# LEARN FROM THE BEST

# PREPARING YOU FOR TOMORROW

Position yourself for the future by aligning your abilities towards the goals. Explore new opportunities in IT and ride the wave of Data Science, AI and beyond.



# 



# Full Stack Developer

Build end-to-end Web applications to bring ideas into life



# Machine Learning

Building decision making models to train the machines for automation



#### Data Science Data analysis and Statistical modelling to extract insights from the data



# **Artificial Intelligence**

Building intelligence to machines to imitate & surpass human intelligence

Hybrid Learning Project-Based Certified Programs

# About Us

We are tech-savvy and professional. Our courses are designed by industry experts along with academicians to ensure all-around competency building, irrespective of the learner's background.

Our promoters are business leaders, entrepreneurs, AI advisory board members, and investors with up-close and personal working experience with the latest technologies.

Our trainers are handpicked from industry and academics to find the right balance between knowledge and skills. Our innovative Knowledge-Skill teaching methodology talks volumes about our expertise.

# ENGAGE | APPLY | EXCEL

Engaged learning is the key to mastering any topic. Our pedagogy enhances engagement in learning through knowledge-skill combination so that the learner would display competencies and excel in the aspired career.

CEDLEARN is a brainchild of technocrats to address the dire shortage encountered in identifying the right talent with real-time project experience. We are aware of the market demand and will train you to be a leader.

# EXPLORING THE SCOPE. THE NEXT BIG BANG

We are at the cusp of the technological transformation where the industry is constantly striving to explore the potential of Data Science, leap towards A.I and beyond. It is a once-in-a-life time opportunity to ride the wave through the right positioning.

**"Traditionally**, Indian I.T aspirants followed the global trends, only from the services point of view, learning overused technologies to survive the day, poised from the very start to be redundant on a shorter run."

Data Science is ruling the business world with increasing demand for Automation, Advanced Data Analytics, In-Memory Computing, Data as Service and more. By 2025, 60% of the data-based tasks would be automated. Surprisingly it could be mastered by anyone, irrespective of their educational background.



**INSTITUTIONS ARE FAILING** As they are purely content centric with minimum or no practical skills or projects.

Artificial Intelligence is ever-expanding with an array of real-time solutions about almost every industry, from manufacturing to agriculture. The shortage of skilled workers is slowing its rate of diffusion – AI has the potential to change the economy's trajectory.

58%	
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think that AI would destroy more jobs than it creates more jobs posted for AI

11%

are forced to professionals from switch jobs to IT services will be keep up. displaced shortly

30%

# Full Stack Vs Al

Brain and Body Analogy – AI is all about imitating and creating a human brain to help us achieve the impossible. Full stack developers help in offering a virtual body in the form of web application while Robotics works on a physical one.

14%

# Artificial Intelligence Vs Deep Learning

# Artificial Intelligence

A terminology widely used, that intends to replicate the human brain. It is an umbrella term that encapsulates ML, DL and part of DS. It aims to achieve ultimate goals for autonomously operating programs.

# A.I created **3 times** more jobs in 2021

81%

#### PREFERS TO HIRE

Right talent over a completely autonomous system

# Data Science

A subset of AI, an essential and integral part of every business to capture and understand the data to draw insights from it enabling the business leaders to take informed decisions.

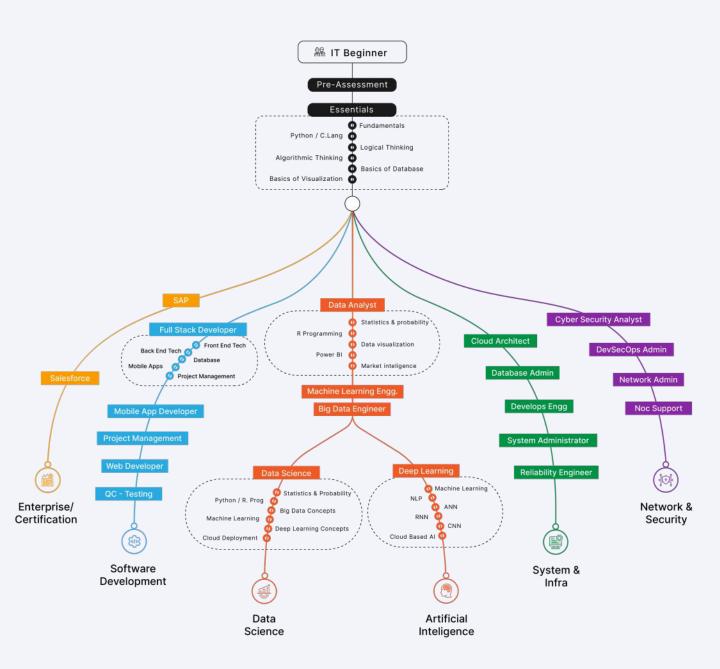
# Drafting Career Paths

"If you can't teach it to a 6-year old, you don't understand it yourself."

