

## Program Student Learning Outcomes Assessment Summary (AY 2017-2018)

### Program Student Learning Outcomes (PSLOs)

At the completion of the **(AAS) Electronics Technology**, the student will be able to:

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.

### PSLO Assessment Report Summary

#### What we looked at:

The Electronics Technology assessment focused on PSLOs 5 and 6. Listed below are the results for each of the PSLOs.

#### What we found:

PSLO 5: Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.

VEE 223 (PC Hardware and Software),

Activity 1: Perform a step-by-step assembly of a desktop computer and install and navigate an operating system.

Activity 2: Perform preventive maintenance on computer units.

Activity 3: Service and repair defective computer units.

Activity 4: Upgrade/replace laptop components, printers and scanners.

Activity 5: Configure computer networking.

11(11 males & 0 female) out of 11 or 100 % of the students pass the assessment and were able to repair computer units and laptops. Perform preventive maintenance, upgrade computer units and connect computers in the network.

PSLO 6: Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.

VEE 224 (Video System and Product Servicing),

Activity 1: Service and repair defective computer monitor and television system.

Activity 2: Service and repair defective CD and DVD system.

Activity 3: Service and repair defective VCR mechanism system.

13(12 males & 1 female) out of 13 or 100 % of the students pass the assessment and were able to repair Television (TV) and computer monitor, Video Cassette Recorder (VCR), CD and DVD player.

In VEE 225 (Business Machine Servicing)

Activity 1: Service and repair of defective computer printer.

Activity 2: Service and repair of fax machine.

Activity 3: Service and repair of cash register.

Activity 4: Service and repair of photocopier.

Activity 5: Service and repair of microwave oven.

14 (13 males & 1 female) out of 14 or 100 % of the students pass the assessment and were able to troubleshoot and repair Fax machine, Computer printer, Cash register and Microwave oven

### **What we are planning to work on:**

- Increase more time for the students to become more competent in using electronic test equipment, signal generators and oscilloscope in troubleshooting audio and video appliances and computers.
- Intensify more activity in checking and testing of passive and active electronics components to increase the level of competency of the students in troubleshooting.
- Include audio servicing in the program.
- Planning to purchase special equipment for troubleshooting and repair of new appliances such as LED TV, LED monitors and other surface mount components. Circuits now a days are getting smaller and integrated removal of components on a double sided board need special tool.
- Add more space to store the business machine we are troubleshooting on this class. Purchase new model of printers, copier and a scanner type cash register for continuous improvement of the course.
- Purchase Infra-red soldering station for repairing/replacing chips in computer and laptop motherboard.

### **Recommendations for students:**

Students must complete all the Math and English courses requires for the program, this proficiency level help the student to meet the course work in Electronics Technology courses. Likewise should meet every course prerequisite of each courses in the program to assure program completion in two years.

Competency on using different test instruments and related electronics devices, identify and test passive and active electronics component and able to read block, wiring and schematic diagram before taking the advance courses in telecommunication program.