## One Week Workshop

On

# Introduction and Basics of Programming skill using MATLAB and PYTHON

(Under TEQIP-III)

17<sup>th</sup> - 21<sup>st</sup> April, 2019

Venue: NIT Srinagar



**Organized By** 

Department of Electrical Engineering

National Institute of Technology Srinagar

Hazratbal, Srinagar - 190006, J&K

#### **About Institute**

National Institute of Technology, Srinagar (NITSRI) was established in 1960 as the Regional Engineering College, Srinagar, Jammu and Kashmir, India. It was one of the first eight Regional Engineering Colleges (REC) established by Government of India during the first Five Year Plan (1956–61). It is governed by the National Institutes of Technology Act, 2007 which has declared it as Institute of National Importance. It is one of the 31 National Institutes of Technology (NITs) and as such is directly under the control of the Ministry of Human Resource Development (MHRD).

NIT campus is on bank of Dal Lake known as Srinagar Jewal. Also, most respected and beautiful holly place of Muslims called Hazratbal Shrine are nearby and walkable distance from campus.

#### **About Electrical Engineering Department**

The Department of Electrical Engineering (EE) is one of the oldest departments since it was REC. The department runs undergraduate, Masters and PhD programmes. The department has experienced and distinguished faculty with all of them having PhD from renowned institutes. The faculties constantly engage in research apart from teaching. There are ten fully equipped laboratories in the department catering to the needs of the students.

## **Workshop Objective**

Python and MATLAB both are the most important languages in the world of computer programming. This is because of its widespread application in the fields of all stream of engineering. NIT Srinagar proudly announces a one week workshop on basic programming using MATLAB and Python. The objective of this workshop is to enhance the knowledge of programming skill of students, researchers and faculty. Also, goal of this workshop is to help the students, researchers and faculty to learn Python and MATLAB in

industry perspective and make them to do efficient coding for real world applications.

#### **Workshop Outcome**

After completion of workshop, participants can understand the main features of the MATLAB and Python development environment. They can use the GUI effectively. They can design simple algorithms to solve problems, and also able to write simple and effective programs in MATLAB and Python to solve scientific and mathematical problems.

## Why Python?

Python is a free, open-source, general-purpose, interpreted, and powerful scripting language for Web applications. It is an easy yet powerful programming language that provides structure and support for large applications as well as the power and complexity of traditional high-level languages. Python is the ideal choice if you require a single language with the features of both an interpreted and a scripting language

#### Why MATLAB?

MATLAB is a high-level computer language for scientific computing and data visualization built around an interactive programming environment. It is becoming the premiere platform for scientific computing at educational institutions and research establishments. The great advantage of an interactive system is that programs can be tested and debugged quickly, allowing the user to concentrate more on the principles behind the program and less on programming itself. Since, MATLAB programs can be developed in much shorter time than equivalent FORTRAN or C programs

#### **Why Should You Attend?**

- Fully Hands-on. Interactive Learning.
- Network with fellow programmers and coding enthusiasts.

## **Topics Covered**

- Mathematical functions
- Writing script and function
- Mathematical introduction to Linear algebra
- Non-linear programming
- Loop and conditional statements
- Root finding
- Interpolation and extrapolation
- Data/File handling
- Plotting and Graphics

## **Prerequisites**

It is advisable to bring your own well working laptop with python software installed. Basic knowledge of computer programming and an understanding of matrix and linear algebra are highly beneficial.

## **Important Date**

Last date of Registration

15th April, 2019

## **Registration Details**

Registration Fee (per participant)	
Students/ Research Scholars	Rs. 800/-
Faculty Members/ Scientists	Rs. 1000/-
Industry Persons	Rs. 1200/-

## For payment, the details of Bank is as follows:

A/c Name: TEQIP-III

A/c No: 0391040100011025 Bank Name: J & K Bank Bank Branch: REC Srinagar

IFSC Code: JAKAORECSGR (0=zero)

## **Organizing Committee**

#### **CHIEF PATRON**

Prof. (Dr.) Rakesh Sehgal Director, NIT Srinagar

#### **PATRONS**

Prof. (Dr.) Abdul Hamid Bhat HOD, Electrical Engineering

Prof. (Dr.) M. F. Wani TEQIP-III Coordinator

#### **CO-PATRONS**

Prof. (Dr.) Mairaj ud-din Mufti
Prof. (Dr.) Aijaz Ahmad
Prof. (Dr.) Shamim Ahmad Lone

#### COORDINATOR

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#### **ORGANIZING MEMBERS**

Dr. Asadur Rahman, AP, EED

Dr. Neeraj Gupta, AP, EED

Dr. Farhad Ilahi Bakhsh, AP, EED

Dr. Ravi Bushan, AP, EED

Dr. Chilaka Ranga, AP, EED

#### Note:

- 1. The entries are limited to only 35 participants.
- Accommodation will be provided inside the NIT Srinagar on first come first serve basis, if available.

## One Week Workshop

On

## INTRODUCTION AND BASICS OF PROGRAMMING SKILL USING MATLAB AND PYTHON

#### **Registration form**

Qualification::  Gender::  Designation::	
Faculty Members/ Scientists/ Industry P Student/ Research Scholar::	609 tax 101 ta
Department::	
Address for Communication::	
e-mail ID ::Phone No ::	
DD/ Online Reference No.::	
Amount in Rs.::	

Signature of the Participants

Name.

Signature of the Competent Authority with Seal

Note: Kindly email the registration form with proof of payment to <a href="mailto:jagtapkushal@nitsri.net">jagtapkushal@nitsri.net</a> up till 15<sup>th</sup> April 2019