Faculty Development Program on
"Engineering Computations and GUI Development with MATLAB"
October 13-17, 2018

Time	Topic
Day 1, October 13, 2018 (Saturday)	
9:00-9:30	Registration
9:30-10:00	Inaugural
10:00-11:00	Programming skill required for being an effective teacher with Applications of MATLAB
11:00-11:15	Tea Break
11:15-13:15	Introduction to MATLAB as effective communication tool, User Interface, Basic Operations
13:15-14:15	Lunch
14:15-16:15	Expressions and Matrices
16:15-16:30	Tea Break
16:30-18:30	Handling Variables, Data Format, Exercise on basic operations
Day 2, October 14, 2018 (Sunday)	
9:00-11:00	Programming Basics, Conditional/logical Statement, Execution Control, Loops
11:00-11:15	Tea Break
11:15-13:15	Using MATLAB as smart Calculator
13:15-14:15	Lunch
14:15-16:15	2D Plotting Visualization Using MATLAB, 3D Plots
16:15-16:30	Tea Break
16:30-18:30	Introduction to SIMULINK, Exercises using SIMULINK
Day 3, October 15, 2018 (Monday)	
9:00-11:00	Exercise on decision making, loops, Writing Functions
11:00-11:15	Tea Break
11:15-13:15	Modifying plots using property editor, Automating Plots using Functions
13:15-14:15	Lunch
14:15-16:15	Handling data in MS Excel and text file, Debugging a program
16:15-16:30	Tea Break
16:30-18:30	Building Graphical User Interface (GUI)
Day 4, October 16, 2018 (Tuesday)	
9:00-11:00	Polynomials, Curve Fitting and Interpolation
11:00-11:15	Tea Break
11:15-13:15	Building GUIs with display of information, Developing GUI for Input/output functions
13:15-14:15	Lunch
14:15-16:15	Ordinary differential equations, Solving an Equation with One Variable
16:15-16:30	Tea Break
16:30-17:30	Problem formulation
17:30-18:30	Quiz/Evaluation
Day 5, October 17, 2018 (Wednesday)	
9:00-11:00	App development in MATLAB, Generating Executable Files and Stand-Alone Applications
11:00-11:15	Tea Break
11:15-13:15	Solution of optimization problems using MATLAB
13:15-14:15	Lunch
14:15-16:15	Machine Learning Techniques
16:30 onwards	Presentations by Participants followed by Valedictory