

ADVANCED DATA ANALYTICS WITH Ai

Shape Your Data Science & Al Career With Us!



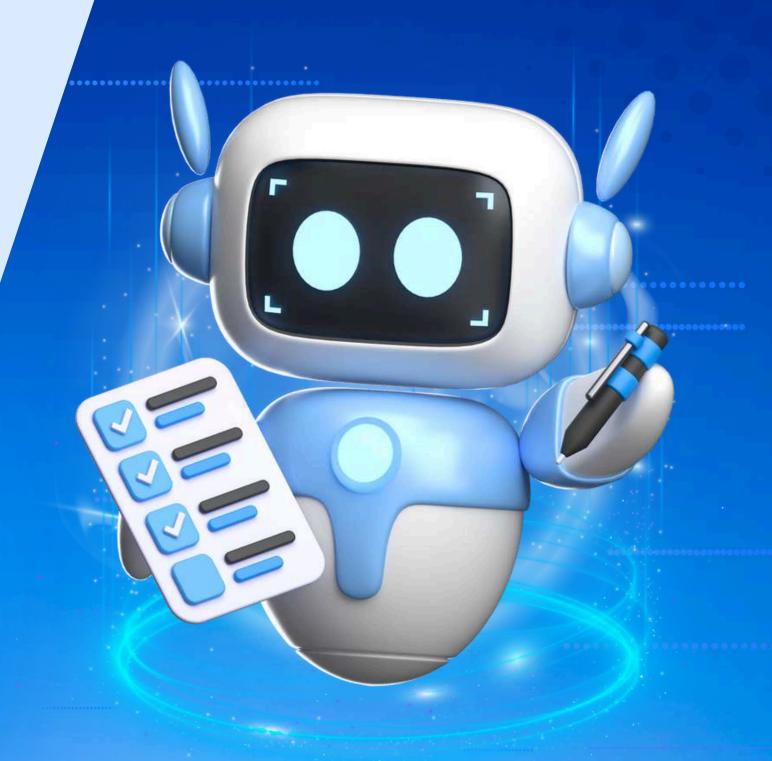
Be Future Ready

CAREER

- 1 Program Intro
- **Who We Are**
- **What You'll Learn (Journey)**
- **Track Raodmap**
- **Curriculum Features & Benefits**
- **6** Curriculum Overview
- **Detailed Syllabus**



TABLE OF CONTENTS





PROGRAM INTRO



Advanced Data Analytics with Al

- For ambitious professionals ready to transform into Al-powered decision makers.
 - Al-powered workflows
 - Statistical & Product Analytics
 - Learn from IIT Alumni & Ex-Scaler Instructor

ONLY 30 SEATS

INTERVIEW-BASED SHORTLISTING







- At Career Redefine, we're not "just another course provider."
- We are a career accelerator helping professionals shift from reporting jobs → Al-powered roles.



- Premium learning (IIT Alumni, Industry Mentors)
- Practical projects (not just theory)
- Affordable & impactful (career growth, not heavy fees)





WHO WE ARE















LEARNERS ALREADY GROWING INTO AI-READY
ANALYSTS & PRODUCT THINKERS



WHAT YOU'LL LEARN



This isn't a course. It's a Career Accelerator.



SQL, Python, Excel, Tableau → Toolkit every analyst needs



Advanced Skills

Stats (predict & analyze) | Product Analytics (Zomato, Swiggy, Amazon) | Al Automation (GenAl, APIs, n8n)



