Intern Stump®

PRODUCT BROCHURE

LIVE COURSE

Python AI Full Stack Development

Learn Python, web development, databases and AI from scratch in live mentor-led sessions. Build 9 real projects and become job-ready as a full stack developer with AI skills.

Industry-Led Course | Applications Opened | Technical

DURATION
6 Months

LEVEL
Beginner to Advanced

MODE
Live Online

LANGUAGE
English

BATCH STARTS
16 Nov 2026

ENROLMENT CLOSES
15 Nov 2026

COURSE FEE

₹7,999

~~₹30,000~~ - save 73% OFF

Scan the QR code on the back cover to view details & enrol

internstump.com

LIVE COURSE BROCHURE

Inside this brochure

Everything on the Python AI Full Stack Development page, in one document. Tap a section to jump to it.

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01 · AT A GLANCE

Course Overview

Learn Python, web development, databases and AI from scratch in live mentor-led sessions. Build 9 real projects and become job-ready as a full stack developer with AI skills.

This live, mentor-led course takes you from Python basics to building full stack web applications powered by AI. You will work with Django, REST APIs, databases, React and machine learning models, completing hands-on projects and graduating with a deployable, job-ready portfolio.

DURATION **6 Months**	LEVEL **Beginner to Advanced**
MODE **Live Online**	LANGUAGE **English**
BATCH STARTS **16 Nov 2026**	ENROLMENT CLOSES **15 Nov 2026**
LEARNERS **Trusted by ambitious learners nationwide**	

COURSE FEE

₹7,999

~~₹30,000~~ - save 73% OFF

Enrollment closes on 15 Nov 2026 - Nov 2026 Batch starts 16 Nov 2026.

Highlights

Industry-Led Upskilling Courses

Learn from industry professionals with years of real-world experience.

Personalized Mentorship

Get one-on-one guidance tailored to your career goals and aspirations.

Premium Resources

Access course materials, job portal, free events, challenges and learner 8C Appraisal reports.

Vibrant Community

Connect with like-minded peers and build lasting professional relationships.

02 · SIMPLE 3-STEP JOURNEY

How Our Courses Work

A structured, step-by-step path designed to take you from foundational learning to career success with industry guidance.

01

Step 1: Enroll & Get Started

Choose your course and complete the enrollment process. Access your learning materials instantly and join our community of learners.

✓ Instant access to course materials
✓ Personalized learning dashboard
✓ Welcome orientation session

02

Step 2: Learn & Practice

Engage with interactive lessons, live sessions, and hands-on projects. Learn from industry experts and apply your knowledge in real-world scenarios.

✓ Live classes with expert instructors
✓ Hands-on practical projects
✓ One-on-one mentorship support

03

Step 3: Complete & Get Certified

Finish your coursework, pass assessments, and receive your professional certificate. Launch your new career with confidence and credentials.

✓ Industry-recognized certificate
✓ Portfolio of completed projects
✓ Career placement assistance

03 · BEFORE YOU ENROLL

Eligibility & Prerequisites

Check who this course is designed for and what you should know before your first class.

WHO CAN JOIN

Eligibility

- ✓ Students from any degree or diploma stream
- ✓ Freshers looking for their first software job
- ✓ Working professionals planning a career switch to tech
- ✓ Anyone passionate about coding and AI

BEFORE YOU START

Prerequisites

- ✓ A laptop or desktop with internet access
- ✓ Basic computer and typing skills
- ✓ Comfort with high school level maths
- ✓ Willingness to practice coding daily
- ✓ No prior programming experience required

04 · CAREER-READY SKILLS

Skills You Will Gain

Hands-on skills you will practise in live classes, assignments and projects throughout the course.

Python | Django | Flask | REST APIs | React | JavaScript | HTML and CSS | SQL | PostgreSQL | Git and GitHub | Machine Learning | Scikit-learn | OpenAI API | Docker | Cloud Deployment

05 · PRODUCT ECOSYSTEM ARCHITECTURE

How we designed our Product?

An all-in-one ed-tech ecosystem carefully engineered to bridge learning, practical skill assessment, career guidance, and employment.

WORLD'S FIRST FEATURE

8C Appraisal Report

Proprietary evaluation matrix measuring holistic performance across 8 career pillars for authentic proof-of-work.

- Communication
- Configuration
- Chronicle
- Completeness
- Cognizance
- Conception
- Comprehension
- Case Study

Industry Validated · 100% Data Score

SUBJECT MATTER EXPERT AI

Insyrio AI

Get instant 24/7 doubt solving and concept clarifications directly from our specialized AI trained on your enrolled courses.

- ✓ 24/7 Course-Specific SME Assistant
- ✓ Instant Step-by-Step Doubt Resolution

Instant Learning Support

GAMIFIED REWARDS

iSure Coins

Use iSure Coins for AI career tools, masterclasses and CertiQ - and part-pay your course fee with them.

- ✓ Earn Perks & Rewards · Pay with Coins

Redeem Rewards Store

AI ENGINE

AI Career Diagnosis

Algorithmic analysis mapping strengths, gaps, and tailored pathways for industry roles.

