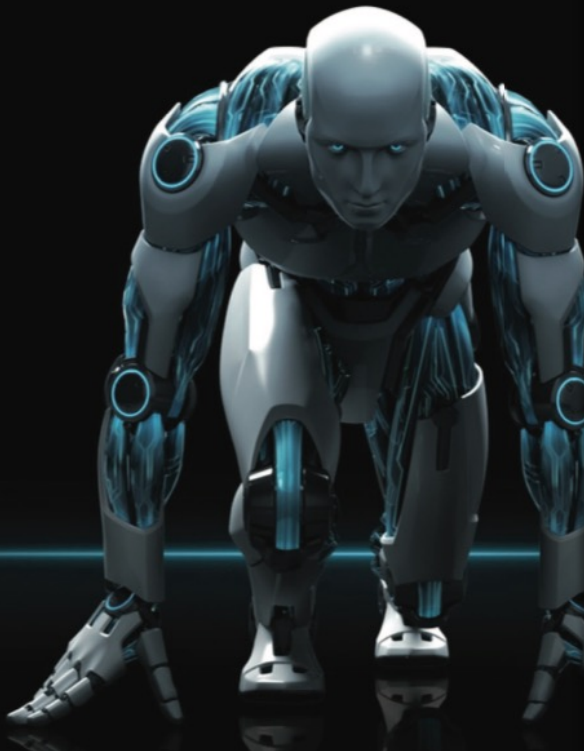


LEARN FROM THE BEST

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.



Data Analytics

Generate insights from the data through analysis and visualization



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

CEDEARN

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.

OUR USP FOR YOUR SUCCESS

Knowledge-Skill Pedagogy for engaged learning, irrespective of current academic and work backgrounds.

Project-Based approach for hands-on experience that could be carried beyond classroom and into the career.

Industry driven course content to match the needs of the market and equip your competencies.

Real projects for real-life all round experience beyond technical skills meeting stringent project demands.

Certificate programs to enhance your profile that helps you in standing apart from the generic market competition.



Certificate Programs to improve your profile and career growth.



Interview Preparation as part of the course for better preparation.



Research Driven and practical oriented teaching and engagement.