- ALBERT EINSTEIN

# We can... and structured it well for you

# Tree Structure to plan your IT career path



We have simplified the learning curve – Al is an umbrella term that encapsulates all the upcoming technologies opening unlimited opportunities in every field of business. Enabling learners to focus on their aspired careers taking advantage of this opportunity.

# Request for free Career Mapping

# IN DEMAND COURSES

We have simplified the learning curve – Al is an umbrella term that encapsulates all the upcoming technologies opening unlimited opportunities in every field of business. Enabling learners to focus on their aspired careers taking advantage of this opportunity. Enabling learners to focus on their aspired careers

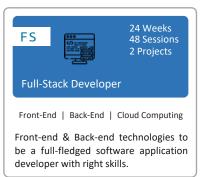


DA

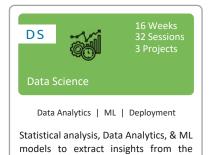
**Data Analytics** 



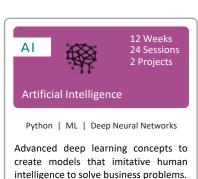
Art & science of teaching machines to learn from data using supervised and unsupervised algorithms.







data for decision making.



Statistics | Visualization | EDA | BI

Drive business decisions through

statistical data analysis, visualization,

and dashboarding using various tools.

10 Weeks

20 Sessions 2 Projects



Job Assurance and Job Guarantee Programs Pre & Post, Module-Level Assessments



Duration :: 4 Weeks | 10 Sessions | 1 Project Mode :: SHORT | LONG | Online / Offline

For those who would like to start their journey into the world of Data Science or IT by learning a programming language, Python is the best option. This versatile, syntax friendly and a yet powerful language is being widely used by professionals. Learn Python from basics to libraries which makes it one of the powerful programming languages.

## Setup + Essentials + Advanced + Libraries

#### **Course Details:**

#### **PYTHON LANGUAGE**

- Getting Started with Python
   Fundamentals; Syntax; Keywords; Comments;
   Variables; Input / Output Operations; Data
   Types
- Data Types, Sequences & Operators
   Data types; Strings; List; Tuples; Set;
   Dictionary; Various Operators
- **Conditional Statements** if statement; if-else; Nested if
- Control Loops For; While; Nested Loops; Range; Break
- Advanced Python Functions
   Default; User-defined; Lambda; Nested;
   Recursion; Decorators; Iterators; Map; Filter
- Object Oriented Programming Classes; Objects; Principles; Encapsulation; Docstrings & Constructor
- Error & Exception Handling Errors; Assertions; Exception Handling; User-defined exceptions

#### **ADVANCED CONCEPTS**

- Handling Files
   File Handling; File operations; Reading & Writing; File object attributes
- Version Control
   Git configuration; File & directory; Creating & merging branches; Working on repository
- Web Scraping Introduction; Tools, Virtual Environment; Scraping data with tools; Handling data
- Python Libraries
   Introduction; Matplotlib, Pandas,
   NumPy, SciPy, Scikit-learn; TensorFlow
- Introduction to Machine Learning
   Introduction; Supervised & Unsupervised
   algorithms; Model Building; Case Studies
- Projects
   2 Real-time Projects

The content of the course takes you through various essential and advanced concepts to make you ready for programming. Post completion of the course you could take the path towards Machine learning or work on being a developer. Skills in Python language is sought after in the industry. Work on your learning path today and start your journey.



- Profile Building Employability Index
- Interview F.A.Qs
- Mock Interview



Duration :: 8 Weeks | 16 Sessions. | 2 Projects + 1

No doubt Python is a versatile and powerful programming language. Be it development or machine learning Python is the popular language among many developers. Coupled with Web Development Frameworks such as Flask or Django there are unlimited opportunities for the students and professionals to be cross-platform web application developers.