- ✓ Skill Gap Mapping

Personalized Roadmap

CURRICULUM

Industry-Led Courses

Handcrafted learning modules built directly alongside senior engineering, design, and management leads.

Practical Frameworks

LIVE

Live Classes

Interactive classrooms with live chat, code walk-throughs, and real-time engagement.

Real-time Q&A Support

AUTO-SCAN

AI Resume ATS

Instant ATS optimization scanner ensuring your resume passes screening software effortlessly.

High Parser Score

PRACTICAL

Assignments

Industry-grade project briefs with detailed feedback and grading from experienced mentors.

Code & Work Reviews

WEEKLY

Challenges

Weekly hackathons, coding sprints, and design contests to test your problem-solving skills.

Leaderboard Ranking

NETWORKING

Events

Exclusive expert keynotes, career fairs, and interactive networking workshops.

Free Community Pass

1-ON-1

Live Mentorship

Direct one-on-one video guidance sessions with experienced industry practitioners.

Personalized Growth

TRACKING

Attendance

Class-by-class attendance tracking to ensure disciplined, consistent progression.

Attendance Reports

HIRING

Jobs

Direct hiring pipeline connecting top-performing learners directly with recruiter managers.

Exclusive Placements

FREE ACCESS

Free Books

Curated digital library filled with essential tech, management, and soft-skill books.

Instant Digital Library

ARTICLES

Blog

In-depth technical tutorials, industry trend analysis, and career growth strategies.

Updated Weekly

FREE ACCESS

Free Study Material

Downloadable cheat sheets, interview preparation guides, templates, and revision notes.

One-Click Downloads

06 · COURSE CURRICULUM

What You Will Learn

A carefully sequenced curriculum - every section breaks into modules and hands-on topics taught live by industry experts.

8	48	288	9
SECTIONS	MODULES	TOPICS	PROJECTS

NO.	MODULE	TOPICS	SESSIONS
SECTION 01 · 6 modules · 36 topics **Python Programming Foundations and Problem Solving Basics** Build a strong base in Python syntax, data structures, functions, and logical problem solving that prepares learners for every later stage of full stack AI development.			
M1.1	**Getting Started with Python and Development Setup** Learners set up a professional Python environment and write their first programs with confidence.	1 Introduction to Python and Its Role in AI Development 2 Installing Python and Configuring VS Code 3 Virtual Environments and Package Management with pip 4 Writing and Running Your First Python Programs 5 Using Jupyter Notebooks and Google Colab 6 Python Style, PEP 8, and Debugging Basics	**1 – 6** · 6 sessions
M1.2	**Core Syntax: Variables, Data Types, and Operators** Learners master the building blocks used in every Python program.	1 Variables, Naming Rules, and Dynamic Typing 2 Numbers and Arithmetic Operations 3 Strings and Text Manipulation 4 Formatted Output with f-Strings 5 Booleans, Comparison, and Logical Operators 6 Type Conversion and User Input Handling	**7 – 12** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M1.3	**Control Flow: Decisions and Loops** Learners control program behavior using conditions and repetition.	1 Conditional Statements with if, elif, and else 2 Nested Conditions and Complex Decision Making 3 for Loops and the range Function 4 while Loops and Loop Control Statements 5 Nested Loops and Pattern Printing 6 Mini Project: Number Guessing and Quiz Game	**13 – 18** · 6 sessions
M1.4	**Core Data Structures in Python** Learners store, organize, and process data using built-in collections.	1 Lists and List Operations 2 List Comprehensions and Sorting Techniques 3 Tuples and Immutability 4 Dictionaries and Key-Value Data Modeling 5 Sets and Membership Operations 6 Choosing and Combining Data Structures	**19 – 24** · 6 sessions
M1.5	**Functions, Modules, and Error Handling** Learners write reusable, organized, and reliable code.	1 Defining Functions with Parameters and Return Values 2 Default, Keyword, and Variable-Length Arguments 3 Scope, Lambda Functions, and Built-in Helpers 4 Modules, Packages, and the Standard Library 5 Exception Handling with try, except, and finally 6 File Handling with Text, CSV, and JSON Files	**25 – 30** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M1.6	**Problem Solving and Logic Building Practice** Learners apply Python fundamentals to structured problem solving and coding challenges.	1 Problem Solving Framework and Algorithmic Thinking 2 Solving Problems with Strings and Lists 3 Recursion Fundamentals and Practical Examples 4 Searching and Sorting Algorithms Basics 5 Testing and Debugging with assert and unittest 6 Capstone Mini Project: Expense Tracker Application	**31 – 36** · 6 sessions
SECTION 02 · 6 modules · 36 topics **Data Structures, OOP and Version Control with Git** Learners master core Python data structures, object-oriented design and Git-based collaboration to write organized, reusable and team-ready code.			
M2.1	**Built-in Data Structures in Depth** Learners work confidently with Python lists, tuples, sets and dictionaries to store and manipulate data efficiently.	1 Lists and List Operations 2 Tuples and Immutability 3 Sets and Set Operations 4 Dictionaries and Key-Value Modeling 5 Nested Data Structures and JSON-like Data 6 Comprehensions and Choosing the Right Structure	**37 – 42** · 6 sessions
M2.2	**Algorithmic Thinking with Core Structures** Learners implement classic structures and algorithms to build strong problem-solving and complexity awareness.	1 Big O Notation and Complexity Basics 2 Stacks and Queues 3 Linked Lists 4 Searching Algorithms 5 Sorting Algorithms 6 Hash Maps, Trees and Recursion Practice	**43 – 48** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M2.3	**Object-Oriented Programming Fundamentals** Learners model real-world entities with classes and objects to write structured and maintainable programs.	1 Classes and Objects 2 Constructors and Instance Attributes 3 Encapsulation and Properties 4 Inheritance and Method Overriding 5 Polymorphism and Abstract Classes 6 Magic Methods and Operator Overloading	**49 – 54** · 6 sessions
M2.4	**Advanced OOP and Clean Code Practices** Learners apply design principles and professional coding habits to build robust and reusable class-based programs.	1 Composition versus Inheritance 2 Class Methods and Static Methods 3 Dataclasses and Modern Python Models 4 SOLID Principles in Python 5 Exception Handling and Custom Exceptions 6 Modules, Packages and Code Organization	**55 – 60** · 6 sessions
M2.5	**Git Fundamentals for Everyday Development** Learners track, save and review code changes using Git commands in a local repository.	1 Introduction to Version Control and Git Setup 2 Staging, Committing and Viewing History 3 Branching and Switching Workflows 4 Merging and Resolving Conflicts 5 Undoing Changes Safely 6 Gitignore, Tags and Project Hygiene	**61 – 66** · 6 sessions
M2.6	**Collaboration with GitHub and Team Workflows** Learners collaborate on shared codebases using GitHub and apply all section skills in a team-style capstone.	1 GitHub Basics and Remote Repositories 2 SSH Keys and Secure Authentication 3 Forks, Pull Requests and Code Reviews 4 Team Branching Strategies and Rebase 5 Issues, Project Boards and README Writing 6 Capstone: Team OOP Project on GitHub	**67 – 72** · 6 sessions

