

**Two week online Faculty Development Program on
“Scientific Computations and GUI Development using MATLAB (SC-GuiD)”
March 21-31, 2022**

Schedule

Session	Title	Date	Time
0.	Inaugural ceremony	21/3/2022	3:00pm to 3:30pm
1.	Programming skill required for being an effective teacher with Applications of MATLAB	21/3/2022	3:30pm to 5:30pm
2.	MATLAB User Interface, Basic Operations, Data Format, Handling Variables	21/3/2022	6:00pm to 8:00pm
3.	Formulating Expressions and Matrices, Exercises on basic operations	22/3/2022	3:30pm to 5:30pm
4.	Programming Basics for decision making, Conditional/logical Statement	22/3/2022	6:00pm to 8:00pm
5.	Using MATLAB as smart Calculator	23/3/2022	3:30pm to 5:30pm
6.	Programming for Execution Control, Loops	23/3/2022	6:00pm to 8:00pm
7.	2D Plotting Visualization Using MATLAB	24/3/2022	3:30pm to 5:30pm
8.	Presenting research results using MATLAB	24/3/2022	6:00pm to 8:00pm
9.	Debugging and Troubleshooting programs, Development Tools and Programming Techniques	25/3/2022	3:30pm to 5:30pm
10.	Writing Functions, Handling data in MS Excel and text file, Debugging a program	25/3/2022	6:00pm to 8:00pm
11.	3D Plots, Modifying plots using property editor, Automating Plots using Functions	26/3/2022	3:30pm to 5:30pm
12.	Solving Engineering Optimization Problems with MATLAB	26/3/2022	6:00pm to 8:00pm
13.	Curve Fitting and GUI Development with MATLAB	28/3/2022	3:30pm to 5:30pm
14.	Algorithm development and Problem formulation	28/3/2022	6:00pm to 8:00pm
15.	Building GUI's with input output functions, toggle buttons	29/3/2022	3:30pm to 5:30pm
16.	Modelling and Simulation of Dynamic Systems using MATLAB Simulink	29/3/2022	6:00pm to 8:00pm
17.	Building GUI's with radio button and other windows GUI options	30/3/2022	3:30pm to 5:30pm
18.	App development in MATLAB, Generating Executable Files and Stand-Alone Applications, Case Studies	30/3/2022	6:00pm to 8:00pm
19.	Machine learning application using MATLAB	31/3/2022	3:30pm to 5:30pm
20.	Solving Mathematical Problems Using MATLAB Symbolic Math	31/3/2022	6:00pm to 8:00pm
21.	Valedictory	31/3/2022	8:00pm to 8:30pm

List of Speakers for the Course:

- [Dr. Pulak Mohan Pandey](#), *Professor, IIT Delhi*
- [Dr. Prashant K. Jain](#), *Professor, IIITDM Jabalpur*
- [Dr. Pavan K. Kankar](#), *Associate Professor, IIT Indore*
- [Dr. Amit Singh](#), *Assistant Professor, MNIT Jaipur*
- [Dr. Mohammad Taufik](#), *Assistant Professor, MANIT Bhopal*
- [Dr. Narendra Kumar](#), *Assistant Professor, NIT Jalandhar*