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

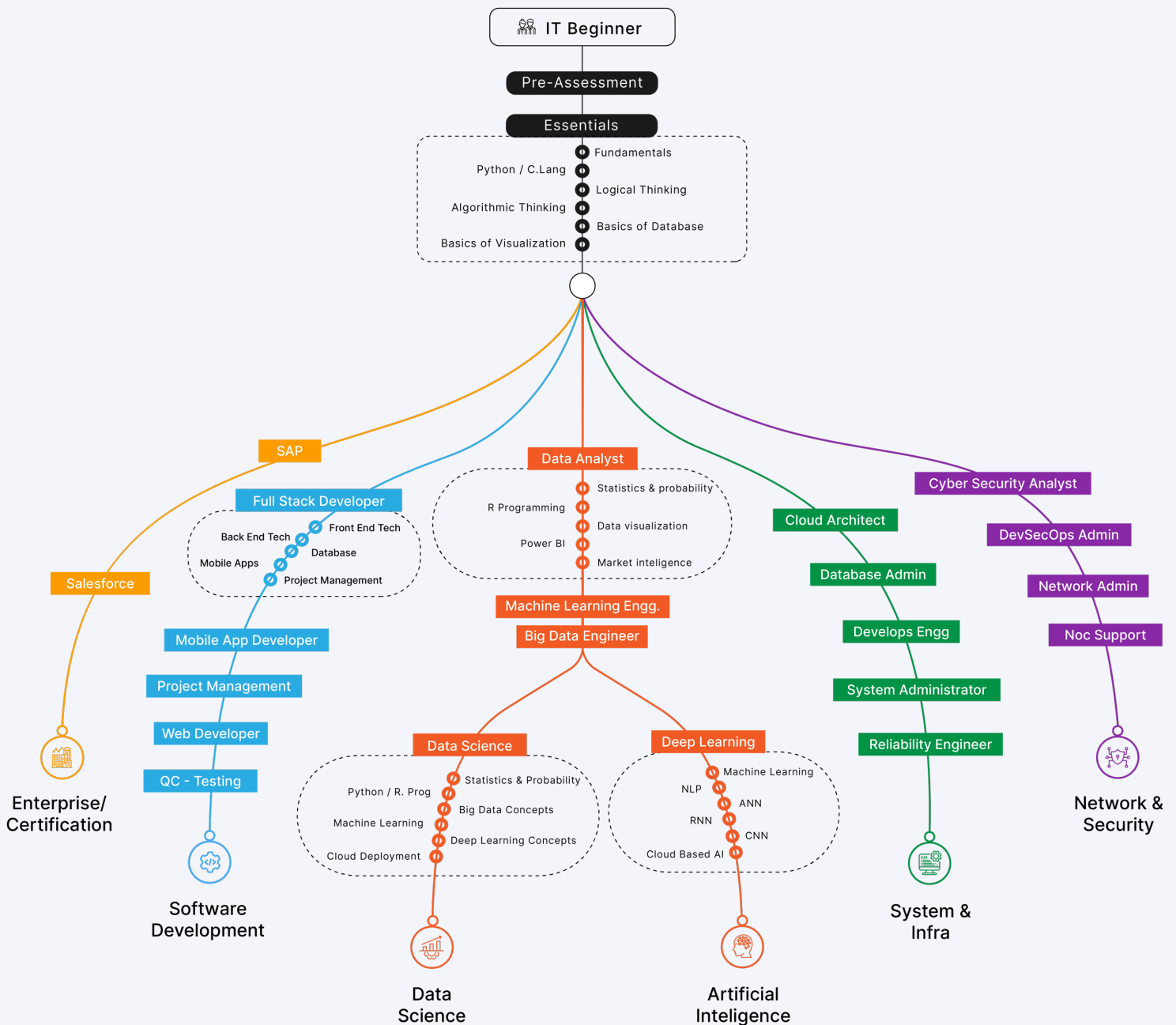
Drafting Career Paths

“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 – AI 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 – AI 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




PL  4 Weeks
12 Sessions
4 Projects

Python Programming Language

Advanced | Data Structures | Libraries


Learn the sought after programming language covering advanced concepts, Data structures, libraries & more.

BI  4 Weeks
20 Sessions
3 Projects

Power BI with Tableau

Power BI | Tableau | Dashboarding


Get insights from the data using most powerful tools. Handle data sets, transform, clean, build models & more.

DA  14 Weeks
42 Sessions
5 Projects

Data Analytics

Statistics | Visualization | EDA | BI


Drive business decisions through statistical data analysis, visualization, and dashboarding using various tools.

ML  12 Weeks
30 Sessions
5 Projects

Machine Learning

Python | Statistics | DL Concepts


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

DS  20 Weeks
60 Sessions
4 Projects

Data Science

Data Analytics | ML | Deployment

Statistical analysis, Data Analytics, & ML models to extract insights from the data for decision making.

AI  14 Weeks
42 Sessions
3 Projects

Artificial Intelligence

Python | ML | Deep Neural Networks

Advanced deep learning concepts to create models that imitative human intelligence to solve business problems.

PW  8 Weeks
24 Sessions
2 Projects

Python with Web Framework

Python | Flask/Django | DB Concepts


Create cross-platform web applications and games and be the developer you have always wanted to be.

PD  12 Weeks
36 Sessions
2 Projects

Python Application Developer

Python | Django | Database | Deploy

A Python application developer to develop & maintain projects related to data typically on the backend.

