

TRACK 02: DATA & AI TRACK

Duration: 6 Months (Cohort Based) | Batch Limit: 10 Students | Fee: Rs 30,000 (Rs 15,000 Upfront + Rs 15,000 Month 3)

PROGRAMME OVERVIEW

Comprehensive hands-on training for building data engineering pipelines, automated web scrapers, data analysis dashboards, and applied AI automation using Python and modern LLM APIs.

CURRICULUM SYLLABUS

- Module 1: Python for Data Engineering

Python advanced syntax, generators, decorators, asynchronous IO, virtual environments, and package management.

- Module 2: Data Extraction, Scraping & Pipelines

Structured web crawling with Scrapy, BeautifulSoup, queue management with Celery/Redis, and data cleansing.

- Module 3: Relational & Analytical Data Processing

SQL data transformations, Pandas dataframes, NumPy operations, data aggregation, time-series analysis, and ETL pipelines.

- Module 4: Business Dashboards & Visualizations

Building interactive data visualizations using Apache ECharts, Streamlit, and modern web analytics charting.

- Module 5: Applied AI & LLM Integration

OpenAI API integrations, prompt engineering, structured JSON extraction, embeddings, vector databases, and retrieval pipelines.

- Module 6: Capstone AI Automation Platform

Live deployment of an intelligent document parser and automated market intelligence dashboard.

CAREER OUTCOMES & PORTFOLIO DELIVERABLES

- * Portfolio featuring automated scrapers, ETL data pipelines, and LLM automation tools.
- * Deep capability in Python, Pandas, SQL data analysis, and OpenAI API integration.
- * Prepared for Python Developer, Data Analyst, and AI Automation Engineer roles.

ADMISSIONS & ENROLLMENT

Admissions Portal: empever.com/pages/contact.html | Official Desk: info@empever.com

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