

# LEARN FROM THE BEST

PREPARING YOU FOR TOMORROW

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



## Data Analytics

Generate insights from the data through analysis and visualization



## Data Science

Data analysis and Statistical modelling to extract insights from the data



## Artificial Intelligence

Building intelligence to machines to imitate & surpass human intelligence



## AWS/AZURE DevOps

Learn tools to manage system development life cycle for efficiency.



## Full Stack Developer

Building web and mobile applications using languages, tools and frameworks

**CEDLEARN**

Hybrid Learning  
Project-Based Approach  
Certified Programs

## About Us

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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.

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# 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.

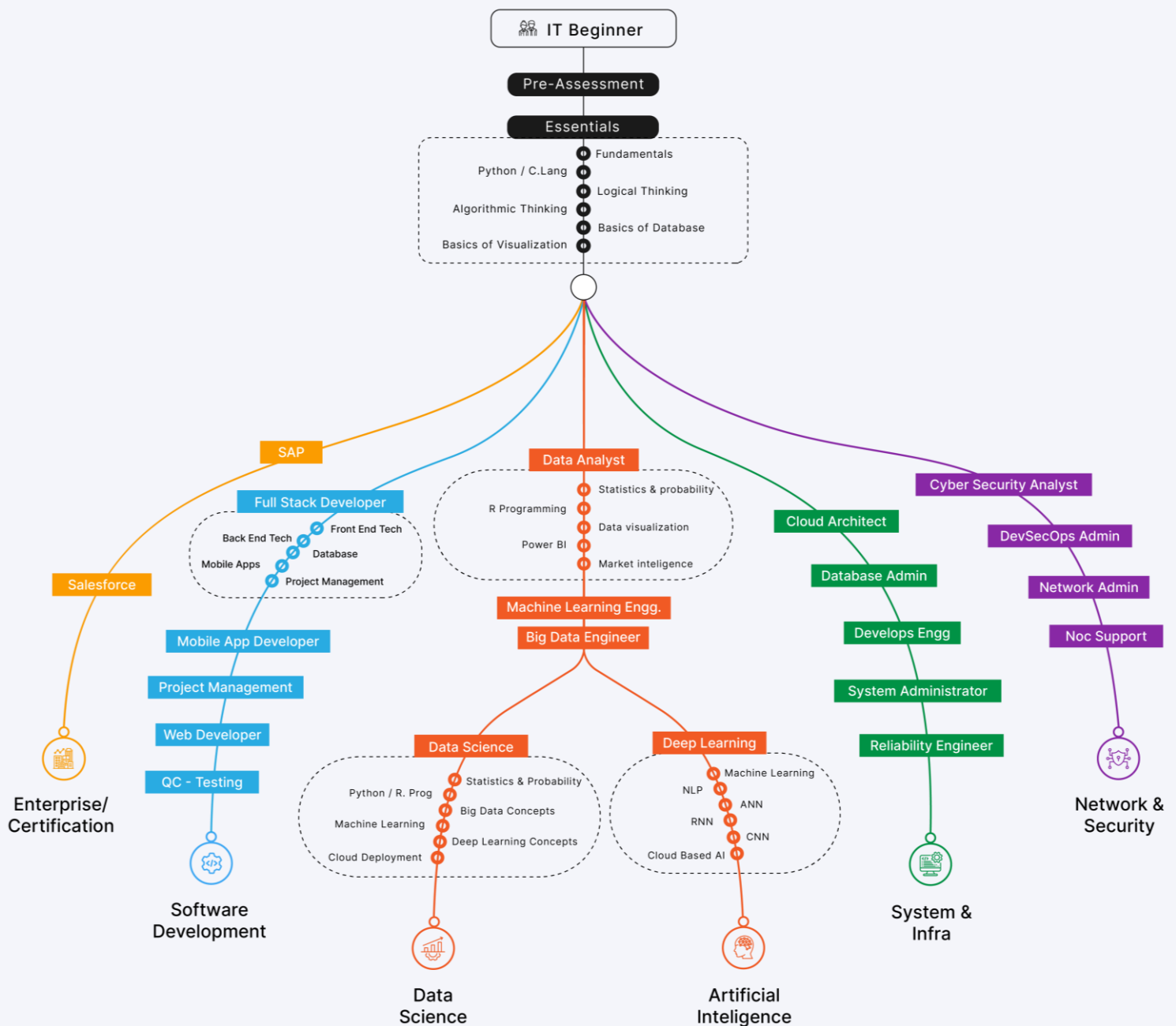
# Drafting Career Paths

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

- ALBERT EINSTEIN

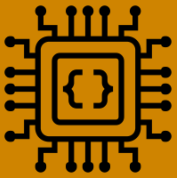
We can...  
and structured it well for you