FS  24 Weeks
72 Sessions
4 Projects

Full-Stack Developer

Front-End | Back-End | Cloud Computing

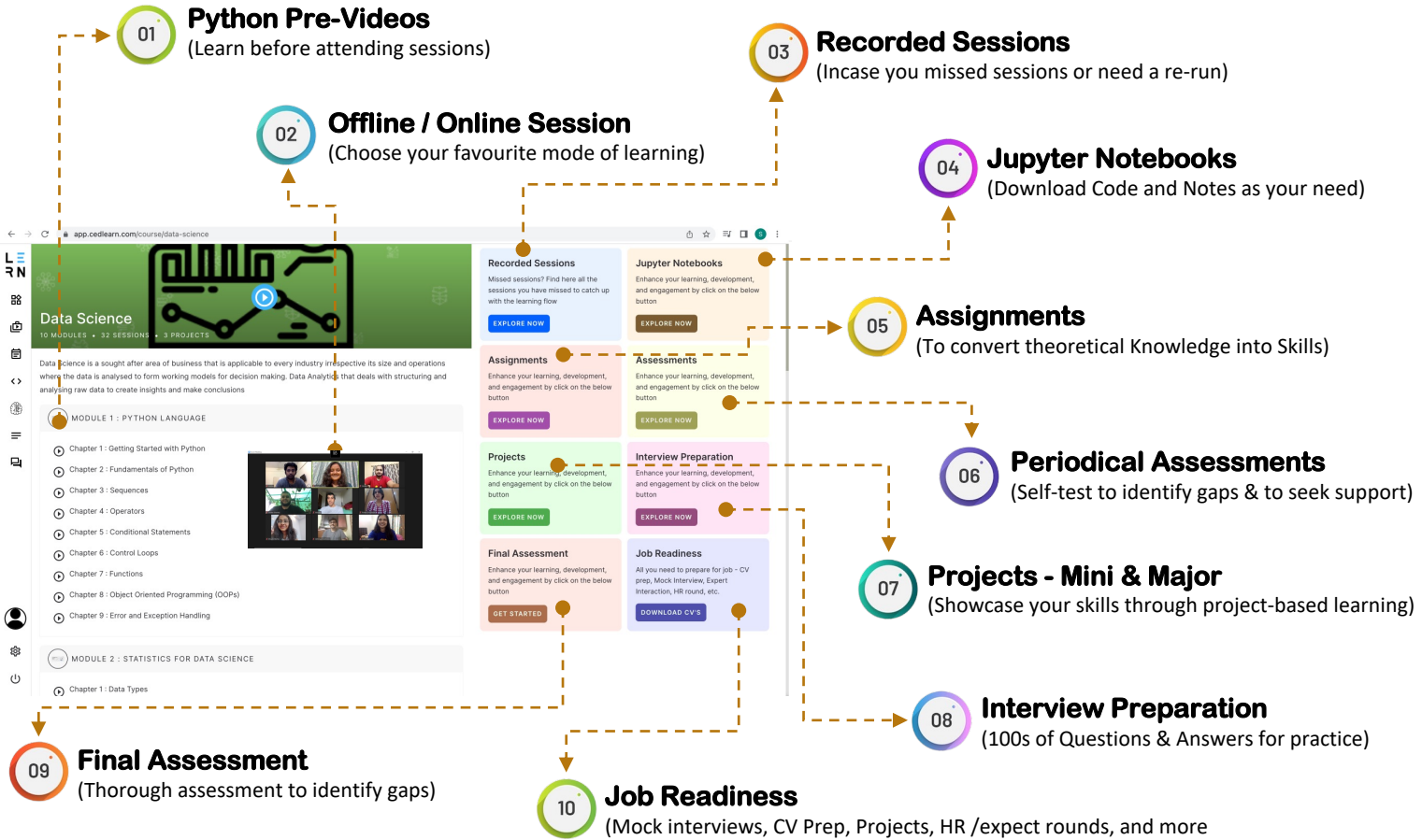
Front-end & Back-end technologies to be a full-fledged software application developer with right skills.

