ZENUS

TRAINING | DEVLOPMENT | PLACEMENT

CERTIFICATION IN MATLAB

Master's in Electrical CAD skills & and take your career to the next level!

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WHO CAN JOIN THE COURSE?

- Electrical, Mechanical, Civil, Aerospace, Chemical Engineers: For system modeling, simulation, control systems design, signal processing, and data analysis.
- MATLAB's environment is excellent for rapid prototyping and development of algorithms due to its matrix-based language.
- Data Scientists and Analysts: For database management, data processing, cleaning, visualization, predictive modeling, and statistical analysis.

GIMPLES OF OUR SUCCESSFUL TRANSITIONS

facebook Reviews 4.6

Justdial Reviews 4.8

Google Reviews 4.8

Sulekha Reviews 4.9

Duration- 8 Weeks

PROGRAM CURRICULUM-I

MODULE:- 1

- Historical Background
- Applications
- Scope of MATLAB
- Importance to Engineers
- Features
- MATLAB Windows (Editor, Work space, Command history, Command Window)
- Operations with variables
- Naming and Checking Existence
- Clearing Operations

Data And Data Flow In Matlab

- Matrix Operations & Operators
- Reshaping Matrices
- Importing Exporting Of Data
- Arrays
- Data types
- File Input-Output
- Communication with external devices

EDITING AND DEBUGGING M FILES

- Writing script files
- writing functions
- Error Correction
- M-Lint Automatic Code Analyzer
- Saving files

Programming

- Flow control
- Conditional Statements
- Error Handling
- Work with multidimensional array
- Cell Array & Characters
- Developing user defined function
- Scripts and other Functions
- Basic Technical Level Computing with MATLAB

MATLAB GRAPHICS

Duration- 8 Weeks

PROGRAM CURRICULUM-II

- Simple graphics
- Graphic Types
- Plotting functions
- Creating plot &Editing plot (2D and 3D)
- Graphics Handles
- GUI (Graphical User Interface)

Simulink

- Introduction
- Importance
- Model Based Design
- Tools
- Mathematical Modelling
- Converting Mathematical Model into Simulink Model
- Running Simulink Models
- Importing Exporting Data
- Solver Configuration
- Masking Block/Model
- Basic Technical Level Computing with MATLAB

CONTROL SYSTEM TOOLBOX

- General instructions
- Create linear models
- Classes of Control System Toolbox
- Discussion on state space representation
- Transfer function
- System gain and dynamics
- Time & Frequency domain analysis
- Classical design, State Space Model Ø
- Transfer function representation, System response
- LTI viewer detail and explanation about LTI viewer
- Designing of compensator
- Use of SISO design

Duration- 8 Weeks

PROGRAM CURRICULUM-III

Project On Control & Simulink

Signal Processing Toolbox

- Basics of Signal Processing
- Representing Signals
- Analysis of different Signals
- Complex Signals
- Filter Designing
- Using the Filter Designing GUIs
- Analysing the filter plots
- Filter Designing using Script Files
- Speech Recording
- Speech Processing
- ·Other Signal Processing Functions

IMAGE PROCESSING TOOLBOX

- Reading and Writing Image Data
- Displaying and Exploring Image
- Spatial Transformation
- Image Registration
- Designing and implementing 2D linear Filters for Image Data
- Morphological Operations
- Transforms
- Analysing and Enhancing Images
- ROI based Processing
- Neighbourhood and Block operations

Computer Vision Systems Toolbox

- ·Input, Output, and Conversions
- ·Display and Graphics
- ·Registration and Stereo Vision
- ·Motion Estimation and Tracking
- ·Geometric Transformations

Duration- 8 Weeks

PROGRAM CURRICULUM-IV

- ·Filters, Transforms, and Enhancements
- ·Project Based on Image & Computer Vision

FUZZY LOGIC TOOLBOX

- ·Basic introduction to fuzzy logic
- ·Fuzzy Versus Non-fuzzy Logic
- ·Foundations of Fuzzy Logic
- ·Fuzzy Inference Systems
- ·Building Systems with Fuzzy Logic Toolbox Software
- ·Building Fuzzy Inference Systems Using Custom Functions
- ·Working from the Command Line
- ·Working in Simulink Environment
- ·Simulating Fuzzy Inference Systems Using the Fuzzy Inference Engine