NO.	MODULE	TOPICS		SESSIONS
SECTION 03 · 6 modules · 36 topics **Frontend Development with HTML, CSS and JavaScript** Learners build responsive, interactive and accessible web interfaces from scratch, progressing from semantic markup to modern JavaScript and API-driven pages.				
M3.1	**HTML Fundamentals and Semantic Page Structure** Learners master the building blocks of web pages using clean, semantic and accessible HTML.	1	How the Web Works and Setting Up the Dev Environment	**73 – 78** · 6 sessions
		2	HTML Document Structure and Core Elements	
		3	Semantic HTML and Page Layout Tags	
		4	Tables, Media and Embedded Content	
		5	Forms and Input Controls	
		6	Accessibility and HTML Best Practices	
M3.2	**CSS Styling, Selectors and the Box Model** Learners style pages confidently by understanding how CSS selects, cascades and renders elements.	1	CSS Syntax and Ways to Add Styles	**79 – 84** · 6 sessions
		2	Selectors, Specificity and the Cascade	
		3	The Box Model and Element Sizing	
		4	Typography, Colors and Backgrounds	
		5	Pseudo Classes, Transitions and Animations	
		6	CSS Variables and Scalable Styling Practices	
M3.3	**Responsive Layouts with Flexbox, Grid and Bootstrap** Learners design layouts that adapt smoothly to any screen size using modern CSS tools.	1	Responsive Design Principles and Media Queries	**85 – 90** · 6 sessions
		2	Flexbox Layout in Depth	
		3	CSS Grid for Two Dimensional Layouts	
		4	Positioning, Z-Index and Overflow	
		5	Bootstrap Framework Essentials	
		6	Tailwind CSS and Utility First Styling	

NO.	MODULE	TOPICS	SESSIONS
M3.4	**JavaScript Fundamentals for Web Developers** Learners learn core JavaScript concepts and relate them to the Python knowledge they already have.	1 JavaScript Basics, Variables and Data Types 2 Operators, Conditions and Loops 3 Functions, Scope and Arrow Functions 4 Arrays and Array Methods 5 Objects, JSON and Classes 6 Error Handling and Debugging in the Browser	**91 – 96** · 6 sessions
M3.5	**DOM Manipulation and Interactive User Interfaces** Learners connect JavaScript to the page to create dynamic and interactive experiences.	1 Understanding the DOM and Selecting Elements 2 Modifying Elements and Styles Dynamically 3 Event Handling and Event Delegation 4 Form Handling and Client Side Validation 5 Browser Storage with localStorage and sessionStorage 6 Mini Project: Interactive To-Do and Quiz App	**97 – 102** · 6 sessions
M3.6	**Asynchronous JavaScript, APIs and Modern Tooling** Learners fetch live data, use modern JavaScript features and prepare a frontend project for deployment.	1 Asynchronous JavaScript and the Event Loop 2 Promises and Async Await 3 Fetch API and Working with REST APIs 4 ES6 Modules and Modern JavaScript Features 5 Package Management and Build Tools with npm and Vite 6 Capstone: Responsive Weather and News Dashboard	**103 – 108** · 6 sessions