# Python + Flask / Django + Database

#### **Course Details:**

PYTHON LANGUAGE	WEB FRAMEWORK
• Getting Started with Python Fundamentals; Syntax; Keywords; Comments; Variables; Input / Output Operations; Data Types	<ul> <li>Database Concepts MySQL Basics, Queries; CRUD operations; MySQL DB; Connection with Frameworks;</li> </ul>
<ul> <li>Data Types, Sequences &amp; Operators</li> <li>Data types; Strings; List; Tuples; Set;</li> <li>Dictionary; Various Operators</li> </ul>	<ul> <li>Flask Framework         Overview; Environment; Features; Creating Application; Views; Dynamic Routing; Errors &amp; Debugging; Flask Template Engine (Jinja2) Layouts; Static Templates; Static Files; Form Handling; HTTP Verbs; Sessions Handling, Flashing, Navigator Bar, Hosting Options     <li>Django Framework         Environment Overview; Features; Project Structures; App Structures; Views and Confi, URLS; Template System; Static files; Models, Migration; Model forms; File upload; Mail System; Session Management; User authentication; Model views &amp; inheritance; Query sets &amp; Filters; Middleware     </li> </li></ul>
<ul> <li>Conditional Statements if statement; if-else; Nested if</li> </ul>	
<ul> <li>Control Loops</li> <li>For; While; Nested Loops; Range; Break</li> </ul>	
<ul> <li>Advanced Python - Functions</li> <li>Default; User-defined; Lambda; Nested;</li> <li>Recursion; Decorators; Iterators; Map; Filter</li> </ul>	
<ul> <li>Object Oriented Programming Classes; Objects; Principles; Encapsulation; Docstrings &amp; Constructor</li> </ul>	
<ul> <li>Error &amp; Exception Handling Errors; Assertions; Exception Handling; User-defined exceptions</li> </ul>	<ul> <li>Projects</li> <li>2 Real-time Projects</li> </ul>

This course has been specifically designed to train professionals to learn Python and its web framework to turn themselves into web application developers. Out of all the available Python Frameworks, Flask and Django are proven to be popular. Students have the opportunity to pick any one of these two and work their way towards deploying the web applications in a real-time environment.





# DATA ANALYTICS

First step to generate insights

Duration :: 10 Weeks | 20 Sessions | 2 Projects + 4 Mini

Analysis of data drives businesses through the organization. Organizations are investing heavily in the data processes and tools to mine the data, cleanse it, apply analytical and visualization methods to extract information to drive business decisions. As a Data Analyst, you would involve in the processes to effectively manage processes and customer expectations.

# Statistics + Visualization + EDA + BI

## **Course Details:**

DATA ANALYTICS	VISUALIZATION/DASHBOARDS
<ul> <li>Business Statistics         Descriptive &amp; Inferential Statistics; Measures of Central Tendency &amp; Dispersion; Data: Distributions, Quality Analysis &amp; Variability; Probability &amp; Distributions; Sampling Techniques, Estimation Types; Hypothesis Testing &amp; Type I, Type II Errors;     </li> </ul>	<ul> <li>Advanced Excel for Analytics         Data Importation; Functions &amp; Formulas to Organize             Data; Macros, Power Map &amp; Power Pivot; Numerica             Analysis - Statistical Functions, Data Analysis Tool             pack, Pivot Tables     </li> </ul>
Correlation & Variance Analysis: Business Use Cases; Parametric & Non-Parametric Tests	<ul> <li>Business Intelligence</li> <li>Overview of Business Intelligence; Business</li> <li>Intelligence Vs Business Analytics; Getting</li> </ul>
<ul> <li>Data Visualization &amp; Reporting</li> <li>Data Visualisation &amp; Concepts; Types of Charts &amp;</li> <li>Word Cloud; Visualising Data using Infographics;</li> </ul>	comfortable with MySQL; Power BI & Analytics Understanding visualization with Tableau
Evaluating an Analytics Report	<ul> <li>Requirement Evaluation</li> <li>Decoding Business Requirement; Dashboarding –</li> </ul>
<ul> <li>Exploratory Data Analysis</li> <li>Qualitative &amp; Quantitative Techniques; Data</li> <li>Profiling &amp; Management; Univariate, Bivariate, &amp;</li> </ul>	Data Story Telling; Formatting Various types of Reports
Multivariate; Correlation & Co-Variance Matrices; Feature Engineering & Extraction; Inferential Statistics: t, f, z, ANOVA, Chi-Square	<ul> <li>Introduction to Machine Learning Supervised &amp; Unsupervised Learning, Building ML models</li> </ul>

"Data Analyst is the front line analytical professional who handles data to drive customer satisfaction, process improvement & innovation"

We have developed this course to encourage learners from both technical and non-technical backgrounds to be Data Analysts. This is an industry-ready curriculum to impart necessary skills in the learners to handle organizations data analytics needs confidently. Program covers both theoretical knowledge such as Statistical modelling and tools such as Power BI to give the right structure to the learning. Learners could practice various case studies and build their dashboards while solving client's business problems.





