



**AVIT**  
AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY



VINAYAKA MISSION'S  
RESEARCH FOUNDATION  
(Deemed to be University under section 3 of the UGC Act 1956)



## Report on Skill development program on E Mobility

**Date :20/09/2022**

**Time:9.30am to 4.00 pm**

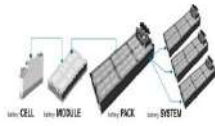
The Department of Electrical and Electronics Engineering in association with AVIT Alumni Association organized a Skill development program on E Mobility. The resource person for the Guest Lecture was Mr.Anil Chourasia, Senior R&D Engineer, Daimler – AGandan Alumni ofElectronicsand Instrumentation EngineeringbelongingtotheBatch 2009-2013.The programstarted with a warm welcome to the guest byDr.L.Chitra,HOD/EEEand introduction of the guest by Mrs. P.Poornima, AP(Gr-II) / EEE

Then the session was taken over by Mr.Anil Chourasia. The topics covered by the resource person are as follows:

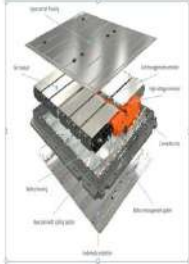
- ❖ E-Mobility Design Consideration &Software Roles in E-Mobility
- ❖ Bev Major Components
- ❖ Vehicle Design Considerations
- ❖ HV Battery Packaging &Various Testing
- ❖ Bus Roller
- ❖ Isolation Monitoring System
- ❖ Weight Distribution and Packaging
- ❖ Battery Cooling and Packaging
- ❖ Other Precautions For Battery Packaging
- ❖ Harness Design : Harness Creation Process & Harness Routing Guidelines
- ❖ Clips and Clamps To Be Selected Based On The Harness Load And Mating Hole Dimensions
- ❖ Harness Components
- ❖ HV Cable Layout Design Guidelines

The Session was attended by 40 students of the Electrical and Electronics Engineering and Mechatronics Engineering. The session endedwiththevoteofthanks by Mr.S.Prakash ,AP(Gr-II)/EEE ,the coordinator of the skill development program.

### HV BATTERY PACKAGING



Battery to be packaged in Under Body, below BIW Floor,  
Between the front and rear wheels



Rear Impact

REESS packaging: Avoid Rear Trunk room area  
EURO NCAP : 70% Rear Offset deformable barrier test 64 km/hr

### Rear Impact test

Rear Impact is found to give maximum Kinetic Energy to the car, but has least impact on Battery pack, provided Battery pack is fixed between Fr & Rr wheels.



<https://www.youtube.com/watch?v=i62W6RAglxg>

