



Social Media Marketing	Industrial/Summer Training	Data Entry
Web Design	Banner Design	Blog Design
Mobile App	Logo Design	Email Support
Digital Marketing	Event Management	Photoshop

Ref: ES/T/2021/1002

07 May, 2021

Dear Candidates

As per notification number **ES/T/2021/1001**, Earn Spot releasing the complete syllabus of various training courses. These syllabus attached in next page.

We would suggest you all to enrol in your desired courses and enjoy learning with our full certified courses.

Registration URL: <https://www.earnspot.in/training.php>

if you facing any problem during registration contact us.

(Noor Azam Ali)
Training & Internship Cell Manager

Website www.earnspot.in | Email: help@earnspot.in | Call: +91 – 7518230209, 8182806566

Find us on Face book: [@earnspot](https://www.facebook.com/earnspot) | WhatsApp: +91 7526012001 | Telegram: <https://t.me/earnspot>

LinkedIn: [@earnspot](https://www.linkedin.com/company/earnspot) | Instagram: [@earnspot](https://www.instagram.com/earnspot) | Twitter: [@earn_spot](https://twitter.com/earn_spot) | YouTube: [@earnspot](https://www.youtube.com/channel/UC...)

Web Development using DJANGO

Module 1 Introduction to DJANGO

1. Features of Django
2. Django web server
3. Understanding Django environment
4. A simple 'Hello world' application
5. Architecture of Django

Module 2 Creating a website - Project

1. Starting a project
2. Creating an app inside the project
3. Activating the app
4. Creating model for our website
5. Converting the model into a table and Examples for fields in models

Module 3 Creating a website – Project (Continue)

1. Basic data access using Django shell
2. Saving objects into database
3. Retrieving objects from database
4. Modifying objects of database
5. Sorting, filtering and deleting object

Module 4 Creating Administration Panel

1. Using the admin interface
2. Customizing the admin interface
3. Adding users
4. Data access and modification using admin panel
5. Giving permissions to users

Module 5 Creating First Page of our site

1. The Django Template system
2. Template Inheritance
3. Improving the website
4. Adding background colour and images in web pages
5. Adding Banner to our website
6. Storing and displaying images
7. Adding users to our site
8. Uploading the information by user
9. Changing the administration interface title

Module 6 Django Form Creation and Email Functionality

1. Forms basics
2. Creating Contact us form
3. Form fields examples
4. Configuration email settings
5. Sending email with Django

Module 7 Django Template Language

1. Django template tags
2. If/else, For
3. If/else/elif, Comments, filter
4. Using templates to display data in the site
5. Creating sessions and cookies in Django

Android

Module 1 Basics of Android

1. What is Android History and Version
2. Installing Software
3. Setup Eclipse
4. Hello Android example
5. Internal Details
6. Dalvik VM
7. Software Stack
8. Android Core Building Blocks
9. Android Emulator
10. AndroidManifest.xml
11. R.java file
12. Hide Title Bar
13. Screen Orientation

Module 2 UI Widgets

1. Working with Button
2. Toast
3. Custom Toast
4. Button
5. Toggle Button
6. Switch Button
7. Image Button
8. Check Box
9. Alert Dialog
10. Spinner
11. Auto Complete Text View
12. Rating Bar
13. Date Picker
14. Time Picker
15. Progress Bar
16. Quick Contact Budge
17. Analog Clock and Digital Clock
18. Working with hardware Button
19. File Download

Module 3 Activity, Intent & Fragment

1. Activity Lifecycle
2. Activity Example
3. Implicit Intent
4. Explicit Intent
5. Fragment Lifecycle Fragment Example

6. Dynamic Fragment
7. Option Menu
8. Context Menu
9. Popup Menu

Internet of Things (IOT)

Module 1 Overview of IoT and High level Architecture

1. What Is the Internet of Things (IoT)?
2. Brief History and evolution of IoT
3. IoT Architecture
4. Trends in the Adoption of IoT
5. IoT Is Powerful and Pervasive
6. Societal Benefits of IoT
7. Risks, Privacy, and Security

Module 2 Setting up IoT Workflow

1. Setup IoT Platform1 (Opensource IoT Platform on local machine)
2. Setup IoT Platform2 (Amazon IoT platform)
3. IoT Use case-1 Implementation on two platforms
4. IoT Usecase-2 Implementation

Module 3 Advanced / Embedded C Programming

1. Basic of C
2. Advanced C programming
3. Project environment - Creating & Building a project, Make files
4. Deep dive - Logic to program translation, Creating your own library, Dry-run
5. Introduction to Data Structures

Module 4 Programming with Python

1. Overview of Programming with Python
2. Native Datatypes and Operators
3. Python Statements and Conditionals
4. Functions
5. String
6. Object oriented programming with Python
7. Errors and Exception Handling
8. File handing
9. Regular expression
10. Modules and Packages

Module 5 Building IoT Applications using Raspberry Pi

1. Overview of Raspberry Pi (RPi) hardware platform
2. Peripherals on Rpi
3. Setup and Install Raspbian OS on Rpi
4. Overview of Linux OS and its sub-systems
5. Linux CLI and important commands
6. Linux File System