- Profile Building Employability Index
- Interview F.A.Qs
- Mock Interview



# MACHINE LEARNING

Teaching Machines through Data

Duration :: 10 Weeks | 20 Sessions | 3 Projects Mode :: SHORT | LONG | Online / Offline

Machine learning can be defined as a concept in which computers or systems are enabled to learn from the data without being programmed. Machine learning is the tool that analyses large amounts of data to identify the underlying patterns using Supervised & Unsupervised methods. Learn to extract insights from the data for decision making

# Python + Statistics + DL Concepts

#### **Course Details:**

PYTHON LANGUAGE	MACHINE LEARNING
<ul> <li>Python Language         <ul> <li>Fundamentals; Syntax; Keywords; Comments; Variables; Input / Output Operations; Data types; Strings; List; Tuples; Set; Dictionary;</li> </ul> </li> <li>Conditional Statements &amp; Control Loops if statement; if-else; Nested if; For; While; Nested Loops; Range; Break</li> <li>Advanced Python - Functions         <ul> <li>Default; User-defined; Lambda; Nested;             Recursion; Decorators; Iterators; Map; Filter</li> </ul> </li> <li>Object Oriented Programming         <ul> <li>Classes; Objects; Principles; Encapsulation; Docstrings &amp; Constructor</li> <li>Error &amp; Exception Handling</li></ul></li></ul>	<ul> <li>Machine Learning Introduction; Libraries; Data Sourcing; E.D.A; Feature Engineering</li> <li>Supervised Learning Linear &amp; Multiple Linear Regression; Logistic &amp; Multiple Logistic Regression; Support Vector Machine; Naïve Bayes; K-Nearest Neighbor; Decision Trees; Ensemble Methods; Optimization Techniques</li> <li>Unsupervised Learning K-Means Clustering; K-Medoid Clustering; DB-Scan Clustering; Optimization Techniques</li> <li>Deep Learning Concepts Introduction to Neural Networks; Artificial Neuron; Artificial Neural Networks; ANN vs CNN; Case Studies</li> <li>Projects 2 Real-time Projects</li> </ul>

Through this course, you would solve various hands-on exercises that make you confident to handle any requirement. Post completion of the course the learners could work with organizations to build efficient models. The application part of this course would prepare you for the future and the internship option would give you the necessary exposure.





# DATA SCIENCE

Data to Decision Making

Duration :: 16 Weeks | 2 Projects + 4 Mini Projects Mode :: SHORT | LONG | Online / Offline

Data is life for any organization and making sense of the available data for futuristic business decisions, decides the organization's future. Be it analyzing the trends, empowering management, customer analysis, mitigating risks, fraud detection, and many more, Data Scientists make it happen. We have simplified your path to be a Data Scientist.

# DATA SCIENCE = Data Analytics + Machine Learning

#### **Course Details:**

DATA ANALYTICS	MACHINE LEARNING
<ul> <li>Module 1         Python Language     </li> <li>Module 2         Statistics for Data Science     </li> </ul>	<ul> <li>Module 7</li> <li>Deep Learning Concepts</li> <li>Module 8</li> <li>Database Concepts - MySQL</li> </ul>
<ul> <li>Module 3</li> <li>Data Analytics &amp; Business Intelligence</li> </ul>	<ul> <li>Module 9</li> <li>Big Data Analytics</li> </ul>
<ul> <li>Module 4</li> <li>Machine Learning - Supervised</li> </ul>	<ul> <li>Module 10</li> <li>Cloud Deployment Techniques</li> </ul>
<ul> <li>Module 5</li> <li>Time Series Analysis</li> </ul>	<ul> <li>Assignments</li> <li>Weekly &amp; Module-wise</li> </ul>
<ul> <li>Module 6</li> <li>Machine Learning - Unsupervised</li> </ul>	<ul> <li>Project</li> <li>Real-time Project(s)</li> </ul>

*"Machine Learning is a technique of parsing data, learn from it and then apply what was learned to make an informed decision"* 

You could *pursue your dream* of being a Data Scientist with basic skills in Statistics, Math and Computer science, irrespective of your academic background. Build your career in the upcoming field of data science.

#### TAKEAWAYS

Our unique pedagogy ensures the right balance between **KNOWLEDGE** and **SKILLS** through projectbased learning. This **CERTIFICATE** program adds value to your profile and pursuit of career options. What more! we prepare you thoroughly to encounter **INTERVIEWS** to ensure you step into the right career soon after completion of the program.