NO.	MODULE	TOPICS		SESSIONS
SECTION 04 · 6 modules · 36 topics **Building Interactive User Interfaces with React** Learners build dynamic single page applications by mastering React components, state, hooks, routing, forms and API integration.				
M4.1	**React Fundamentals and Project Setup** Learners set up a modern React workspace and understand the core ideas behind component based interfaces.	1	Introduction to React and the Virtual DOM	**109 – 114** · 6 sessions
		2	Setting Up a React Project with Vite	
		3	Writing JSX and Embedding Expressions	
		4	Creating and Composing Functional Components	
		5	Passing Data with Props	
		6	Rendering Lists and Conditional UI	
M4.2	**State Management and Event Handling** Learners make interfaces respond to user actions by managing local component state and events.	1	Understanding State with the useState Hook	**115 – 120** · 6 sessions
		2	Handling Click and Input Events	
		3	Updating Objects and Arrays in State Immutably	
		4	Lifting State Up and Sharing Data	
		5	Building a Controlled Component Interface	
		6	Mini Project: Interactive Task Manager	
M4.3	**Hooks, Effects and Component Lifecycle** Learners use advanced hooks to manage side effects, references and reusable logic.	1	Side Effects with the useEffect Hook	**121 – 126** · 6 sessions
		2	Cleaning Up Effects and Avoiding Common Pitfalls	
		3	Using useRef for DOM Access and Persistent Values	
		4	Optimizing with useMemo and useCallback	
		5	Managing Complex State with useReducer	
		6	Building Custom Hooks for Reusable Logic	

NO.	MODULE	TOPICS		SESSIONS
M4.4	**Routing, Forms and Global State** Learners build multi page experiences with navigation, validated forms and shared application state.	1	Client Side Routing with React Router	**127 – 132** · 6 sessions
		2	Dynamic Routes and URL Parameters	
		3	Protected Routes and Layouts	
		4	Form Handling and Validation with React Hook Form	
		5	Sharing Data with the Context API	
		6	Global State with Redux Toolkit	
M4.5	**Connecting React to APIs and Data** Learners fetch, display and manage remote data while handling loading and error states gracefully.	1	Fetching Data with Fetch and Async Await	**133 – 138** · 6 sessions
		2	Handling Loading and Error States	
		3	Using Axios and Organizing API Services	
		4	Data Fetching and Caching with React Query	
		5	Pagination, Search and Infinite Scrolling	
		6	Authentication Flow on the Client Side	
M4.6	**Styling, Testing and Deploying React Applications** Learners polish interfaces with modern styling, test components and publish a production ready application.	1	Styling with CSS Modules and Tailwind CSS	**139 – 144** · 6 sessions
		2	Building Responsive Layouts and Reusable UI Kits	
		3	Animations and Micro Interactions	
		4	Testing Components with Vitest and Testing Library	
		5	Performance, Accessibility and Code Splitting	
		6	Capstone: Deploying a React Dashboard Application	

NO.	MODULE	TOPICS		SESSIONS
SECTION 05 · 6 modules · 36 topics **Backend Development with Django, Flask and REST APIs** Learners build secure, database-driven backend systems and production-ready REST APIs using Flask and Django, ready to connect with React frontends.				
M5.1	**Web Server Fundamentals and Flask Essentials** Learners understand how the web works and build their first backend applications with Flask.	1	How the Web Works: HTTP, Requests and Responses	**145 – 150** · 6 sessions
		2	Setting Up Flask and Virtual Environments	
		3	Routing, Views and URL Parameters in Flask	
		4	Templates and Forms with Jinja2	
		5	Flask Blueprints and Application Structure	
		6	Error Handling, Logging and Environment Configuration	
M5.2	**Databases and ORM Fundamentals** Learners design relational databases and use ORMs to persist application data.	1	Relational Database Design and SQL Basics	**151 – 156** · 6 sessions
		2	Advanced SQL: Joins, Aggregations and Indexes	
		3	SQLAlchemy Models in Flask	
		4	Relationships and Migrations with Flask-Migrate	
		5	Working with MongoDB and NoSQL Concepts	
		6	Query Optimization and Database Best Practices	