7. Install packages on Raspbian OS
8. Setting up Raspbian as an IoT gateway
9. Write Python program to interface with Arduino using serial libraries
10. IoT Communication Models and Protocols
11. Building python based programs to communicate to cloud server using various application protocols
12. Develop a complete python based application IoT application
13. Rpi as a device
14. Interfacing with sensors and actuators using GPIO pins
15. Interfacing with camera on Rpi

MATLAB

Module 1 Introduction to MATLAB

1. Historical Background
2. Applications
3. Scope of MATLAB
4. Importance of MATLAB for Engineers
5. Features
6. MATLAB Windows(Editor, Work Space, Command History, Command Window)
7. Operations with Variables
8. Naming and Checking Existence
9. Clearing Operations
10. Introduction to Arrays
11. MATLAB File Types

Module 2 Data Flow in MATLAB

1. Matrix Operations & Operators
2. Reshaping Matrices
3. Importing Exporting Of Data
4. Arrays
5. Data types
6. File Input-Output
7. Communication with External Devices

Module 3 Editing & Debugging M files

1. Writing Script Files
2. Writing Functions
3. Error Correction
4. M-Lint Automatic Code Analyzer
5. Saving Files

Module 4 System Programming

1. Flow Control
2. Conditional Statements
3. Error Handling
4. Work with Multidimensional Array
5. Cell Array & Characters
6. Developing User Defined Function
7. Scripts and Other Functions

Module 5 Image processing

1. To study about the basic image processing tools.
2. To write program for Histogram processing.
3. Write program for image segmentation.
4. Write program image restoration.

Module 6 Simulink

1. Introduction, Importance.
2. Model Based Design, Tools.
3. Mathematical Modeling.
4. Converting Mathematical Model into Simulink Model.
5. Running Simulink Models.
6. Importing Exporting Data.
7. Solver Configuration.
8. Masking Block/Model.

PLC

Module 1 Introduction to PLC

1. Types of PLC
2. Source and sink type of PLC
3. Programming language of a PLC
4. Hardware over view of Industrial series of PLC
5. Control wiring of PLC
6. Data files used in a PLC
7. Interfacing with relay
8. Control circuit designing with feedback concept
9. Interfacing with proximity sensor with PLC
10. Communication with PC
11. Wiring different field device to PLC
12. Simulator analysis of a PLC programming
13. Uploading downloading & monitoring programs
14. Introduction to SFD, Instruction List and Ladder logic
15. Monitoring /modifying data table values
16. Hands on experience on real time applications
17. Faultfinding /troubleshooting and documentation

Module 2 I/O CONFIGURATION & MEMORY MAPPING

1. Why I/Configuration is require?
2. How the I/O modules are addressed for AB & Siemens – PLCs
3. First steps with the programming device
4. Instructions contacts, coils , and PLC scan
5. A look at the instruction covered in all PLCs.
6. Each instructions being illustrated by applications specific program examples.
7. The instruction covered are :- NO/NC , Set ,Reset <timer <Counters <companion, Arithmetic , Logical & Move functions
8. An introduction to communication options available for the type of PLCs

Module 3 LADDER LOGIC PROGRAMMING

1. Comparison b/w Gate, relay ladder &PLC logic.
2. Description of using Memory bit in a programing.
3. Mathematical concept DD, ANI, SUB, MUL, DIV and etc.
4. Logical concept AND, ANI, OR, EXOR, NOT etc.
5. Special Function MOV, SET, RST, CMP, INC, DEC.

6. Programming based on Timer and counter.
7. Advance Control Function programming.

Module 4 RELAY LOGIC

1. Basic principal of relay working.
2. Making AND, OR gate, NOT gate logic circuit.
3. Interfacing relay with sensor.
4. Relay based control designing.
5. Interconnection between Different relay &switch's

Solid work

Module 1 Introduction of Solid Works, Drawing sketches for solid models.

Module 2 Adding relations and Dimensions to sketches, Advance dimensioning techniques and base feature options.

Module 3 Creating reference geometries,

Module 4 Advance modeling tools –I, Advance modeling tools –II, Editing features.

Module 5 Assembly modeling.

Module 6 Working with drawing views.

Module 7 Configuration and library features.

Auto CAD

Module 1 2D Drawing Construction

Module 2 Drawing Aids in auto CAD

Module 3 Modifying Commands in Auto CAD

Module 4 Fine Tuning drawings in Auto CAD

Module 5 working with in Auto CAD

Module 6 Grouping in Auto CAD

PYTHON

Module 1 Introduction

1. Working with Python
2. Basic Syntax
3. Variable and Data Types
4. Operator

Module 2 Conditional Statements

1. If
2. If- else
3. Nested if-else
4. Looping
5. For
6. While
7. Nested loops

Module 3 Control Statements

1. Break

2. Continue
3. Pass

Module 4 String Manipulation

1. Accessing Strings
2. Basic Operations
3. String slices
4. Function and Methods

Module 5 Lists

1. Introduction
2. Accessing list
3. Operations
4. Function and Methods
5. Working with lists

Module 6 Tuple

1. Introduction
2. Accessing tuples
3. Operations
4. Working
5. Function and Methods

Module 7 Dictionaries

1. Introduction
2. Accessing values in dictionaries
3. Working with dictionaries
4. Functions
5. Properties