## DATA ANALYTICS

#### **Business Statistics**

- Descriptive & Inferential Statistics
- Measures of Central Tendency & Dispersion
- Data: Distributions, Quality Analysis & Variability
- Probability & Distributions
- Sampling Techniques, Estimation Types
- Hypothesis Testing & Type I, Type II Errors
- Correlation & Variance Analysis: Business Use Cases
- Parametric & Non-Parametric Tests

#### Data Visualization & Reporting

- Data Visualisation & Concepts
- Types of Charts & Word Cloud
- Visualising Data using Infographics
- Evaluating an Analytics Report

#### **Exploratory Data Analysis**

- Qualitative & Quantitative Techniques
- Data Profiling & Management
- Univariate, Bivariate, & Multivariate
- Correlation & Co-Variance Matrices
- Feature Engineering & Extraction
- Inferential Statistics: t, f, z, ANOVA, Chi-Square

#### Advanced Excel for Analytics

- Data Importation
- Functions & Formulas to Organize Data
- Macros, Power Map & Power Pivot
- Numerical Analysis Statistical Functions, Data Analysis Tool pack, Pivot Tables

#### Business Intelligence

- Overview of Business Intelligence
- Business Intelligence Vs Business Analytics
- Getting comfortable with MySQL
- Power BI & Analytics
- Understanding visualization

#### **Requirement Evaluation**

- Decoding Business Requirement
- Dashboarding Data Story Telling
- Formatting Various types of Reports

#### **MACHINE LEARNING**

#### Python Programming

- Programming Basics using Python
- Scientific & Numerical Computing
- Advanced Python

#### Supervised Learning

- Linear, Logistic, Lasso, Ridge & Time-Series
- Support Vector Machines (SVM)
- Decision Tress & Random Forest
- K-Nearest Neighbour
- Naive Bayes Classifier

#### Unsupervised Learning

- Clustering: K-Means, K-Medoids, Hierarchical
- Dimensionality Reduction
- Principal Component Analysis
- Association Rule Mining
- Apriori Algorithm

#### Adv. Algorithms & Techniques

- Cross Validation Techniques
- Gradient Descent Algorithm
- Ensemble: Stacking, Blanding, Bagging, Boosting
- Optimization: Grid & RandomizedSearchCV

#### Big Data with ML

- Introduction to Big Data Applications
- Linux and SQL Commands
- Big Data Frameworks
- Hadoop & Spark Ecosystem
- Streaming with Python
- Advanced Spark
- Security in Big Data

#### Cloud Deployment

- Deployment & Types
- Flask & Docker
- Deploying over Cloud

#### Deep Learning Concepts

- Neural Networks
- Activation Functions
- Artificial Neural Networks (ANN)
- Convolution Neural Networks (CNN)
- Recurrent Neural Networks (RNN)
- Sentiment Analysis, Text Analytics, Text Mining

# SIGN OF

#### Real-time Projects

- Data Science Inhouse or Onsite
- Machine Learning Inhouse or Onsite \*\* Learner to sign NDA for the intellectual property

- Profile Building Employability Index
- Interview F.A.Qs
- Mock Interview



# Artificial Intelligence

Cognition for the machines

Duration :: 12 Weeks | 2 Projects + 2 Mini Projects Mode :: SHORT | LONG | Online / Offline

Developing algorithms to help computers to imitate human intelligence without any limitations, to give life to machines. Brush your basics on understanding and handling data and progress towards mastering neural networks, CV, NLP along with cloud computing for deployment. A sought after course specifically designed for students with or without software background to explore the world of AI and beyond.

#### MACHINE LEARNING & DEEP NEURAL NETWORKS

### **Course Details:**

ARTIFICIAL INTELLIGENCE	
<ul> <li>Module 1</li> <li>Introduction &amp; Essentials</li> </ul>	<ul> <li>Mini Project 1</li> <li>In-house Project</li> </ul>
<ul> <li>Module 2</li> <li>Python Language</li> </ul>	<ul> <li>Module 7</li> <li>Recurrent Neural Networks</li> </ul>
<ul> <li>Module 3</li> <li>Machine Learning</li> </ul>	<ul> <li>Module 8</li> <li>Applications of Deep Learning</li> </ul>
<ul> <li>Module 4</li> <li>Introduction to Neural Networks</li> </ul>	<ul> <li>Module 9</li> <li>Cloud Deployment Techniques</li> </ul>
<ul> <li>Module 5 Artificial Neural Networks (ANN)</li> </ul>	<ul> <li>Major Project</li> <li>Real-time Project(s)</li> </ul>
<ul> <li>Module 6</li> <li>Convolutional Neural Networks (CNN)</li> </ul>	<ul> <li>Hackathon</li> <li>Open challenge</li> </ul>

"AI is an ability of the computer program to function like a human brain"



One-on-One Interaction for effective learning & supporting the needs of the learner. Project-based learning enables learner to complete the course at own pace, within the scheduled period. Includes individual career counselling & necessary support.