Job Assurance and Job Guarantee Programs

Pre & Post, Module-Level Assessments

Learning Supporting Dashboard

Supporting the student's learning path through carefully drafted **10-step approach** for success.

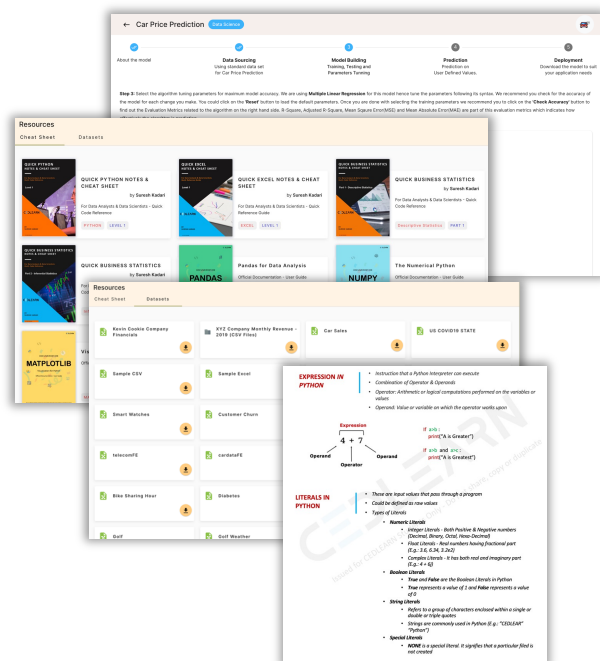


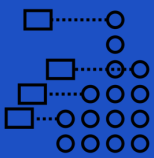
Resources Section

To support your learning we have designed and developed resources section where you could find Cheat Sheets, Datasets for practice and more. You could also visit our Data Analytics and Data Science project page to understand the 5-step approach in solving a problems statement.

Students are encourage to take up various projects and showcase their learning to improve their skill. We believe in Project-based learning which is the core principal of our teaching methodology.

Seeing in believing. Explore Resources and Projects section to rate us.





BUSINESS ANALYTICS

Supporting Business Goals

Duration :: 14 Weeks | 42 Sessions | 5 Projects + 4 Mini Projects

Mode :: SHORT | LONG | Online / Offline

Support business processes and project goals using analytical techniques and tools. Learn to meet the business analytical requirement through application of statistical analysis. Generate insights to support decision making in a dynamic business environment. Build your career in this challenging and promising domain to make your mark.

Statistics + Visualization + Business Intelligence

Course Details:

BUSINESS ANALYSIS	VISUALIZATION/DASHBOARDS
<ul style="list-style-type: none"> 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 Business Analytics with EDA Insight generation, Business Goals, Business Analytics, Managerial Reporting, Qualitative & Quantitative Analysis; Data Profiling & Management; Inferential Statistics: t, f, z, ANOVA, Chi-Square 	<ul style="list-style-type: none"> Advanced Excel for Analytics Data Importation; Functions & Formulas to Organize Data; Macros, Power Map & Power Pivot; Statistical Functions, Data Analysis Tool pack, Pivot Tables, ... Business Intelligence Overview of Business Intelligence; Business Intelligence Vs Business Analytics; Deep Analytics Understanding visualization and dashboards Python Language Basic Python, IDE & IDLE, Data Structures, Functions, OOPs, Exceptions, NumPy, Pandas, Visualization, ... SQL with Power BI Database Types, DDL, DCL, DML, Joins, View and more. Cover Power Query, Power Pivot, Power View, Services, Tableau Intro and more Data Management Understanding Data, Data Sufficiency, Business problem analysis, Project Analysis

"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 a Business Analyst. 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.



