SHARDA UNIVERSITY
AGRA

5 DAYS TRAINING PROGRAM

ON

UNLOCKING MATLAB AND SIMULINK POTENTIAL FROM FUNDAMENTALS TO APPLICATIONS

Organized by

SHARDA SCHOOL OF BASIC SCIENCES AND RESEARCH
SHARDA UNIVERSITY AGRA, U.P., INDIA

30th September - 04th October, 2024	**(Online Mode) (02:30 pm to 04:30 pm)**

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ABOUT SHARDA UNIVERSITY AGRA

Sharda University Agra is a venture of the renowned Sharda Group which has established itself as a high quality education provider with prime focus on holistic learning and imbibing competitive abilities in students. The University prides itself in being the only multi-discipline campus in the Agra-Mathura Region, spread over 50+ acres and equipped with world class facilities. Sharda University Agra promises to become one of the India's leading universities with an acknowledged reputation for excellence in research and teaching. With its outstanding faculty, world class teaching standards and innovative academic programmes, Sharda intends to set a new benchmark in the Indian education system.

ABOUT SHARDA SCHOOL OF BASIC SCIENCES AND RESEARCH

Sharda School of Basic Sciences and Research boasts to provide an interdisciplinary approach, exposure to different disciplines in science including Physics, Mathematics and Environmental Sciences.

The Sharda School of Basic Sciences and Research is unique from other institutions of higher learning as it is committed to imparting knowledge in pure and applied sciences, which not only forms the foundation for further academic pursuits in science and technology but also acts as the foundation for students to pursue a career in multi facet directions.

The academic programmes are designed to meet the requirement of the latest technological developments and envisages to become a state-of-the-art department that cater the students at Graduate level along with providing high-quality education and cutting-edge interdisciplinary research in sciences. The school is continuously associated with academic/sponsored research and industrial consultancy work.

ABOUT TRAINING PROGRAM

The objective of this five days training program is to equip participants with a solid foundation in MATLAB and its applications, advanced programming techniques, AI- driven problem-solving, optimization, parallel computing and model-based design using Simulink. Through hands-on sessions and practical examples, participants will gain proficiency in navigating the MATLAB environment, implementing complex mathematical expressions, handling diverse data sources and solving engineering problems. Additionally, the program will introduce optimization techniques and parallel computing to enhance computational efficiency and provide insights into industry-relevant model-based design, preparing participants for career opportunities in this field.

OBJECTIVES

The main objectives of the training program are:
Equip participants with a solid foundation in MATLAB and its applications
Provide knowledge of advanced programming techniques
Address on MATLAB coding using AI
Focus on optimization and parallel computing
Empower participants to gain knowledge of Model-based design with Simulink

COURSE CONTENT

Day1: MAT LAB Basics
Introduction to MATLAB and its applications, Get familiar with MATLAB Environment, Implementation of Mathematical expressions in MATLAB, Reading data from various sources including excel/csv, audio, video, image files and webcam, displaying output data.

Day2: Advance programming concept
Loops and control statements, loop based problems, Live scripting and publishing the codes for report generation.

Day3: MATLAB Coding using AI
Function creation, solution of linear, non-linear and ordinary differential equations (ODEs), solution of different engineering problems using AI chat playground.

Day4: Optimization and Parallel Computing
Introduction to optimization, use cases of optimization, demonstration of particle swarm optimization (PSO) algorithm to solve daily life problems, use of parallel computing to speed up the simulation process by activating the multicores of the processor.

Day5: Model based design with Simulink
Introduction to model based design, scope in Industry, few design examples, job opportunities.

RESOURCE PERSON

Dr. R. K. Thenua is a young and dynamic faculty of engineering well known for teaching MATLAB programming and certified from IIT Madras, India. He is a B.Tech., M.Tech. in Electronics and Communication Engineering and Ph.D. from Visvesvaraya National Institute of Technology (VNIT), Nagpur in the domain of "B5G and 6G Wireless Communications". Currently he is associated with the department of ECE, VNIT, Nagpur. He has more than 17 years of teaching and research experience.
He has assisted a number of research scholars from various IITs, NITs and international universities like the University of Southern Queensland, Australia; Arizona State University, U.S.; the University of British Columbia; the Korea Institute of Science and Technology Information, South Korea and many more. He has been an active educational digital content creator for the last 10 years and has benefited millions of students through the YouTube platform.

REGISTRATION

The training program is open to all students, faculty members, professionals, researchers and enthusiasts having an interest in MATLAB and its applications. There is no prerequisite to attend the program but prior knowledge about the basics of mathematics will be helpful to understand the content of program. All participants are required to register in advance by sending a registration fee as mentioned through NEFT/RTGS/IMPS/UPI in concern account and fill the Google form given as below.

REGISTRATION FEE

Early bird Registration up to 25th Sept., 2024	**Rs. 200/-**
Registration from 26th Sept. to 29th Sept., 2024	**Rs. 250/-**

E-certificate will be provided to all registered participants. Registered participants will receive the meeting link on their email ids/whatsapp group.

For registration fill out the Google form
https://forms.gle/nPwrmW74rojE7xtM8

ACCOUNT DETAILS

NAME OF ACCOUNT HOLDER	SHARDA UNIVERSITY AGRA A UNIT OF SHRI ANAND SWAROOP EDUCATIONAL TRUST
ACCOUNT NUMBER	769205000252
IFSC	ICIC0007692
NAME OF BANK	ICICI Bank Ltd.

SCAN QR CODE
FOR UPI PAYMENT

SHARDA UNIVERSITY
AGRA

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