

Objectives and Course Content of Short Term Courses

O. Plan No.	EE-26
Name of Course	Hardware in Loop for power system and power electronics Applications (in collaboration with Typhoon HIL Switzerland)
Objectives	<p>This training programme is specially designed for Engineering College and polytechnic teachers and will mainly deal with the various aspects of Power System and Power Electronics applications.</p> <p>The course aims to:</p> <ul style="list-style-type: none"> (i) Update the knowledge in the emerging and upcoming topics in the subject area. (ii) Make the teachers conversant with hardware validation of power system and power electronics applications using Typhoon HIL system. (iii) Study of HIL technology in new energy applications (smart grid, renewable energy and distributed generation, electric vehicles, electrification of vessels and off shore installations, etc.)
Course Contents	<p>The programme will be designed around the following major topics:</p> <ul style="list-style-type: none"> - Introduction of Typhoon HIL Technology Simulation, Real-time Simulation & Hardware-in-the-Loop System Architecture Basics, Electrical Domain Modelling Principles and Constraints, Signal Processing Modelling Principles - Modelling with Typhoon Schematic Editor - HIL SCADA, Script Editor - Hands-on experience with an example related to Power Electronics, Electric Drives, Power System, Solar Energy, Advance Micro-Grid
Course Coordinators, email address and phone number	<p>Dr. Shimi S.L & Dr. Ritula Thakur shimi.reji@gmail.com 9417588987</p>