Bachelor's Degree	Working (in related field)	Working (not in related field)	US Army	Current Status Unknown
Fall 2014 to Spring 2016	31	9	8	5	4	5

**14. Employment data and employer feedback (employer survey)**

Survey forms were developed by the instructors on which the employers were asked to rate their satisfaction with the performance of their employees. The following competencies were rated:

- *Writing skills*
- *Speaking skills*
- *Interpersonal skills*
- *Team work*
- *Problem solving skills*
- *Mathematical skills*
- *Computer skills*
- *Technical skills needed for the job*
- *Productivity*
- *Work quality*
- *Time and attendance*
- *General work ethics*
- *Attitude*

*A space for comments and suggestions was also provided.*

**15. Program added or cancelled at nearby regional institutions** (PCC, GCC, Hawaii schools, UOG, CMI, NMC)

*Other Regional Institutions Offering the same Program/Course*

<b>Regional Institution</b>	<b>Electronics Program/Course Offerings</b>
Palau Community College	<b>PCC</b> offers AAS General Electronics Technology Program, which is designed to provide students with technical knowledge, skills and proper work habits/attitudes necessary for employment in the field of electronics. The program prepares students to work and advance in their careers as electronic technicians, assemblers, testers, parts counter salespersons or operators of their own electronic parts distributor establishments and service and repair shops. While COM-FSM offers electronics whose focus is on consumer electronics servicing, business machine servicing and computer maintenance.
Guam Community College	<b>GCC</b> offers Secondary CTE Program in Electronics and AS in Computer Networking.
Honolulu Community College	<b>HCC</b> offers CENT (Computer, Electronics and Networking Technologies) program, which is designed to provide the student with a mixture of knowledge and hands-on training with an emphasis on preparing students for entry-level employment in the ICT industry.
Marshall Community College	No course offering similar to COM-FSM.

**16. Transfer rate**

*Nine (9) graduates pursue higher education through scholarship in China and US and four (4) join the US military.*

**Analysis**

**Findings**

This section provides discussion of information discovered as a result of the evaluation such as problems or concerns with the program and what part of the program is working well and meeting expectation.

**1. Course Student Learning Outcomes of program courses.**

*In AAS ET there were additional six (6)*

*technical courses that need to be taken to earn the degree. This entire courses requires 70% of the student to get or receive at least a grade of 70 or "C" or better as seen on TRACDAT generated report. Course Level assessment data is summarized below:*

*VEE 222 Discrete Devices II - From Fall 2014 to Fall 2015 all students received a grade of 70% or "C" or higher in all CLO except on the last CLO in Spring limited/defective components and materials in the experiment.*

*VEE 223 PC Hardware and Software – For Fall 2014 18 out of 19 (95%) students passed the course with a grade ranging from 80 to 95. These students were awarded with a certificate from Cisco and also a letter to show that they have successfully completed the Cisco IT Essentials Certification.*

*1 student failed due to excessive absenteeism.*

*For Fall 2015 10 out of 12 (83%) students passed the course with a grade ranging from 80 to 93. These students were awarded with a certificate from Cisco and also a letter to show that they have successfully completed the Cisco IT Essentials Certification.*

*Note: students who achieved a score of 85 or higher on the Cisco on-line final exam will receive a certificate and a letter from the Cisco CEO. Students who achieve a score between 72 and 84 will only receive a certificate.*

*2 students failed due to excessive absenteeism.*

*VEE 224 Video Systems and Product Servicing – all students received a grade of 70% or "C" or higher in all CLO in Spring 15 and 16.*

*VEE 225 Business Machines and Servicing - all students received a grade of 70% or "C" or higher in all CLO in Spring 15 and 16.*

*VEE 235 – Digital Electronics II - all students received a grade of 70% or "C" or higher in all CLO in Fall 14 and 15.*

*VEE 240 Signal Processing - all students received a grade of 70% or "C" or higher in all CLO in Fall 14 and 15. However some target*

*in Spring 15 and 16 is not met. Specially Spring 2015 due small number of enrollees.*

*Overall the target is met for AY 2014-2016 and the turnout rate of the students who got a 70 or "C" or better grade is above 70%.*

## **2. Program Student Learning Outcome.**

*AAS ET has 6 PSLO each have corresponding technical courses, which fulfill each learning outcome to comply the program objective. PSLO five and six outcomes are measured only since PSLO one to four has a separate assessment that belongs to CA Electronics Engineering Program. For PSLO # 5 18 out of 19 (95%) of the students in Fall 2014 passed the assessment and 10 out 12 (83%) of the students passed in Fall 2015. For PSLO # 6 100 % of the students passed the assessment in Fall 2014 and 2015.*

*The 2 PSLO target was met accordingly.*

## **3. Program Enrollment.**

### *3.1 Historical enrollment pattern*

*Based on the data gathered the enrollment for each semester for AY 2014-2016 Fall-Spring-Fall-spring semester the number is decreasing (44,45,34 and 20).*

### *3.2 Students Average credit in AAS ET.*

*The recorded Student average credit for this program for AY 2014-2016 Fall –spring-fall-spring semester are 11.5, 11.1, 9.03 and 12.05. The average credit is way below the recommended per semester which is 15 to 17 credits.*

## **4. Average class size.**

*The average class sizes for AY2014-2016 varies from semester to semester are 12.1, 9.6, 16 and 5.7.*

