

SHORT-TERM TRAINING PROGRAM ON 'REALIZATION OF ELECTRICAL CONCEPTS USING MATLAB AND SIMULINK'

The Department of Electrical and Electronics Engineering organized an STTP on 'Realization of Electrical Concepts Using MATLAB and Simulink', from 10th and 12th February 2024. 30 students from the 5th semester and 50 students from the 3rd semester (a total of 80 students) from the department of Electrical and Electronics Engineering, along with faculty members from the Department of Electrical and Electronics Engineering participated in this training program.

Day 01: 10-02-2024

The event started at 10.30 am with a welcome speech and guest introduction. Dr. Sanjeev K Nayak, EDU Manager, Alstom, handled both sessions of this day. In Session 1, after introducing MATLAB, he continued to speak on basic concepts of MATLAB and Simulink. He explained about writing mathematical equations, waveforms, programs to get waveforms, and some problems on electric circuits using MATLAB Simulink.

The afternoon session started at 1:30 pm, after explaining MATLAB he gave a hands-on session for designing Electric circuits like RC circuits, RL, and RLC circuits.



Introductory Session on MATLAB Simulink



Presenting Bouquet to Dr. Sanjeev K Nayak

Day 02: 12-02-2024

The event started at 10.40 am with a welcome speech and guest introduction. Dr. Sanjeev K Nayak, EDU Manager, Alstom, over the first session of Day 2. He started with a brief introduction on the topic and went on to explain the design of electric circuits using MATLAB Simulink and also designing a single line diagram.



Dr. Sanjeev K Nayak giving a lecture.

The afternoon session of Day 2 was started at 1:30 pm. Over the second session of Day 2 he started with a brief introduction on the topic and went on to explain about designing of resonance circuits like RL, RC, and RLC, the designing of P, PI, and PID controllers and hands-on session for the designing of electrical circuits using MATLAB Simulink.

OUTCOME OF THE EVENT:

The students gained knowledge on the following:

- The design and implementation of Electric circuits using MATLAB Simulink.
- Testing and verification of Electric circuit problems using MATLAB Simulink.
- Create custom blocks using MATLAB functions.