Job Readiness

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



DATA ANALYTICS

Data to Insight Generation

Duration :: 14 Weeks | 42 Sessions | 5 Projects + 4 Mini Projects
Mode :: SHORT | LONG | Online / Offline

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 + Python + SQL + Power BI

Course Details:

DATA ANALYSIS	VISUALIZATION/DASHBOARDS
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Advanced Excel for Analytics Data Importation; Functions & Formulas to Organize Data; Macros, Power Map & Power Pivot; Statistical Functions, Data Analysis Tool pack, Pivot Tables, ... Business Intelligence Overview of Business Intelligence; Business Intelligence Vs Business Analytics; Deep Analytics Understanding visualization and dashboards Python Language Basic Python, IDE & IDLE, Data Structures, Functions, OOPs, Exceptions, NumPy, Pandas, Visualization, ... SQL with Power BI Database Types, DDL, DCL, DML, Joins, View and more. Cover Power Query, Power Pivot, Power View, Services, Tableau Intro and more Introduction to Machine Learning Regression, Supervised & Unsupervised Learning, Building ML models and more.

“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.



Job Readiness

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



MACHINE LEARNING

Teaching Machines through Data

Duration :: 12 Weeks | 30 Sessions | 5 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 + Business Statistics + DL Concepts

Course Details:

PYTHON LANGUAGE	MACHINE LEARNING
<ul style="list-style-type: none"> ● Python Language Fundamentals; Syntax; Keywords; Comments; Variables; Input / Output Operations; Data types; Strings; List; Tuples; Set; Dictionary; ● Conditional Statements & Control Loops if statement; if-else; Nested if; 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 ● Statistics for ML Data Types; Samples; Measures of Central Tendency; Meas. of Dispersion; Positions; Distribution; Sampling; Hypothesis Testing; Probability; Distributions; Prob. Theorems 	<ul style="list-style-type: none"> ● Machine Learning Introduction; Libraries; Data Sourcing; E.D.A; Feature Engineering ● Supervised Learning Linear & Multiple Linear Regression; Logistic & Multiple Logistic Regression; Support Vector Machine; Naive Bayes; K-Nearest Neighbor; Decision Trees; Ensemble Methods; Optimization Techniques ● Unsupervised Learning K-Means Clustering; K-Medoid Clustering; DB-Scan Clustering; Optimization Techniques ● Deep Learning Concepts Introduction to Neural Networks; Artificial Neuron; Artificial Neural Networks; Convolutional Neural Networks; ANN vs CNN; Case Studies ● Projects 2 Real-time Projects

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.



Job Readiness

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





DATA SCIENCE

Data to Prediction

Duration :: 20 Weeks | 60 Sessions | 4 Projects + 5 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 Analytics + Machine Learning + DL Concepts + Deployment

Course Details:

DATA ANALYTICS	MACHINE LEARNING
<ul style="list-style-type: none"> ● Module 1 Python Language ● Module 2 Business Statistics for Data Science ● Module 3 Data Analytics & Business Intelligence ● Module 4 Machine Learning - Supervised ● Module 5 Time Series Analysis ● Module 6 Machine Learning - Unsupervised 	<ul style="list-style-type: none"> ● Module 7 Advanced Excel ● Module 8 Database Concepts - MySQL ● Module 9 Power BI & Tableau ● Module 10 Cloud Deployment Techniques ● Module 11 Deep Learning Concepts ● Project Real-time Project(s)

"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 project-based 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
- Reporting and Dashboarding
- Deep Analytics
- Understanding visualization

Database & SQL

- DB types, DDL, DCL, DML Commands
- Joins, Views
- Advanced Queries and Handling Database

Real-time Projects

- Data Science – Inhouse or Onsite
- Machine Learning – Inhouse or Onsite

*** Learner to sign NDA for the intellectual property*

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 Trees & 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

Power BI & Tableau

- Power Query
- Power Pivot - Data Modelling & DAX
- Power View
- Power BI Service
- Dashboard development & Collaboration
- Project Execution
- Tableau Introduction