NO.	MODULE	TOPICS	SESSIONS
M5.3	**Django Core: Models, Views and Templates** Learners build full-featured web applications using the Django framework and its batteries-included approach.	1 Introduction to Django and Project Anatomy 2 Django Models and the ORM 3 Migrations and the Django Admin Interface 4 Views, URL Configuration and Templates 5 Class-Based Views and Generic Views 6 Django Forms, Validation and Static Files	**157 – 162** · 6 sessions
M5.4	**Building REST APIs with Flask and Django REST Framework** Learners design and implement clean, well-structured REST APIs that power modern frontends.	1 REST Principles and API Design Standards 2 Building a REST API with Flask 3 Serialization and Validation with Marshmallow 4 Django REST Framework Serializers and API Views 5 ViewSets, Routers and Nested Resources 6 Pagination, Filtering, Searching and API Documentation	**163 – 168** · 6 sessions
M5.5	**Authentication, Authorization and API Security** Learners protect applications and APIs using industry-standard authentication and security practices.	1 Session Authentication and User Management in Django 2 Password Hashing and Secure Credential Storage 3 Token and JWT Authentication for APIs 4 Permissions, Roles and Access Control 5 Common Web Vulnerabilities and Defenses 6 CORS, Rate Limiting and Secure API Configuration	**169 – 174** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M5.6	**Testing, Integration and Backend Capstone Project** Learners test, connect and deliver a complete backend service integrated with a React frontend.	1 Unit Testing Backend Code with Pytest 2 Testing Django Views and REST APIs 3 Background Tasks, Email and File Uploads 4 Connecting React Frontend to the Backend API 5 Capstone Planning: Designing the Backend Architecture 6 Capstone Build, Review and Presentation	**175 – 180** · 6 sessions
SECTION 06 · 6 modules · 36 topics **Databases, SQL and Authentication for Web Applications** Learners design relational and NoSQL databases, write efficient SQL, connect data layers to Django and Flask apps, and secure applications with modern authentication and authorization.			
M6.1	**Relational Database Fundamentals and Data Modeling** Learners understand how relational databases work and design clean schemas for real applications.	1 Introduction to Databases and DBMS Concepts 2 Tables, Rows, Columns and Data Types 3 Primary Keys, Foreign Keys and Constraints 4 Entity Relationship Diagrams and Table Relationships 5 Normalization and Schema Design Best Practices 6 Designing a Database for a Full Stack Project	**181 – 186** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M6.2	**Core SQL for Querying and Managing Data** Learners write SQL statements to create, read, update and delete data confidently.	1 Creating Databases and Tables with DDL 2 Inserting, Updating and Deleting Records with DML 3 Retrieving Data with SELECT, WHERE and ORDER BY 4 Aggregate Functions, GROUP BY and HAVING 5 Working with NULL Values, Dates and String Functions 6 SQL Practice Lab with Real World Datasets	**187 – 192** · 6 sessions
M6.3	**Advanced SQL, Performance and Transactions** Learners combine tables, optimize queries and keep data consistent under concurrent use.	1 Joins Across Multiple Tables 2 Subqueries and Common Table Expressions 3 Window Functions and Analytical Queries 4 Indexes and Query Optimization 5 Transactions, ACID and Concurrency Control 6 Views, Stored Procedures and Database Security Basics	**193 – 198** · 6 sessions
M6.4	**ORMs and Database Integration with Django and Flask** Learners connect Python web applications to databases using ORMs and manage data safely.	1 Connecting Python to Databases with psycopg and SQLAlchemy Core 2 Django Models, Migrations and the Admin Panel 3 Django ORM Queries, Relationships and Aggregations 4 Flask with SQLAlchemy Models and Alembic Migrations 5 Preventing SQL Injection and Handling Data Validation 6 Seeding, Backups and Managing Data in Production	**199 – 204** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M6.5	**NoSQL, Caching and Choosing the Right Data Store** Learners work with document stores and caches and learn to select storage technology for different needs.	1 Introduction to NoSQL and When to Use It 2 MongoDB Fundamentals and Document Modeling 3 Using MongoDB with Python through PyMongo 4 Redis Basics and Caching Strategies 5 Pagination, Search and Handling Large Datasets 6 Choosing the Right Database for Your Application	**205 – 210** · 6 sessions
M6.6	**Authentication, Authorization and Web Application Security** Learners implement secure login systems and protect applications against common web vulnerabilities.	1 Authentication Concepts and Secure Password Storage 2 Sessions, Cookies and Django Authentication System 3 Token Based Authentication with JWT 4 Role Based Access Control and Permissions 5 OAuth 2.0, Social Login and Email Verification 6 Protecting Against XSS, CSRF and Common Vulnerabilities	**211 – 216** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
SECTION 07 · 6 modules · 36 topics **Machine Learning and Generative AI Integration in Applications** Learners build machine learning models and generative AI features, then integrate them into Django and Flask applications with production awareness.			
M7.1	**Machine Learning Fundamentals with NumPy and Pandas** Learners prepare data and understand core machine learning concepts using Python's scientific stack.	1 Introduction to Machine Learning Concepts 2 NumPy Arrays and Vectorized Computation 3 Data Analysis with Pandas DataFrames 4 Data Cleaning and Missing Value Handling 5 Exploratory Data Analysis and Visualization 6 Feature Engineering and Data Preprocessing	**217 – 222** · 6 sessions
M7.2	**Building and Evaluating Models with Scikit-learn** Learners train classical models and measure their quality using proper validation techniques.	1 Regression Models for Numeric Prediction 2 Classification with Logistic Regression and KNN 3 Decision Trees and Random Forests 4 Model Evaluation Metrics and Cross Validation 5 Hyperparameter Tuning and Pipelines 6 Clustering and Recommendation Basics	**223 – 228** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M7.3	**Deep Learning and Natural Language Processing Essentials** Learners explore neural networks and text processing techniques that underpin modern AI features.	1 Neural Network Fundamentals 2 Building Neural Networks with TensorFlow and Keras 3 Image Classification with Convolutional Networks 4 Transfer Learning with Pretrained Models 5 Text Processing and Sentiment Analysis 6 Embeddings and Semantic Similarity	**229 – 234** · 6 sessions
M7.4	**Generative AI and Large Language Model Foundations** Learners understand how large language models work and how to control their output effectively.	1 How Large Language Models Work 2 Prompt Engineering Techniques 3 Working with LLM APIs in Python 4 Structured Outputs and Function Calling 5 Streaming Responses and Conversation Memory 6 Image and Speech Generative AI Services	**235 – 240** · 6 sessions
M7.5	**Retrieval Augmented Generation and AI Agents** Learners ground model answers in private data and build tool-using assistants.	1 Introduction to Retrieval Augmented Generation 2 Document Loading and Text Chunking 3 Vector Databases and Similarity Search 4 Building a Question Answering Chatbot 5 AI Agents and Tool Usage 6 Evaluating and Improving AI Responses	**241 – 246** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M7.6	**Integrating AI Features into Full Stack Applications** Learners deploy models behind APIs and connect them to React frontends responsibly.	1 Saving and Loading Trained Models 2 Serving Predictions with Flask and Django APIs 3 Connecting AI Endpoints to the React Frontend 4 Background Tasks and Caching for AI Workloads 5 Responsible AI, Privacy and Cost Control 6 Capstone: Deploying an AI Powered Web Application	**247 – 252** · 6 sessions
SECTION 08 · 6 modules · 36 topics **Deployment, Docker, Cloud and Interview Preparation** Learners package, deploy and monitor full stack AI applications using Docker, CI/CD and cloud platforms, then prepare for technical interviews and job placement.			
M8.1	**Production Readiness for Full Stack Applications** Learners prepare Django, Flask and React applications for safe and stable production use.	1 Environment Variables and Configuration Management 2 Production Settings for Django and Flask Apps 3 Web Servers with Gunicorn and Nginx 4 Building and Optimizing the React Production Bundle 5 Logging, Error Handling and Application Monitoring 6 Performance Tuning and Security Hardening Basics	**253 – 258** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M8.2	**Containerization with Docker** Learners package full stack and AI applications into portable containers.	1 Containers and Docker Fundamentals 2 Writing Dockerfiles for Python Applications 3 Multi-Stage Builds and Image Optimization 4 Docker Compose for Multi-Service Applications 5 Volumes, Networking and Persistent Data 6 Containerizing Machine Learning and GenAI Services	**259 – 264** · 6 sessions
M8.3	**CI/CD Pipelines and Automation** Learners automate testing, building and releasing code using modern pipelines.	1 Introduction to CI/CD Concepts and Workflows 2 Automated Testing with Pytest for Backend Code 3 Building GitHub Actions Workflows 4 Building and Publishing Docker Images in Pipelines 5 Automated Deployment and Release Strategies 6 Frontend Testing and Quality Checks in Pipelines	**265 – 270** · 6 sessions
M8.4	**Cloud Deployment of Full Stack AI Applications** Learners deploy complete applications to cloud platforms and manage them in production.	1 Cloud Computing Fundamentals and Service Models 2 Deploying Backend APIs on Render and Railway 3 Hosting React Frontends on Vercel and Netlify 4 Deploying on AWS EC2 with Docker 5 Cloud Storage, Databases and Managed Services 6 Domains, SSL Certificates and Cost Management	**271 – 276** · 6 sessions

