## Workshop for the beginners on MATLAB, PYTHON and LATEX

### Objective of the program

Programming language, good report writing and article preparations are essential skills for an engineering students and engineering educators. Good programming skill increases the efficiency to implement projects, developing teaching materials and helps for teaching also. Nowadays, good coding skills are very essential for all engineers. This program will help the participants to start with coding in MATLAB and PYTHON. Both of these languages are powerful, very popular, user-friendly and easy to learn. On the other hand, LATEX is a free scripting language which helps to write and manage various report writing, book writing and thesis preparation etc. Automatic citation management, figure number, table number are the key benefits of LATEX. The training will be provided by a group of faculty from the department of ECE, Central Institute of Technology Kokrajhar.

### Organizers and instructors

Organizer: Haradhan Chel, Asst. Professor and HOD, Depart-

ment of ECE, CIT Kokrajhar.

Co-organizer: Dr. Agile Mathew, Asst. Professor, ECE

MATLAB: Mr.K.K. Pandey, Asst. professor, ECE, Email:

kk.pandey@cit.ac.in

PYTHON: Mr.Haradhan Chel, Asst. professor, ECE, Email:

h.chel@cit.ac.in

LATEX: Dr.Agile Mathew, Asst. professor, ECE, Email: a.mathew@cit.ac.in, SIMULINK: Mr. Antaryami Panigrahi,

Asst. Professor, ECE, Email: a.panigrahi@cit.ac.in



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Department of Electronics and Communication Engineering

From 06/09/21 to 17/09/21, Everyday 4 PM To 6 PM

click here to register

Elligibility: Students, Faculties and staff of CIT Kokrajhar having a valid CITK email id.

### **Program Details**

#### WEEK-1

DAY-1: MATLAB INSTALLATION, TOOLBOXES AND THEIR USES, COMMAND LINE AND EDITOR, PLOTTING GRAPH AND DIFFERENT ALGEBRIC AND SCIENTIFIC OPERATION IN COMMAND PROMPT AND EDITOR. PRACTICE AND ERROR HANDLING + QUIZ-1

DAY-2: PYTHON INSTALLATION WITH ANACONDA, PACKAGES AND THEIR USES, CONSOLE, DIFFERENT EDITOR LIKE SPYDER, JUPYTER NOTEBOOK, PYCHARM, DIFFERENT ALGEBRAIC AND SCIENTIFIC OPERATION IN COMMAND PROMPT AND EDITOR, PRACTICE AND ERROR HANDLING.+ QUIZ-2

DAY-3: BASICS OF LATEX PACKAGES, EDITORS,PRACTICE AND ERROR HANDLING, QUIZ-3

DAY-4: MATLAB-ALGORITHM TO CODE EXAMPLE. APPLICATION OF IF-THEN-ELSE, FOR LOOP AND WHILE LOOP. NUMBER AND STRING MANIPULATION. , QUIZ-4

DAY-5: PYTHON-ALGORITHM TO CODE EXAMPLE. APPLICATION OF IF-THEN-ELSE, FOR LOOP AND WHILE LOOP. NUMBER AND STRING MANIPULATION. QUIZ-5

### WEEK-2

DAY-1: REPORT WRITING IN LATEX, ASSIGNENT-6

DAY-2: MATLAB STRUCTURE, FUNCTION DECLARATION AND RETURNING VALUES. GLOBAL AND LOCAL VARIABLE IN MATLAB. PRACTICE AND ERROR HANDLING, QUIZ-6

DAY-3: PYTHON STRUCTURE, FUNCTION DECLARATION AND RETURNING VALUES. GLOBAL AND LOCAL VARIABLE IN MATLAB. PRACTICE AND ERROR HANDLING, QUIZ-7

DAY-4: MATLAB SIMULINK., QUIZ-8