E2MATRIX

WORKSHOP PROPOSAL

"MATLAB/SIMULINK"

Submitted by: -

E2MATRIX

(An ISO 9001:2008 Certified Company)

The Value of Trust

Return on Influence

"Join hands for long relations because trust matter"

Simulink, developed by Math Works, is a graphical programming environment for modeling, simulating and analyzing multidomain dynamic systems. Its primary interface is a graphical block diagramming tool and a customizable set of block libraries. It offers tight integration with the rest of the MATLAB environment and can either drive MATLAB or be scripted from it. Simulink is widely used in automatic control and digital signal processing for multi domain simulation and Model-Based Design.
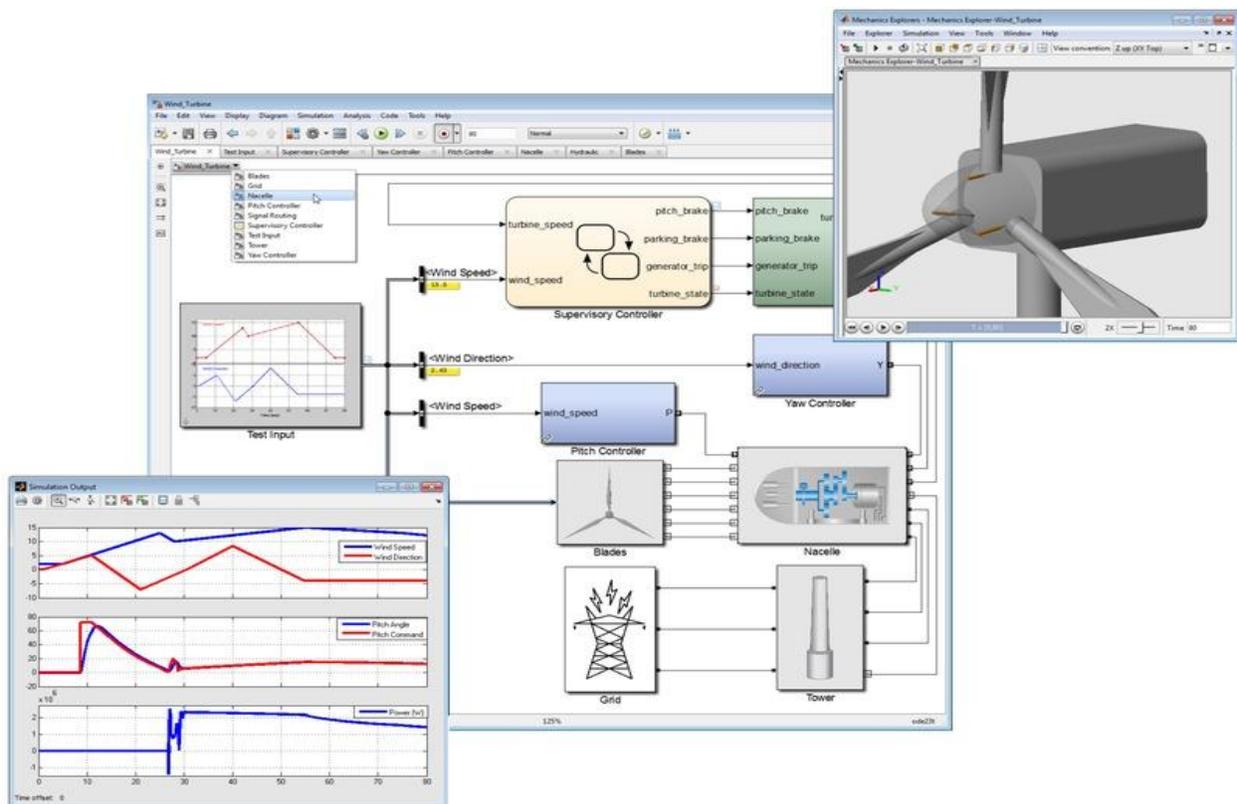
The main purpose of this "Hands-on Training on Matlab Simulink" is to create awareness and enrich knowledge for research scholars, faculty and students in the area of Simulink models using Matlab.

1-DAY WORKSHOP

1. Introduction to MATLAB
2. Matrix Operations
3. MATLAB Programming
4. Introduction to Simulink
5. Introduction to Simulink Library
6. Introduction to SimScape
7. Introduction to SimPowerSystems
8. Creating Simulink Model
9. Running Simulink Model
10. Observing Output
11. Using Help Option
12. Simple Circuits Simulation (clip, clamp, uncontrolled rectifiers, Network Theorems)

TIME DURATION: 4 hours

COST: 300/- PER STUDENT

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2-DAYS WORKSHOP

Day 1

1. Introduction to MATLAB
2. Matrix Operations
3. MATLAB Programming
4. Introduction to Simulink
5. Introduction to Simulink Library
6. Introduction to SimScape
7. Introduction to SimPowerSystems
8. Creating Simulink Model
9. Running Simulink Model
10. Observing Output
11. Using Help Option
12. Simple Circuits Simulation (clip, clamp, uncontrolled rectifiers, Network Theorems)

Day 2

1. Simulation of Digital Logic Circuits (basic, flip flops, counters, application examples)
2. PID controller
3. Circuit Design, Simulation and Analysis
4. Controlled Rectifiers
5. Choppers
6. Generation of SPWM
7. Inverters (PWM & SPWM)

TIME DURATION: 4 hours/day

COST: 500/- PER STUDENT

3-DAYS WORKSHOP

Day 1

1. Introduction to MATLAB
2. Matrix Operations
3. MATLAB Programming
4. Introduction to Simulink
5. Introduction to Simulink Library
6. Introduction to SimScape
7. Introduction to SimPowerSystems
8. Creating Simulink Model
9. Running Simulink Model
10. Observing Output
11. Using Help Option
12. Simple Circuits Simulation (clip, clamp, uncontrolled rectifiers, Network Theorems)

Day 2

1. Simulation of Digital Logic Circuits (basic, flip flops, counters, application examples)
2. PID controller
3. Circuit Design, Simulation and Analysis
4. Controlled Rectifiers
5. Choppers
6. Generation of SPWM
7. Inverters (PWM & SPWM)
8. AC-AC Converters
9. Sample Project (Application Oriented)

DAY 3

1. Introduction to Power System Network
2. Introduction to Load Flow Analysis
3. Creating Power System Network Model
4. Load Flow Analysis for IEEE 6-Bus System
5. Introduction to Faults and Power System
6. Stability Analysis
7. MATLAB Programming
8. Fault Analysis
9. Stability Analysis
10. Fuzzy applications to Power system

TIME DURATION: 4 hours/day

COST: 700/- PER STUDENT