Skill development through assessments to understand competencies of the learner and building over the strengths while working on the grey areas. A scientific approach in knowledge transfer for effective learning experience and demonstration of skills.



Application Oriented teaching method for better learning that differentiates from other online and offline programs. Learner could participate in real-time or internal projects or develop solutions along with the WORKGROUP for better competencies & networking.

#### Python for Al

- Introduction & IDEs
- Basic & Advance Modules
- Libraries for ML
- Coding with Python

#### Data Visualization

- Types of Data Visualization
- Techniques of Data Visualization
- Dashboarding for Insights
- Tools for Visualization

#### Introduction to ML

- Machine Learning Concepts
- 5-Stage of Machine Learning
- Training, Testing & Optimization

#### Recap Supervised & Unsupr.

- Introduction to Supervised & Unsupervised
- Regression & Classifications
- Clustering
- Other Algorithms

#### Introduction to DL

- Introduction to Artificial Intelligence
- Introduction to ML & DL
- Introduction to Perceptron
- Neural Networks

#### ANN in Action

- Artificial Neural Networks
- Model Initialization
- Regression
- Classification Binary
- Classification Multi-class

#### Exploring CNN

- Convolutional Neural Networks
- CNN Architecture, Activation Functions, SoftMax
- Computer Vison Applications
- Transfer Learning
- Object Detection & Recognition
- Sematic Segmentation

#### Understanding RNNs

- Introduction to RNN
- RNN Architecture & Networks
- Training & Testing RNN
- LSTM's

#### Natural Lang. Processing

- Introduction to NLP & NLTK Toolkit
- Pre-processing Unstructured Text Data
- Bag of Words, Word2Vec
- Application of text Classification
- 'Sentimental Analysis'
- 'Chat Bot'

#### **Cloud Computing for AI**

- Deployment & Types
- Flask & Docker
- Deploying over Cloud

#### **Mini Projects**

- Mid-Program practice
- Real-time applications
- Delivery & Presentation

#### Hackathons

- Solution to an Open Problem
- Mentored by Experts
- Engage with Experts from Industry

# SIGN OFF

#### Final Real-time Project

- Lab Work Weekly practical work
- Client Project(s) Inhouse or Onsite
   \*\* Learner to sign NDA for the intellectual property

- Profile Building Employability Index
- Interview F.A.Qs
- Mock Interview



FULL-STACK DEVELOPER

## With Project-Based Training

Duration :: 24 Weeks | 2 Projects with Deployment Mode :: SHORT | LONG | Online / Offline

Become a full-stack developer to develop cutting-edge IT web applications to showcase the skills market is looking for. This program was designed and developed by industry experts covering necessary technologies you would need to evolve into a full-stack developer. This program covers frontend, backend, database and deployment techniques.

## JS Frameworks + Database + Backend + Cloud Computing

#### **Course Details:**

PYTHON LANGUAGE	WEB FRAMEWORK
<ul> <li>The Fundamentals         Fundamentals of Programming;         HTML &amp; CSS         Linux         Git &amp; GitHub         JavaScript         TypeScript         </li> <li>JavaScript Framework         React JS         Angular     </li> <li>Database</li> <li>MySQL (RDBMS         MONGO DB     </li> </ul>	<ul> <li>Backend REST API NODE JS</li> <li>Project Deployment Essential of Deployment Virtual Machines Linux &amp; Heroku Deployment Load Balancing; Firewall Configuration</li> <li>Projects 2 Mini Projects Real-time Projects</li> </ul>

Post completion of the course you would gain industry-ready skills to be an independent web application developer. Project-based learning would impart confidence to design, develop, debug and deploy web applications. This course is ideal for those who would like to build their career path in the field of applications development. Be the sought after resource in the market with this Certification, Internship and Job Readiness program.