NO.	MODULE	TOPICS	SESSIONS
M8.5	**Capstone Project and Professional Portfolio** Learners build, deploy and present an end-to-end AI full stack project that showcases their skills.	1 Capstone Planning, Requirements and Architecture Design 2 Capstone Build Sprint: Backend and AI Integration 3 Capstone Build Sprint: Frontend and User Experience 4 Capstone Containerization and Cloud Deployment 5 Writing Documentation and Professional README Files 6 Project Demo and Presentation Skills	**277 – 282** · 6 sessions
M8.6	**Interview Preparation and Career Launch** Learners prepare for technical interviews and build a strong job search strategy.	1 Python and Data Structures Interview Questions 2 Full Stack and System Design Interview Basics 3 AI and Machine Learning Interview Questions 4 Resume, LinkedIn and GitHub Profile Optimization 5 Mock Technical Interviews and Feedback 6 HR Interviews, Salary Negotiation and Job Search Strategy	**283 – 288** · 6 sessions

07 · PLACEMENT TRAINING

Our Placement Support Services

Placement Training comes with the Placement Assistance plan. Once your course is completed, our placement trainers take you through these six live sessions one by one - finish all six to earn the Placement Training Completion Certificate.

01

Complete your course

Placement Training starts after course completion

02

6 sessions, one by one

Each step is scheduled after the previous one is done

03

Get certified

Placement Training Completion Certificate

STEP 1 OF 6 · LIVE SESSION

1:1 Mock Interview

A live one-to-one mock interview with an industry expert, followed by honest feedback on your answers, confidence and presence.

- ✓ Technical & HR round simulation
- ✓ Questions from your course domain
- ✓ Body language & confidence pointers
- ✓ Personal improvement checklist

1:1 Live · Online · Feedback

After course completion · live with a placement trainer

STEP 2 OF 6 · EXPERT REVIEW

Resume Optimization

Your resume reviewed line by line and reshaped into a clear, ATS-friendly profile that highlights your projects and skills.