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**



# 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:

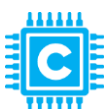
| Hardware                                                                                                                                                                                                                                                                                                  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

*"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

## 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

## Real-time Projects

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

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

## Job Readiness

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

# Learning Supporting Dashboard

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

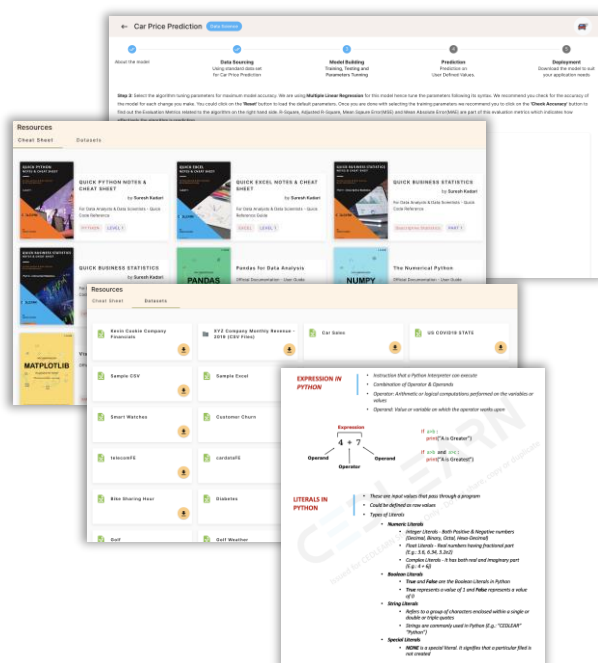


## Resources Section

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.**



# 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



**DA**

14 Weeks  
40 Sessions  
4 Projects

### Business Analyst

**Statistics | Reporting | BI | Data Tech**

Business Statistics, Data Visualization, Report Generation, Power BI, Tableau, Advanced Excel, Business Intelligence, Client Analytics, Time-Series, ...

**DA**

16 Weeks  
44 Sessions  
5 Projects

### Data Analyst

**Statistics | E.D.A | Power BI | Python**

Statistical Analysis, Visualization for BI & Reporting, Advanced Excel, Power BI/Tableau, MySQL, Jupyter Notes, Python basics, Regression Techniques, ...

**DS**

20 Weeks  
60 Sessions  
4 Projects

### Data Science

**Statistics | Data Analytics | Machine Learning**

Statistical analysis, Visualization & reporting, Data Analytics, Machine Learning, Intro to Deep Learning, MYSQL concepts, Power BI/Tableau, ...

**ML**

12 Weeks  
30 Sessions  
5 Projects

### Machine Learning

**Statistical Analysis | Python | Algorithms**

Includes Python, Machine Learning and Deep Learning Concepts. Statistical modelling, Python libraries (Pandas, NumPy, Matplotlib, etc), MySQL

**AI**

14 Weeks  
42 Sessions  
3 Projects

### Artificial Intelligence

**Machine Learning | Neural Networks**

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

**BI**

4 Weeks  
20 Sessions  
3 Projects

### Power BI with Tableau & SQL

**Power BI | Tableau | SQL**

Glimpse of Power BI, Power Query - ETL, Power Pivot - Data Model, Power View, Power BI Services, Intro to tableau, Dashboarding, SQL Basics

**FS**

24 Weeks  
72 Sessions  
4 Projects

### Full-Stack Developer

**Front-End | Back-End | Cloud Computing**

Fundamentals, Java Script Frameworks, Database, Backend. MySQL, AngularJS, React, NodeJS, TypeScript, GitHub, Cloud deployment and Project

**PL**

4 Weeks  
12 Sessions  
4 Project

### Python Programming Language

**Programmer | Developer | Data Science**

Includes Basic Python, Advanced Python concepts, Functions, OOPS, Error & Exception Handling, Web Scraping and Introduction to ML, Projects

**PW**

8 Weeks  
24 Sessions  
2 Projects

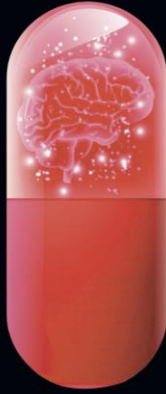
### Python with Web Framework

**Web Application | Games | Developer**

Python with Flask / Django, Basic & Advanced Python concepts, Flask and Django Framework. Tools/Programs, Database concepts, Projects

*Job Assurance and Job Guarantee Programs*

*Pre & Post, Module-Level Assessments*



*“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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