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

Job Readiness

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



Artificial Intelligence

Cognition for the machines

Duration :: 14 Weeks | 42 Sessions | 3 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 style="list-style-type: none"> ● Module 1
Introduction & Essentials ● Module 2
Python Language ● Module 3
Machine Learning ● Module 4
Introduction to Neural Networks ● Module 5
Artificial Neural Networks (ANN) ● Module 6
Convolutional Neural Networks (CNN) | <ul style="list-style-type: none"> ● Mini Project 1
In-house Project ● Module 7
Recurrent Neural Networks ● Module 8
Applications of Deep Learning ● Module 9
Cloud Deployment Techniques ● Major Project
Real-time Project(s) ● Hackathon
Open challenge |
|--|---|

"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 AI

- 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 & Unsupervised

- 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 Vision 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*

Job Readiness

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



FULL-STACK DEVELOPER

With Project-Based Training

Duration :: 24 Weeks | 72 Sessions | 4 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 style="list-style-type: none"> The Fundamentals Fundamentals of Programming; HTML & CSS Linux Git & GitHub JavaScript TypeScript JavaScript Framework React JS Angular Database MySQL (RDBMS) MONGO DB 	<ul style="list-style-type: none"> Backend REST API NODE JS Project Deployment Essential of Deployment Virtual Machines Linux & Heroku Deployment Load Balancing; Firewall Configuration Projects 2 Mini Projects Real-time Projects

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.

SIGN OFF

Real-time Projects

- Front end project – Inhouse or Onsite
 - Full-stack project – Inhouse or Onsite
- ** Learner to sign NDA for the intellectual property*

Job Readiness

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



TypeScript



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, 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 PROGRAMMING

Basics to Libraries with ML Introduction

Duration :: 4 Weeks | 12 Sessions | 4 Projects

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	ADVANCED CONCEPTS
<ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● 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.



Job Readiness

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



PYTHON WITH WEB

Covering Flask / Django

Duration :: 8 Weeks | 24 Sessions. | 2 Projects + 1 Deployment

Mode :: SHORT | LONG | Online / Offline

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
<ul style="list-style-type: none">● 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	<ul style="list-style-type: none">● Database Concepts MySQL Basics, Queries; CRUD operations; MySQL DB; Connection with Frameworks;● Flask Framework Overview; Environment; Features; Creating Application; Views; Dynamic Routing; Errors & Debugging; Flask Template Engine (Jinja2); Layouts; Static Templates; Static Files; Form Handling; HTTP Verbs; Sessions Handling, Flashing, Navigator Bar, Hosting Options● Django Framework Environment Overview; Features; Project Structures; App Structures; Views and Config URLs; Template System; Static files; Models; Migration; Model forms; File upload; Mail System; Session Management; User authentication; Model views & inheritance; Query sets & Filters; Middleware● Projects 2 Real-time Projects

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.



Job Readiness

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



PYTHON APPLICATION DEVELOPER

With Django & MySQL

Duration :: 12 Weeks | 36 Sessions | 2 Projects + 1 Deployment

Mode :: SHORT | LONG | Online / Offline

Application developers are always on demand. These days with increasing demand for the back-end 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 style="list-style-type: none">● 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	<ul style="list-style-type: none">● Database Concepts MySQL Basics, Queries; Tables; CRUD; Joins; Set Operators; Aggregations● Django Framework Environment Overview & Features; Project Structures; App Structure; GIT & GITHUB; Views and Config URLs; Working with Models and Databases; Configuring of MySQL; GET & POST – CRUD operations; Postman Tool; User Authentication & Authorization; Cookie Management; Session Management; Django Middleware; File upload; Mail System; Project Deployment● Project Deployment Virtual Machine; SSH & SCP; Environment Setup; Code Deployment; Database Configuration; Webserver configuration; Domain configuration; Load Balancing● Projects 2 Real-time Projects

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.



