

REGISTRATION FEE

Intending participants are requested to register their names by filling the attached registration form. The non-refundable registration fees should be sent in the form of a Demand Draft in favour of "Account Anchor Institute Cell" payable at Surat. The registration fee to participate in the programme is given as below.

Particulars	Registration fee
Faculty Members	Rs. 5000/-
Practicing Engineers	Rs. 5000/-
Any Graduate	Rs. 3000/-

THE NUMBER OF SEATS ARE LIMITED TO 25 AND REGISTRATION IS ON A FIRST CUM FIRST SERVED BASIS.

Registration fee do not include Food/ Accommodation etc. The participants have to bear their own travelling expenses.

IMPORTANT DATES

The completed registration form may be sent as an e-mail attachment to mkr@med.svnit.ac.in / dil@med.svnit.ac.in on or before 12/01/2018. The registration form must contain the signature of the Head of the Institution with seal. The selected applicants will be intimated by e-mail

CORRESPONDENCE

Dr. M. K. Rathod/Dr. D. I. Lalwani/Dr. A. A. Shaikh

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REGISTRATION FORM

Short Term Training Programme (STTP)

on

MATLAB Programming for Engineers

(16-20 January 2018)

S. V. NATIONAL INSTITUTE OF TECHNOLOGY
SURAT - 395 007

Full Name: _____

Designation & Dept.: _____

Organization and Address: _____

Email: _____

Amount Paid: _____

DD* No. Date: _____

Name of the Bank: _____

***In favor of "Account Anchor Institute Cell"**
payable at Surat Registration Category: _____

(SVNIT faculty/Student/Faculty/Industry)

Accommodation required (Yes/No): _____

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the programme. I also agree to inform the Coordinators in case, I am unable to attend the programme.

Place: _____
Date: _____ Signature of the candidate

Mr/Ms/Dr _____ is a student/employee of our institute/organization and is hereby sponsored to participate in the STTP

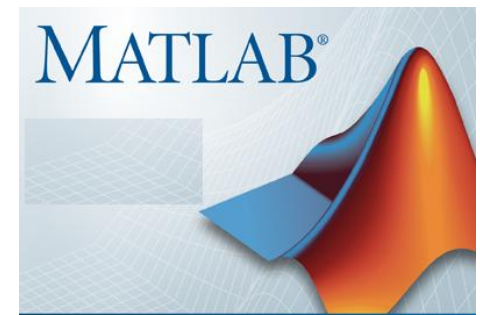
Place: _____
Date: _____
Signature & Stamp of Head of Institution/Organization

Short Term Training Programme (STTP)

Organized By: Anchor Cell

MATLAB Programming for Engineers

16-20 January 2018



Coordinators:

Dr. M. K. Rathod, Assit. Professor, MED, SVNIT
Dr.D.I.Lalwani, Asso.Professor, MED,SVNIT
Dr.A.A.Shaikh, Asso.Professor, MED,SVNIT

Organized By



Department of Mechanical Engineering
S. V. National Institute of Technology
SURAT - 395 007 (Gujarat) India
Website: www.svnit.ac.in

SURAT CITY

Surat is a well-developed commercial city in Gujarat state. It is also administrative capital of the Surat district. Surat is famous for its diamond and textile industries. It is at the heart of the world's diamond-polishing industry. It is also the largest manufacture of silk and synthetic textiles, and dress materials. Several large scale industries and establishments are located in the city (e.g., RIL, ONGC, NTPC, GAIL, L&T, ESSAR, NTPC, KRIBHCO, etc.). Surat city is a hospitable host to numerous congresses and conferences. The institute is located at Ichchhanath on Surat-Dumas road and issituated 5km away from Surat Airport and 10 km from railway station/bus station.

ABOUT SVNIT

Sardar Vallabhbhai National Institute of Technology (SVNIT) Surat is one of the twenty National Institutes of Technology in India set up with the objective to provide high quality technical education to meet the needs of the Nation in the present competitive world. The Institute campus is spread over 100 hectares of land on the Surat-Dumas Road.

ABOUT THE ANCHOR

Anchor Institute (Engineering & Auto), SVNIT-Surat is supported by Industries Commissionerate, Department of Industries and Mines, Gujarat Government, Gandhinagar. Industrial Commissionerate, Government of Gujarat, Gandhinagar, realized that there is shortage of sufficient technical manpower coming out of the academic institutions. This is due to the fact that large fraction of the fresh graduates and post graduates from engineering colleges are unemployable. The need for better quality and skilled technical manpower is increasing and will continue to increase in time to come. Hence the Anchor Institute cell is established to tackle this issue through the training and skill development programmes

PROGRAMME OUTCOMES

The basic outcomes of the STTP on MATLAB Fundamentals are as follows:

- Develop knowledge of the general concept of programming
- To Solve and analyse engineering problems in a project work/research work through MATLAB programming
- To develop the skill for writing MATLAB codes for algorithm and solve engineering problems.

PROGRAMME CONTENTS

1. Introduction to MATLAB and its environment

- Introduction of various windows such as command window, command history window, editor/debugger window, workspace window, etc.
- Express constant
- Define, use and assign value to variables and rules for naming variables
- Use MATLAB as a calculator
- Express small and large numbers in scientific notation
- Write and execute simple MATLAB commands and functions

2. Performing analysis and visualizing vectors and matrices (arrays)

- Understanding the concept and notation of vector and matrix
- Creating manually a vector and a matrix
- Use of commands/functions related to vector such as sum, mean, max and min.
- Performing arithmetic operation on matrix
- Matrix manipulation
- Append a matrix to another matrix
- Identify matrix and vector elements
- Determine length/size of a matrix and vector

3. Introduction to operators, expressions and statements

- Arithmetic operators and the colon and the transpose operator

- Precedence of operators
- ### 4. Introduction of some important built-in function
- ### 5. Polynomials and curve fitting
- Writing a polynomial in MATLAB
 - Perform different operations on polynomial
 - Evaluation
 - Finding the roots
 - Add, subtraction, multiplication and division
 - Compute the derivative and integration of a polynomial
 - Fit a polynomial curve for a given set of points
- ### 6. Writing a program in MATLAB using m-files (Automating commands with scripts)
- ### 7. Decisions, and relation and logical operator
- Know the syntax and meaning of if, if-else, elseif
 - Know the syntax and meaning of standard relational and logical operations
 - Perform relational and logical algebra on vectors, matrices and scalars
- ### 8. Repeating with for and while loop
- Know the syntax and meaning of for-end and while-end
- ### 9. Writing a user-defined functions (function m-file)
- ### 10. Introduction to graphics
- Create 2-D plots
 - Generate a multiple 2-D plots on a single graph
- ### 11. File handling
- Storing output data in a file

The programme consists of interactive lectures and hands-on training.

The participants will be provided course material which includes tutorial and problem based assignment for hands-on training.