## **5. Course completion rate.**

*The data for AY2014-2016 completion rate for Fall-Spring-Fall-spring semester 88.8%, 86.2%, 84.9% and 91.2%.*

**6. Student Persistence rate (semester to semester).**

*Fall 2014 to Spring 2015 is 133.3%.*

**7. Student Retention rate (fall to fall)**

*Fall 2014 and Fall 2015 is 66.7%.*

**8. Success rate on licensing or certification exam.**

*The AAS ET program does not require the student to pass on licensing or certification exam given by the third party certification body to graduate however the courses on this program are being look after by the qualified professional instructor from time to time to meet the standards and competencies needed by the industry for them to be competitive and be able to pass on Electronics Technician Association (ETA) certification exam.*

*Students taking VEE 223 is given a certification of completion and letter from Cisco CEO when they achieved a grade of 85 or higher.*

**9. Graduation rate.**

*COM-FSM Pohnpei campus for AY 2014-2016 were able to produce 31 graduates for AAS ET. The decline in graduation rate can be seen as a direct result of the decline in program enrollment.*

**10. Student Seat Cost**

*There remains a need for the College to develop a way to calculate student seat cost so that such figures can be available to faculty conducting program review.*

**11. Cost of Duplicate or redundant courses, programs or services.**

*Duplicate or redundant courses and programs have not been offered.*

**12. Student's satisfaction rate**

*Majority of the AAS ET students shows satisfaction to the program as shown on the*

*graphs.*

**13. Alumni data.**

*No established system of tracking alumni's whereabouts and status. Asking former students and company in the area collects the data. This explains the high number of "current status unknown".*

**14. Employment data and employer feedback.**

*13 graduates work at different company and shop here in Pohnpei. Only eight (8) are working in their related field of specialization and five (5) are not.*

**15. Program Added or cancelled at regional institutions.**

*PCC, HCC and GCC are the identified regional institutions offering the same program but their main focus is on computer and networking. COM-FSM offers electronics whose focus is on consumer electronics servicing, business machine servicing and computer maintenance.*

**16. Transfer rate.**

*Nine (9) graduates pursue higher education through scholarship in China and U.S. and four (4) were accepted in the US military.*

*It is recommended the following strategy should be adopted to ensure the sustainability of AAS ET program and meet the industry demand for Electronics technician.*

**Recommendations**

This section provides recommendations from the program on what to do to improve or enhance the quality of program and course learning outcomes as well as program goals and objectives. This section should also include suggestions that describe how the program might be able to create opportunities for a better program in the future. Some examples are exploring alternate delivery mechanisms, forming external partnerships, or realigning with other programs.

- 1. Purchase NIDA cards for VEE 222 and 240 hands-on experiments. Majority of the test equipment and generators in the workshop are shared by AAS ET and AAS TC are now more than 10 yrs. old and need to be refurbish or change for most of it are already starting to show some error.*
- 2. Purchase modern soldering equipment for VEE 224 such as digital Hot Air soldering station and Infrared soldering station. This is due to the advent of LCD/LED television and monitors who use surface mount component and the use of lead free solder.*
- 3. For VEE 223 it is recommended that CA100 will*



*be a pre-requisite. The course mostly utilizes computer applications such as email, web browsing, word documents, power point, navigating in Windows and more. Students who successfully completed CA100 do very well in the course as compared to students who has no background in the use of computer and applications.*

- 4. Suggested to add a new course VEE226 Audio Electronics (4). Lesson on advance audio, service and troubleshooting of different audio devices will be its emphasis. Hands-on will focus in modern audio devices during laboratory activities.*
- 5. Remove VEE 223 PC Hardware Servicing in the Electronics Technology program. This will be included in the new endorsement CISCO Computer and Networking Program.*
- 6. Although several strategies have been implemented during the past year to increase the number of enrollees to the program including exhibits and meeting with the graduating high school students for recruitment. It is still not enough to get their attention. It is recommended that the College develop a new strategy to lure students to enroll in the program. College should also try disseminating information to the community that PNI Campus is not only offering Vocational Course but also Degree Program.*
- 7. Suggested course offering in the catalog should be strictly followed in order for the students to finish their program within the specified timeframe and strictly follow the recommended number of credits per semester.*
- 8. It is recommended that the technical courses and general education courses must be revisit and benchmark to that of Honolulu community college (HCC) and Guam Community College (GCC) for alignment of credits hours and articulation purpose supposing the student wants to pursue further their education on these regional accredited schools, courses taken in AAS ET can be credited.*
- 9. Create a Committee that will study the feasibility of making PNI campus as assessment center of Electronics Technician Association (ETA) and the instructors as its assessor so that student don't need to go to mainland just to have an assessment exam. The College should handle the training and assessment fee of the instructors.*

**10.** *AAS ET instructors should meet to review the student satisfaction surveys and check on the items they disagree or strongly disagree and develop a plan to address this remarks.*

**11.** *College should develop a separate program to track the whereabouts of its alumni and not solely rely on the instructors' initiative of tracking them. The*

**12.** *College should create a position for Career Placement Coordinator that will:*

- *organizes the job/internship placement services for CTE students*
- *initiates and maintains contact with prospective employers and agencies.*
- *presents career information and related subject matter to CTE students*
- *guides CTE students in their preparation to seek employment*
- *follows up employed students and those involved in advanced training programs*
- *assists students with career research and selection of career options*

**13.** *Strengthen the Advisory council.*