Job Readiness

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



POWER BI & TABLEAU WITH SQL

Business Intelligence & Dashboarding

Duration :: 5 Weeks | 20 Sessions. | 3 Projects - BI & Dashboards

Mode :: SHORT | LONG | Online / Offline

Insight from the data is essential for decision making and Power BI helps in connecting with the disparate data sets, transform, clean to build a data model or visualization that could be shared with other business stakeholders. This is a powerful and essential tool for every data analyst to quickly gather, analyze, publish and share data in an useful way.

Power BI + SQL + Tableau + Dashboarding

Course Details:

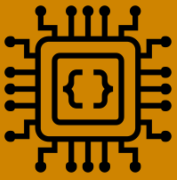
POWER BI	DASHBOARDING
<ul style="list-style-type: none">● Glimpse of Power BI Introduction, Business Intelligence, Installation, Service Overview, Publishing● Power Query Extract, Transform & Load (ETL); Data Types & filters; Column & Row Transformations; Combine queries - Append, Union, Merge/Join● Power Pivot Data Modelling-Relationship View; Data Model - DAX; Various DAX Functions - Date & Time, Text, Logical, Math & Statistical, Filter, Time Intelligence● Power View Report/Power view, Filters, Grouping, Binning & Sorting, Hierarchies & Drill Down, Power Visualizing techniques; Filtering, Categorical Data, Trend Data, KPI Data, Tabular & Geographical Data● Essential SQL Introduction, Database Types, DDL, DCL, DML Commands, Joins & Views	<ul style="list-style-type: none">● Power BI Service Power BI service Introduction, Dashboards Development, Data Gateways, Collaboration using App Workspace, Sharing Content using Apps & Content Packs, Row level security in Power BI● Tableau - Getting Familiar Introduction, Installation and setup, Basic operations, Functions, Data Handling, Visualization Techniques,● Excel Dashboarding Introduction to Advanced Excel Concepts, Descriptive analytics & Pivoting, Dashboarding & Reporting● Final Project 3 Real-time Projects - Various domains for Visualization & Dashboarding

This course has been specifically designed to train professionals to master the powerful business intelligence tools to connect the data together, create custom visuals, integrate with other application, extract insights from the data, perform advanced analytics, bring together data governance and security, address specific business problems using data, embed Power BI tiles in PowerApps Apps and more.



Job Readiness

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



Embedded Systems

Ensemble Hardware & Software

Duration :: 20 Weeks | 60 Sessions | 2 Projects + 4 Mini Projects
Mode : Offline - Project-based Learning

Embedded Systems and IoT are continuing to grow in a wide range of applications in a wide range of industries. These technologies have the potential to transform the way we live and work. Currently the demand for Embedded Systems is increasing multi-fold hence, encouraging students to pursue this promising technology.

Hardware + Embedded Programming + IoT Concepts

Course Details:

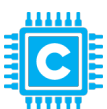
Hardware	Embedded Programming
<ul style="list-style-type: none"> ● Module 1 Introduction to Embedded System ● Module 2 Microprocessor Vs Microcontroller ● Module 3 Basic Electronics ● Module 4 Essential of Embedded Systems ● Module 5 Python Programming Language ● Module 6 Embedded C 	<ul style="list-style-type: none"> ● Module 7 8051 - Microcontroller ● Module 8 ARM Controllers ● Module 9 Wired & Wireless Networks ● Module 10 Embedded Linux ● Module 11 TinyML ● Project Real-time Project(s)

"Embedded Systems future is bright and is projected to grow exponentials expected realise a market side of \$160B by 2031"

You could **pursue your dream** of being a Embedded System Engineer with basic skills in Hardware, Software, IoT, TinyML, Microcontrollers and more. Build career in upcoming field of Embedded Systems.

TAKEAWAYS

Our unique pedagogy ensures the right balance between **KNOWLEDGE** and **SKILLS** through project-based 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.