- ✓ Structure & format review
- ✓ Impact-focused bullet points
- ✓ Course projects showcased
- ✓ Keywords for your target roles

ATS-Ready · Projects · Rewrite

After course completion · live with a placement trainer

STEP 3 OF 6 · PROFILE MAKEOVER

LinkedIn Optimization

Headline, About, skills and featured work tuned so recruiters can find you and quickly see what you can do.

- ✓ Headline & About section
- ✓ Skills & endorsements plan
- ✓ Featured projects & certificates
- ✓ Networking & outreach tips

Discoverable | Skills | Network

After course completion · live with a placement trainer

STEP 4 OF 6 · INDUSTRY-LED

Career-Led Workshop

A practical workshop on job search strategy, applications, interviews and how hiring works in your domain.

- ✓ Finding the right openings
- ✓ Applications that get replies
- ✓ Interview rounds explained
- ✓ Offer & joining essentials

Job Search | Live | Hiring Process

After course completion · live with a placement trainer

STEP 5 OF 6 · MENTOR-LED

Career-Led Mentorship

Personal guidance from an industry mentor on roles, growth paths and your next career moves.

- ✓ Role & domain fit discussion
- ✓ Personal career roadmap
- ✓ Skill gaps to close next
- ✓ Answers to your career questions

1:1 Mentor | Career Path | Growth

After course completion · live with a placement trainer

STEP 6 OF 6 · COMMUNICATION

Industrial Communication Training

Workplace communication that employers expect: emails, meetings, presentations and professional etiquette.

- ✓ Professional emails & messages
- ✓ Meetings & stand-up updates
- ✓ Presenting your work clearly
- ✓ Workplace etiquette & teamwork

Emails | Speaking | Workplace

After course completion · live with a placement trainer

Placement Training Completion Certificate

Complete all six sessions to receive a verifiable certificate listing every training you finished - share it with recruiters along with your course certificate.

08 · SMES

Meet Our SME Board Members

Expert professionals guiding your journey through real-world industry knowledge and practical experience.



SME BOARD MEMBER · SENIOR SME

Karteek Ch

Associate

Tata Consultancy Services · Subject Matter Expert

Technology professional, mentor, and engineer specializing in Oracle, AI, IoT, and emerging technologies.

Technology professional and TCS Engineer specializing in Oracle, Java, Python, AI, and IoT. An experienced Subject Matter Expert and Mentor at Intern Stump, passionate about practical learning, emerging technologies, and industry-ready student development.



SME BOARD MEMBER · SENIOR SME

Sri Satya Lokesh

Lead Engineer

Dhan AI · Subject Matter Expert

Strategic Lead Engineer specializing in scalable microservices, AI automation, and Conversational AI.

Strategic Lead Engineer with 6+ years of experience in microservices, AI automation, and Conversational AI, specializing in Node.js, TypeScript, Python, Kafka, scalable architectures, performance optimization, mentoring, and enterprise technology modernization.



SME BOARD MEMBER · SENIOR SME

Ruman Aktar

Founder

Rumandev.com · Subject Matter Expert

Guiding backend API integration, full-stack database architecture, and scalable Web application pipelines.

Technology professional specializing in backend API integration, full-stack database architecture, and scalable web application pipelines, with a focus on system performance, seamless data flow, application reliability, and efficient software development practices.

09 · TOOLS AND TECHNIQUES

Key Tools and Techniques

Master industry-standard methodologies used by top-tier professionals, gaining practical exposure to tools, frameworks, and strategies for results.

INDUSTRY STANDARD 01

Python

The core programming language used for backend logic, automation and AI development throughout the course.

BACKEND CORE 02

Django

A powerful web framework for building secure, scalable backends with built in ORM and admin tools.

MOST IN DEMAND 03

React

A popular JavaScript library for building fast, component based user interfaces.

PRODUCTION READY 04

PostgreSQL

A reliable open source relational database used to store and query application data with SQL.

API BUILDING 05

Django REST Framework

A toolkit for building well structured REST APIs with serialization, permissions and authentication.

ML ESSENTIALS 06

Scikit-learn

A machine learning library for training, tuning and evaluating models on structured data.

GENERATIVE AI 07

LLM APIs and Prompt Engineering

Techniques for integrating generative AI models into applications with well designed prompts.

TEAM WORKFLOW 08

Git and GitHub

Version control tools for tracking changes, collaborating with teams and showcasing your code.

DEPLOYMENT SKILL 09

Docker

A containerisation tool that packages applications so they run consistently across any environment.

Many More Tools Integrated in Curriculum

10 · COURSE PROJECTS

Projects You Will Work On

Build a strong portfolio by working on industry-relevant projects that simulate real job scenarios, helping you gain confidence and career-ready skills.

INDUSTRY-LED PROJECT 01

Python Expense Tracker CLI

Build a command line app that records, categorises and summarises daily expenses. Store data in files and practice functions, OOP and error handling.

Duration: 6-10 hours

INDUSTRY-LED PROJECT 02

Responsive Portfolio Website

Design a personal portfolio using HTML, CSS and JavaScript. Make it mobile friendly and host it on GitHub Pages.