Neural Network Toolbox

- ·Network Objects, Data, and Training Styles
- ·Multilayer Networks and Backpropagation Training
- ·Control Systems
- ·Radial Basis Networks
- ·Self-Organizing and Learning
- ·Vector Quantization Nets
- ·Adaptive Filters and Adaptive Training

Stateflow In Simulink

- ·State flow Chart Concepts
- ·State flow Chart Notation
- ·State flow Chart Semantics
- ·Building Mealy and Moore Charts
- ·Using Actions in State flow Charts
- ·State flow Design Patterns
- ·Truth Table Functions for Decision-Making Logic

Duration- 8 Weeks

PROGRAM CURRICULUM-V

- Using Simulink Functions in State flow Charts
- Debugging and Testing State flow Charts
- Exploring and Modifying Charts
- Semantic Rules Summary
- Semantic Example

AUTOMATED DRIVING TOOL BOX

- Reference applications form a basis for designing and testing ADAS applications.
- Scenario Simulation
- Ground Truth Labeling
- Planning and Control
- Detection and Tracking
- Localization and Mapping

Overview Of Machine Learning

- Classification Workflow
- Regression workflow
- Importing and Pre-processing Data
- Engineering Features
- Machine learning models

ZENUS CAREER SERVICES

Career-oriented Session
Attend 10+ career-oriented session by industry mentors and prepare your career trajectory

Profile Building
Php Programming resume and LinkedIn profile to make an impression on top employers

Dedicated Job Portal Access
Get exclusive access to 20+* job posting per month on Zenus's job portal

Mock Interview Preparation
prepare with mock interviews including most asked question by top employers

1:1 Mentoring Session
Get 1:1 guidance at every step in your career transition to Php-Programming

Placement Assistance
Placement opportunities are provided once the learner is moved to the placement pool upon clearing Placement Readiness Test(PRT)**

NO. 1 AWARD WINNING TRAINING COMPANY

Awared By Ex-Indian Cricketer Chetan Sharma Sir

Awared By Ex-Indian Cricketer Sandip Patil Sir

VISIT US

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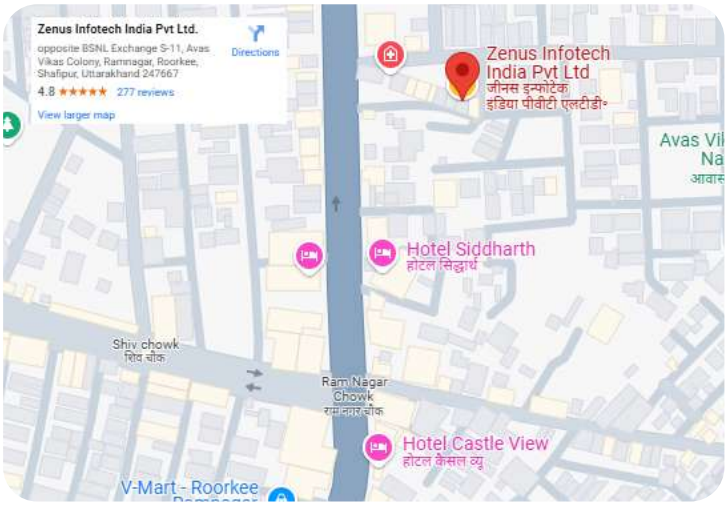

STUDENT TESTIMONIALS

Shivant Tyagi
★★★★★
Our experince with ZENUS INFOTECH has been very good. its the best company in india for industrial training and placements.

Abdul Raoof
★★★★★
Good teches.And Good teacher .Zenus teacher is helping person that solve the asking question .Zenus is a wonderful platform

Piyush Kumar
★★★★★
I feel my self with a great weight of knowledge after doing training from Zenus Infotech

Prabhat Saini
★★★★★
Extremely nice atmosphere to learn softwares and knowledgeable and helpful faculty with great experience.

Sumit Pant
★★★★★
Highly skilled staffs well as good place to work ..the faculties are very good teachers

Ishant Chauhan
★★★★★
Highly experienced and project oriented training received with full support from the trainner. Thanks Zenus Infotech