Raspberry Pi



Introduction to Embedded Systems

- History of Embedded Systems
- Need of Embedded Systems
- Emerging Applications & Opportunities
- Programming Language Classification
- Advantages & Disadvantages

Microprocessor Vs Microcontroller

- Understanding Differences
- Classification based on Architecture
- Memory Classification
- Application Classification

Basic Electronics

- Introduction to Electronics
- Current & Voltage
- Resistor & Capacitors
- Semiconductor Devices
- Building Analog Circuits

Essentials of Embedded Systems

- Sensors & Modules
- GPIO Peripherals
- Interrupts & Low Power
- Timer Devices
- Pulse-Width Modulation
- Interfacing External Devices

Python Programming Language

- Introduction to Python
- Essentials of Python
- Variables & Data Types
- Data Structures
- Conditional Statements
- Control Loops
- Functions
- Exception Handling
- OOPs Concepts
- Libraries

Real-time Projects

- Hardware– Inhouse or Onsite
- Embedded Systems– Inhouse or Onsite

*** Learner to sign NDA for the intellectual property*

Embedded C

- Introduction to Embedded C
- Difference between C & Embedded C
- Structure of C
- Constants, Variables & Data Types
- Operators
- Control Structures & Loops
- Functions

8051 Microcontroller

- Introduction
- Features & Architecture
- Registers & Memory
- Programming Peripherals

ARM Controllers

- Introduction to ARM
- Raspberry Pi Controller
- IoT Concepts
- IoT Development Board
- ESP & Other Controllers
- Real-life Applications

Wired & Wireless Networks

- I2C Bus Standard
- Bluetooth
- Zigbee
- USB
- UART

Embedded Linux

- Linux Fundamentals
- Linux Commands
- VI Editors
- Introduction to Device Driver
- Kernel Module Vs Application
- Types of Device Driver and more

TinyML

- Introduction & Data Gathering
- Designing a ML
- Deployment & Training

Job Readiness

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

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

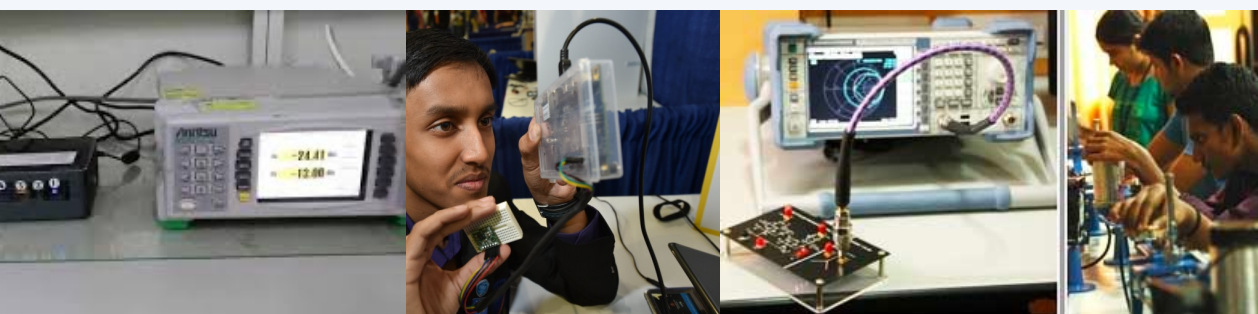
Inhouse Projects



Classroom Sessions

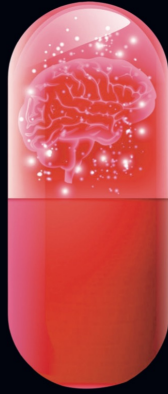


Lab Hardware



Latest Learners Projects

- AI based firewall for the server
- Robotic Arm control
- Dashboarding for Deep Analytics
- Facial recognition for rostering
- Operating System for Deep Learning
- Stock & Portfolio prediction
- MSE through AI
- and more...



“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



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