

Report on Workshop
MATLAB for Engineers & its Applications in Power Electronics
Organised by
Department of Electrical and Electronics Engineering
6-9-2017 to 7-9-2017

Submitted by: Dr M. Chakkrapani, Associate Professor., Dept. of EEE

Resource Person: Dr. Lakshmanan S A, Sr. Assistant Professor, Dep of EEE, MITS-Madanapalle. **Attended:** III B-Tech EEE students & Faculty members **Venue:** WB-117



The workshop started at 10 a.m. in WB-117. The resource person **Dr. Lakshmanan S A** was introduced by the HOD, Dept. of EEE. The speaker has addressed the importance and proficiency of MATLAB software and significance of learning the software by Electrical engineering students to model the power electronic converters. The resource person has delivered the following topics in the area of power electronics.

1. Basics of Power electronics converters.
2. Design and Analysis of AC/DC converters using MATLAB.
3. Design and Analysis of DC/AC converters using MATLAB.
4. Design of Switched Mode Power Converters using MATLAB.
5. Design of AC/AC converter using MTALAB.
6. Simulation of single pulse inverter with PWM control.
7. Simulation of Forced commutation circuit.
8. Simulation of Gate firing circuit for SCR.

The students and faculty were too enthusiastic to learn about the MATLAB software and using the basic knowledge of MATLAB, they have simulated power electronic converters. Finally, the resource person was felicitated by two of III-year EEE students and HOD EEE dept.