Duration: 6-10 hours

INDUSTRY-LED PROJECT 03

React Task Manager

Create a task management interface with components, state and hooks. Add filtering, editing and local storage persistence.

Duration: 8-12 hours

INDUSTRY-LED PROJECT 04

Blog Platform with Django

Develop a full blog with user login, post creation, comments and an admin panel. Use Django ORM with a relational database.

Duration: 10-15 hours

INDUSTRY-LED PROJECT 05

REST API for an E-commerce Store

Build secure REST APIs for products, carts and orders using Django REST Framework. Add JWT authentication and test endpoints with Postman.

Duration: 10-15 hours

INDUSTRY-LED PROJECT 06

House Price Prediction Model

Train a regression model using Scikit-learn on a real housing dataset. Evaluate it and serve predictions through a Flask API.

Duration: 8-12 hours

INDUSTRY-LED PROJECT 07

AI Chatbot Using LLM API

Create a chatbot that uses a large language model API with prompt design and conversation memory. Connect it to a React chat interface.

Duration: 10-14 hours

INDUSTRY-LED PROJECT 08

Resume Analyzer with NLP

Build a tool that extracts skills from uploaded resumes and scores them against job descriptions. Present results in a clean dashboard.

Duration: 10-15 hours

INDUSTRY-LED PROJECT 09

Capstone Full Stack AI Application

Plan, build and deploy an end to end product combining React, Django, a database and an AI feature. Containerise it with Docker and host it on the cloud.

Duration: 20–30 hours

11 · COURSE ENROLLMENT

Python AI Full Stack Development

Learn Python, web development, databases and AI from scratch in live mentor-led sessions. Build 9 real projects and become job-ready as a full stack developer with AI skills.

Starts	16 Nov 2026	**Enrolment closes**	15 Nov 2026
Duration	6 Months	**Timings**	7:00 PM – 8:00 PM IST
Batch	Nov 2026 Batch (16 Nov 2026 - 02 Mar 2027)	**Batch status**	Batch open · Starts on 16 Nov 2026 · Applications close 15 Nov 2026

Your plan

One-time fee · inclusive of GST

Plan 1

Course + Live Work Experience

Build real projects and earn a live work experience certificate.

₹7,999

~~₹30,000~~ · 73% OFF

Live classes & completion certificate	✓ Included
Live projects	✓ Included
Live work experience certificate	✓ Included
8C appraisal report	✓ Included
SME AI (Insyrio)	✓ Included
Live chat with SME	✓ Included
Placement assistance	✗ Not included

Plan perks	15% off across Intern Stump - coins, self-paced courses, masterclasses, mock interviews 20% off membership plans
Also included	• Live classes with industry SMEs • Course completion certificate • Live projects reviewed by your SME

Good to know

Completion certificate

Verifiable ID - a sample certificate can be previewed on the course page.

8C Appraisal System

How the eight Cs work - see the 8C Appraisal section of this brochure.

Part-pay with iSure Coins

Use your coin balance at checkout.

Need help choosing?

See the FAQs or book a free demo.



12 · 8C APPRAISAL

World's First Ed-Tech with 8C Appraisal

Verified 8C Appraisal Certificate: every candidate receives an official corporate readiness report shared directly with hiring partners upon course completion.

The 8C Appraisal is a proprietary evaluation matrix measuring holistic performance across 8 career pillars for authentic proof-of-work:

Communication | Configuration | Chronicle | Completeness | Cognizance | Conception | Comprehension | Case Study

13 · HELP & LEARNER ADVISORY CENTER

Frequently Asked Questions

Find answers to common questions about our learning tracks, placement assistance, and 8C evaluation model, or connect directly with an academic consultant.

Q1 Do I need experience to join Python AI Full Stack Development?

No. The course starts from Python basics and gradually moves to advanced full stack and AI topics, so complete beginners can join comfortably.

Q2 What is the duration of the course?

The course runs for 6 Months with live mentor-led sessions, assignments and project work throughout.

Q3 How much is the course fee?

The current fee is ₹7,999, reduced from ₹30,000, which gives you a saving of 73%. Check the page for any ongoing offers.

Q4 When does the next batch start?

The upcoming batch is Nov 2026 Batch and begins on 16 Nov 2026. Classes are held at 7:00 PM – 8:00 PM IST.

Q5 Are the classes live or recorded?

Classes are taught live by industry mentors so you can ask questions in real time. Session recordings are shared for revision.

Q6 What projects will I build?

You will complete 9 hands-on projects, from a Python CLI app and React interfaces to REST APIs, an AI chatbot and a deployed capstone application.

Q7 Will I get a certificate after completion?

Yes. You receive a course completion certificate from Intern Stump once you finish the required assignments and projects.

Q8 Does this Technical course help with placements?

Yes. You get resume building, portfolio guidance, mock interviews and job preparation support. These improve your readiness, though final selection depends on your performance.

Ready to take the next step?

Python AI Full Stack Development · Live Course

Scan to view details & enrol

internstump.com/courses/python-ai-full-stack-development

WEBSITE
internstump.com

EMAIL
info@internstump.com

CALL / WHATSAPP
+91 7396168247

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