### **FUNDAMENTALS**

#### Fundamentals of Programming

- Essentials of Programming Languages
- Algorithmic Thinking; Working with Data
- Structured & Modular Programming
- Object-Oriented Programming

#### HTML & CSS

- HTML Elements & Structure
- Semantic HTML; Forms & Tables
- CSS Syntax & Selectors
- Grid & Flexbox; Bootstrap & Material UI
- Less & Sass; Variables & Functions
- Responsive Design

#### Linux

- Basic Linux Commands
- Working with directories
- File & Directory permissions
- SSH & SCP; CRON Jobs

#### Git & GitHub

- Installation & Setup
- Git Commands; Branches & Tags
- GIT SSH Connection
- Git Stash, Revert, Reset, and diff commands
- Pull Requests; Merge Conflicts

#### JavaScript

- Scope, Variables & Operators
- Conditional Statements; Loops & Functions
- Object-Oriented Programming
- Functional Programming
- Asynchronous JavaScript
- JSON; DOM Manipulation & Data Structures

#### TypeScript

- TypeScript Basics; Define & Composing Types
- Functions & Interfaces
- Classes & Interfaces
- Decorators; Modules & Namespaces

### JAVASCRIPT FRAMEWORKS

#### React JS

- React Basics and JSX; React Router & Routing
- React Components & Props
- React Lifecycle Methods
- Composition vs Inheritance
- React Conditional Rendering
- React Hooks; Session & Local Storage
- Redux ; Progressive Web App (PWA)
- React Testing & Performance

#### Angular JS

- Setup; Components
- Templates; Directives
- Dependency Injection; Routing and Navigation
- Forms; HTTP Client

## DATABASE

#### MySQL (RDBMS)

- Installation
- Data Types;
- SQL Statements (CRUD)
- JOINS; Functions

#### MONGO DB

- Introduction & Installation
- Schemas & Relations
- Data Validation & Middleware
- CRUD Operations; MongoDB Queries
- Relationships in MongoDB
- Indexing & Aggregations; Replication & Sharding; MongoDB Security

#### BACKEND

#### **REST API**

- Http Methods;
- Resource Naming;
- HTTP Status Codes;
- API Guidelines

#### NODE JS

- Node JS Fundamentals
- Express Integration; Node Module System
- Database Integration
- REST API & CRUD Operations
- Data Validation;
- Authentication & Authorization
- Emails and File Uploads; Error Handling
- Node JS Security
- Continuous Integration and Delivery
- Node JS Testing and Performance
- Node JS Project

#### Deployment

- Virtual Machine & Webserver Setup
- Linux VM Deployment
- Heroku Deployment
- Load Balancing
- Firewall Configuration



# PYTHON APPLICATION DEVELOPER

# With Django & MySQL

Duration :: 12 Weeks | 2 Projects + 1 Deployment Mode :: SHORT | LONG | Online / Offline

Application developers are always on demand. These days with increasing demand for the backend developers Python Application Developer course is the best option for the students who would like to start their journey with python and eventually evolve into a professional back-end Python developer to create web, mobile and desktop applications.

