

**#Learn\_from\_Home**

## **Professional Data Analysis**

**Course Code : LFH/DA/01**

**Duration: 20 hrs**

### **Course Syllabus**

#### **INTRODUCTION**

This industry oriented course is developed by both the Software development division & Training division of **ipsr solutions limited**. IPSR is a **public limited IT company** with 20 years of expertise in [Software product development](#), [Training services](#), [Placement services](#) & [Digital Marketing services](#). During the past 2 decades, IPSR has trained candidates from **50+ countries** and helped **40000+ candidates** to build their IT career. Our IT services division is a pioneer in development of **Academic solution products**, incorporating cutting edge technologies like Artificial Intelligence, Data Analytics and Machine learning. Live industry experts from this IT division contribute a major role in delivering this course. Our placement division is having **1500+ placement tie-up companies** and we are conducting [recruitment on all days](#).

The Course curriculum is designed and developed by a team of expertise panel lead by following academicians

- ❑ **Dr. Mendus Jacob, M.Sc., M.Phil., Ph.D., MloD**
  - ❑ M.D & C.E.O - IPSR & Valin Technologies, U.K.
  - ❑ Director - MCA, Marian College, Kuttikkanam (Autonomous)
  - ❑ Former Director of School of Applicable Mathematics, M.G. University.
  - ❑ Academician and Entrepreneur with 30+ years experience
- ❑ **Dr. Sunil Job K.A, M.Sc, M.Ed, M.Phil, Ph.D., RHCE**
  - ❑ Chief of Academic Solutions - IPSR
  - ❑ Former college Principal and a Specialist in Data Analytics & Machine Learning
  - ❑ Blogger and a Resource person for National conferences
  - ❑ Academician with 25+ years experience

## What you'll learn

Importance of data in data analysis and machine learning and different visualization methods.

□ How to visualize real world data and analyze the data using Excel and Tableau.

## Description

This course is aimed for students who want to become a data analyst or as a first step for those who want to become a data scientist or machine learning engineer or AI programmer.

## Course Outcome (CO)

While successfully completing this course, the learner will be able to:

- Explain data, its types and relevance in data analysis and Machine Learning.
- Visualize real word data and analyze the data.
- Explain what is a dashboard and different dashboard types.



- Create a dashboard using excel.
- Summarize data and create various summarized graphs using pivot tables and pivot charts.
- Work with tableau and find insights from a dataset.
- Prepare Data visualization using dashboards in Tableau.

## What does this course give you?

Skill required to become a data analyst using Excel and Tableau.

## Course content

### Data Explained

- What is data
- Relevance of data
- Types of data
- Data formats
- Data source

### Data collection.

- Tasks for data collection

### Data cleaning using Excel

- Text-to-columns



- Find and replace
- Filter
- Remove duplicates
- Delete all Formatting
- Remove Extra Spaces
- Change Text case
- Numbers Stored as Text into Numbers

### **Data visualization**

- Types of data visualization
- Right method of chart selection
- Data visualization tasks using real world data

### **Dashboard**

- What is dashboard
- Various types of Dashboards
- Ingredients for creating an effective dashboard.
- Workflow for creating dashboard
  - Steps for creating Dashboard

### **Pivot table using excel**

- Summarizing data
- Rows and fields

### **Pivot chart using excel**

- Creating various summarized graphs

- Selecting right data columns

### **Dashboard using excel**

- Taking real world data to create excel dashboard
- Various settings in Dashboard design options

### **Tableau initialization**

- Tableau installation
- Data source settings in tableau
- Data Interpreter
- Interface of Tableau sheet
- Various menu options

### **Data Integration using Tableau**

- Inner join
- Left and right join
- Outer join

### **Visualization using Tableau**

- Various graphs in tableau
- Real world data visualization tasks

### **Dashboard using Tableau**

- Taking real world data to create Tableau dashboard
- Various settings in Dashboard design options



## Contact Us

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We have branches at Kochi, Thiruvananthapuram, Calicut and Bengaluru.