## VINAYAKA MISSION'S RESEARCH FOUNDATION AARUPADAIVEEDU INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

## International Skill Development Program on VEHICLE ELECTRONIC CONTROL SYSTEM

## **Report on the Program (08.04.2021 to 10.04.2021)**

11.04.2021

Mode of Training Handled: Online through Microsoft Teams
No. of AVIT Students attended: 126
No. of KIoT/Wollo University Students attended: 69
Trainers: Dr. M. Saravanakumar & Mr. N. Shivakumar Assistant Prof., Mechanical Department, AVIT.

Department of Mechanical Engineering, Aarupadai Veedu Institute of Technology, Vinayaka Mission's Research Foundation, in association with Wollo University, Kombolcha Institute of Technology, Ethiopia – organized an International Skill Development Program on VEHICLE ELECTRONIC CONTROL SYSTEM, dated from 08/04/2021 to 10/04/2021.

Inaugural session stated at 11:00 am on 08/04/2021, welcome address followed by about the program, Presidential address, Inaugural address, Special Address, about Wollo University and MoU between AVIT and Wollo University, and Felicitation speech were given by Prof. L Prabhu, Vice Principal/Admin & HOD/Mech, Dr. M Prabhahar, Prof./Mech, Dr. K L Shanmuganathan, Principal, Mr. M Syed, Director-International Relations/VMRF, Mr. P Rajasekaran, Deputy Registrar/VMRF, Dr. S Prabhakar, Asso. Prof./Wollo University - Ethiopia, Dr. D Vijendra Babu, Vice Principal/Part Time Studies, and Dr. S P Sangeetha, Vice Principal/Academics.

Dr. S Prabhakar, Associate Prof./Mechanical Department, Wollo University – Ethiopia, was managed 69 participants from Ehiopia, between 11:00 am to 2:00 pm on all the three days of the training program. During this period of time, specific topics were handled for Ethiopian participants along with AVIT students in both Theory presentation and Practical sessions. For AVIT students training was conduction from 9:00 am to 12:30 pm and from 1:30 pm to 4:00 pm in all the three days.

Theory presentation handled during Forenoon session followed by Practical session during Afternoon session on the same topics in all the three days. On the first day of training, explained on various electrical and electronic components involved with the vehicle related to engine, safety devices, and other common electrical accessories including starter motor and alternator. Explained on types of sensors used in automotive application, how those sensors can be tested in simple way and testing of starter motor & alternator with the help of Bosch Automotive Electrical Test Bench. On the second day of training, explained on Working Principle of each sensors used in Automotive application, how to connect OBD (On Board Diagnosis) Tool with the vehicle and software, use of OBD Tool and checking faults/errors with the sensors/actuators, how to erase the fault with the sensors/actuators using OBD tool and also how to diagnose the other electronic control systems with the vehicle such as cruise control, vehicle detection, Antilock braking system, air bag, central locking system, suspension system etc.

On the third day of training, explained on battery maintenance, air-conditioning charger – how to drain and refill the refrigerant fluid with the vehicle air conditioning system, and electronic ignition & fuel injection control in live mode.

On all the three days of training, students from AVIT and Ethiopian participants were asked their doubts during each topic and cleared through trainers and all the sessions were went like interactive sessions & students gained good knowledge than expectation.









