



The Electronics and Telecommunication Engineering Department organized an Industrial Visit for the B.E students to Western Railway Virar Carshed. All the B.E Electronics and Telecommunication Engineering students along with Ms. Madhura Ranade and Mr. Pratik Parsewar visited to the Virar carshed, western railway on 17th August, 2022 with an interest of linking the theoretical knowledge with the practical aspects of Traction system.

Date: 17th August, 2022.

Department: Electronics and Telecommunication Engineering.

Venue: Western Railway Virar Carshed.

Co-coordinators: Ms. Madhura Ranade and Mr. Pratik Parsewar



Mr. Ansari Sir (chief instructor) has given brief idea about traction system and signals like auto signals and manual signals in details. Students were given brief idea about signal system used in traction system & different safety features. Signals like siemens and medh handle in engine front acceleration in EMU. The AWS Auxiliary warning system of EMU explained in details. He has briefly discussed about different types of traction motor their performance, different method used for speed control and why Dc is now replaced by Ac. He also gives the knowledge of torque.

Students got opportunity to see the locomotive driving section. Mr. Ansari sir has briefly explained how the train is provided traction and brake by Motorman with the help of joystick. He given the idea about how motor driver working in twisting condition(15 degree angle). The different parameter displaced on screen in motorman cabin like supply available, braking status, event occurred, master key, cabin occupation, status of light, fan in different units.



In practical session the shows us various component used in EMU like master controller, internet protocol ring switch, modular digital input/output card, internet protocol cable switch, Fiber optic cable, mobile communication gateway, Governor pressure switch, centralised control panel and many more. He has given brief history of different EMU and their advancement, different parts of traction like Current Collection System, Transformer, Control unit, pantograph, counters with reading like ISU, sfbb(signal fellow by Pass button).