# Python + Django + MySQL + Project Deployment

#### **Course Details:**

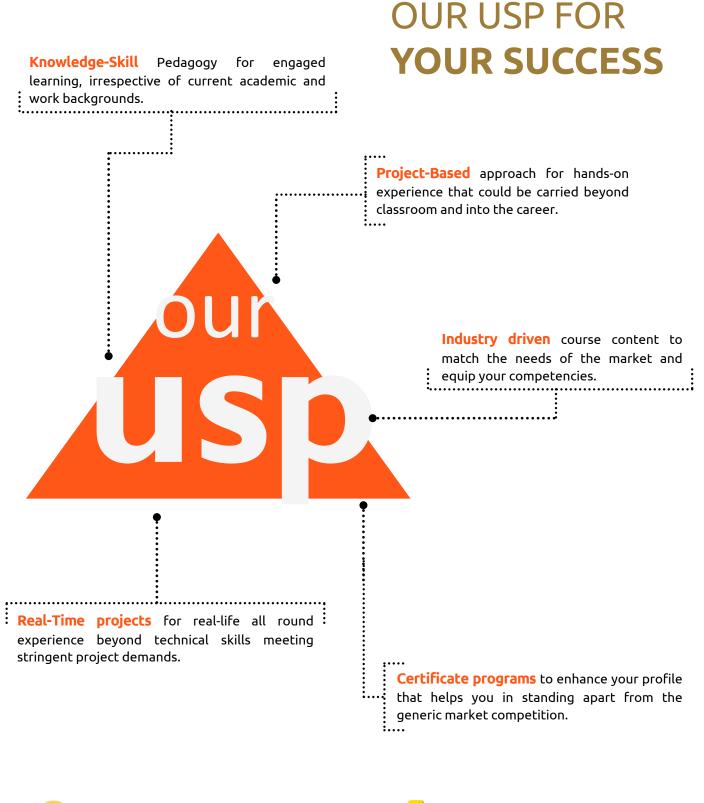
PYTHON LANGUAGE	WEB FRAMEWORK
<ul> <li>Getting Started with Python</li> <li>Fundamentals; Syntax; Keywords; Comments;</li> <li>Variables; Input / Output Operations; Data</li> <li>Types</li> </ul>	<ul> <li>Database Concepts MySQL Basics, Queries; Tables; CRUD; Joins; Set Operators; Aggregations</li> </ul>
<ul> <li>Data Types, Sequences &amp; Operators</li> <li>Data types; Strings; List; Tuples; Set;</li> <li>Dictionary; Various Operators</li> </ul>	<ul> <li>Django Framework         Environment Overview &amp; Features; Project Structures; App Structure; GIT &amp; GITHUB;     </li> </ul>
<ul> <li>Conditional Statements if statement; if-else; Nested if</li> </ul>	Views and Config URLS; Working with Models and Databases; Configuring of MySQL; GET & POST – CRUD operations; Postman Tool; User
<ul> <li>Control Loops</li> <li>For; While; Nested Loops; Range; Break</li> </ul>	<ul> <li>Authentication &amp; Authorization; Cookie Management; Session Management; Django Middleware; File upload; Mail System; Project Deployment</li> <li>Project Deployment Virtual Machine; SSH &amp; SCP; Environment Setup; Code Deployment; Database Configuration; Webserver configuration; Domain configuration; Load Balancing</li> </ul>
<ul> <li>Advanced Python - Functions</li> <li>Default; User-defined; Lambda; Nested;</li> </ul>	
<ul> <li>Recursion; Decorators; Iterators; Map; Filter</li> <li>Object Oriented Programming Classes; Objects; Principles; Encapsulation; Docstrings &amp; Constructor</li> </ul>	
<ul> <li>Error &amp; Exception Handling Errors; Assertions; Exception Handling; User-defined exceptions</li> </ul>	<ul> <li>Projects</li> <li>2 Real-time Projects</li> </ul>

This practical hands-on course was designed and developed by industry professionals to impart necessary knowledge and skills in the students to be a independent back-end developers. Learn the language and framework to be market-ready as soon as you complete the course. Students get the opportunity to deploy their projects to build their profile as part of the course work.





- Profile Building Employability Index
- Interview F.A.Qs
- Mock Interview



**Certificate Programs** to improve your profile and career growth.



**Research Driven** and practical oriented teaching and engagement.



**Interview Preparation** as part of the course for better preparation.



**Workgroup membership** for showcasing your learning & networking, off the course.

**Project-Oriented Approach** encourages students to participate in inhouse or real-time customer projects or pursue their next million dollar project dream while showcasing their experiential learning. Our in-house equipment and experts are at your disposal.

# Our Learner Engagement

Unique Project-based approach to enhance the learner participation

# **Inhouse Projects**



# **Classroom Sessions**



# Lab Hardware



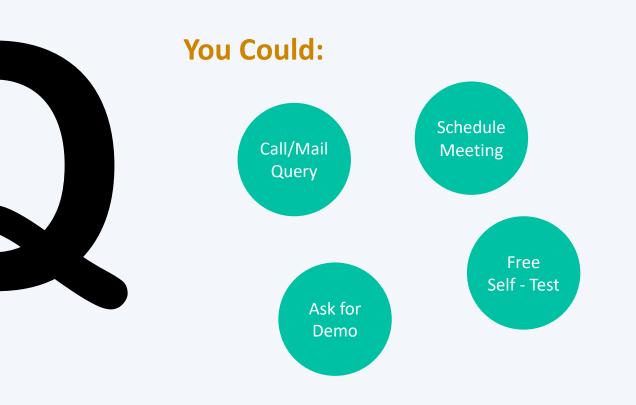
# **Latest Learners Delivered Projects**

- AI based firewall for the server
- Robotic Arm control
- Collision avoidance system
- Facial recognition for rostering
- Operating System for Deep Learning
- MSE through AI
- and more...

# STILL in DOUBT



With overwhelming information and claims from all around, we understand your dilemma in picking the right path or the institution. No worries, we are here to clear your mind – no strings attached. Just get it touch with us.



Our expertise in career coaching is at par with our training solutions. And they are free to avail. Try us today.



<sup>66</sup> This is your last chance. After this, there is no turning back... You take the red pill—you stay in Wonderland, and I will show you how deep the rabbit hole goes.

Remember: All I'm offering is the truth. Nothing more."

- Morpheus of MATRIX

Our Suggestion – Take the **RED** pill of Artificial Learning



Hyderabad | Bangalore | Delhi | Chennai | Kochi