Career Prep

Mock Interviews |
Resume + ATS
Optimization |
Real-world Case
Studies





TRACK ROADMAP





ESSENTIAL DATA ANALYSIS TOOLKIT

- SQL
- PYTHON & LIBRARIES
- TABLEAU & EXCEL







GEN AI & DATA ANALYSIS

 AI AUTOMATIONS & WORKLOWS FOR BUSINESS













- PROBABILITY & STATISTICS
- PRODUCT ANALYTICS





INTERVIEW PREPARATION

REAL INTERVIEW
 QUESTIONS &
 PROBLEM SOLVING









CURRICULUM FEATURES & BENEFITS





PROGRAM DURATION

5 MONTHS MANDATORY +1 MONTH OPTIONAL



LIVE SESSIONS

2 SESSIONS PER WEEK 3.5 HOURS PER SESSION



CHECKPOINT SESSIONS

PROBLEMS SOLVING & REVISION CLASSES



MODULE TESTS

MANDATORY
ASSESSMENT TEST
AFTER EACH MODULE



CAPSTONE PROJECT

REAL WORLD DATA
PROJECT AFTER EACH
MODULE



1:1 INSTRUCTOR-MENTOR

FLEXIBLE MENTOR ACCESS



RESUME REVIEW

ROLE-SPECIFIC RESUME REVIEW



MOCK INTERVIEWS

INTERVIEW PRACTICE



CLASS RECORDING LIBRARY

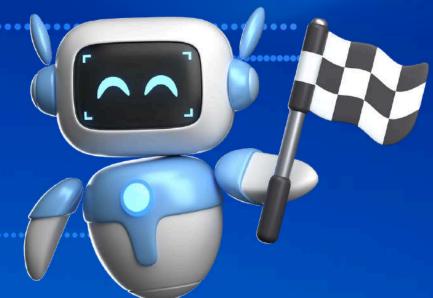
HANDS-ON REVISION REPLAYS







ESSENTIAL DATA ANALYSIS TOOLKIT





3 Modules



27 Sessions



13 Weeks









• INTRO TO DATABASES & BIG QUERY SETUP

Data Lake, ETL, Data Warehouse ER Diagram, Primary-Foreign Keys

 DATA EXTRACTION & DATA TYPES

INT, FLOAT, VARCHAR, SELECT COUNT, ORDER BY, LIMIT, OFFSET

• FILTERING & SUB-QUERIES

WHERE, LIKE, IN, BETWEEN, AND Sub-Queries in SELECT & FROM

 CASE STATEMENTS, JOINS, UNION

IF, CASE WHEN, INNER JOIN, LEFT RIGHT, FULL, SELF, CROSS JOINS

• GROUP BY & AGGREGATIONS

GROUP BY, WHERE vs HAVING

 WINDOW FUNCTIONS, LEAD, LAG

OVER, PARTITION, DENSE RANK NTILE, Nth VALUE, UNBOUNDED

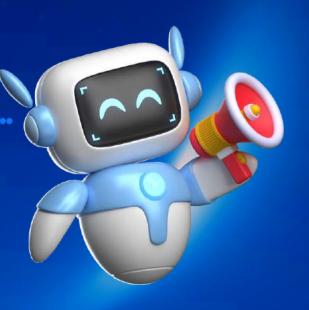
• DATE & TIME FUNCTIONS, PARSING

Intervals Extraction, DATE DIFF

CTES & VIEWS







- INTRO TO PYTHON & SETUP, IDES
- DATA TYPES & VARIABLES

int, float, bool, str

 OPERATORS-EXPRESSIONS, FLOW & LOOPS

if, if-else, elif, for loop, while loops

• DATA STRUCTURES & COMPREHENSIONS

Strings, Lists, Tuples, Dictionaries Lists, Sets & Dict Comprehensions MEMORY MANAGEMENT
 & COMPLEXITY

Time & Space Complexity

 OOPS & FUNCTIONAL PROGRAMMING

Classes, Objects, Methods

- FUNCTIONAL PROGRAMMING & EXCEPTION
- ALGORITHM FUNDAMENTALS
 Searching, Sorting, Recursion

 NUMPY (NUMERICAL COMPUTING)

Arrays, Slicing, Math Functions

 PANDAS (DATA ANALYSIS), DATAFRAME

Series, GroupBy, Merging, Filtering

DATA VISUALIZATION
 & DATE LIBRARIES

Matplotlib, Seaborn, Date Time







• TABLEAU SETUP & GETTING STARTED

Business Data Understanding

 VISUALIZATIONS & FIRST DASHBOARD

Cross Tab, Bar, Line, Pie, Geo Filters, Publishing & Sharing

• DATA CLEANING & STATISTICAL PLOTS

Data Research Paper, Histogram Box Pot, Scatter Plot, Correlation • ADVANCED PLOTS & CALCULATED FIELDS

Dual Axis, WordCloud, Waterfall

 GROUPS, SETS & TABLE CALCULATIONS

Dynamic Sets & Parameters INDEX, LOOKUP, RANK Functions

• LEVEL OF DETAIL CALCULATIONS

FIXED, INCLUDE, EXCLUDE

• JOINS, BLENDS, TRENDLINES

• FORECASTING, ANIMATIONS & STORIES

 SPREADSHEET FORMATTING OPERATIONS

• EXCEL FUNCTIONS & FORMULAS

• LOOKUP FUNCTIONS & DYNAMIC ARRAYS

 PIVOT TABLES ANALYSIS & MACROS







BUSINESS ACUMEN & MATHEMATICS





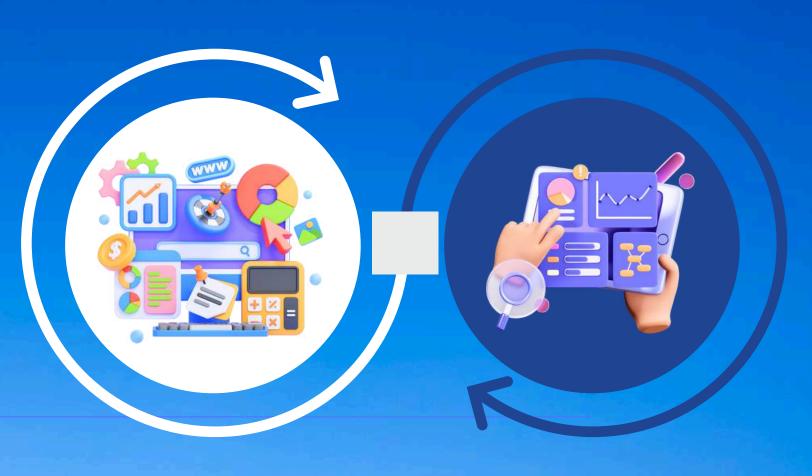
2 Modules

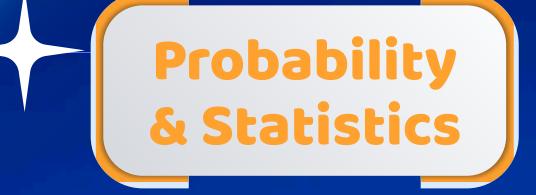


13 Sessions



6 Weeks









 BASIC & CONDITIONAL PROBABILITY CONCEPTS

Experiment, Sample Space, Events Bayes Theorem (Applications in AI)

- PERMUTATIONS & COMBINATIONS
- **DESCRIPTIVE STATISTICS**Central Tendency & Dispersion
- PROBABILITY DISTRIBUTIONS;
 DISCRETE & CONTINUOUS

Bernoulli, Binomial, Geometric, Poisson Uniform, Exponential, Gaussian • SAMPLING & INFERENTIAL STATISTICS

Central Limit Theorem,
Confidence Intervals

• HYPOTHESIS TESTING FRAMEWORK

Null & Alternative Hypotheses, p-Values

• HYPOTHESIS TESTING FRAMEWORK

Significance Levels, Type I & Type II Errors
One-tailed vs Two-tailed Tests

PARAMETRIC TESTS

Z-test, T-test, ANOVA

• NON-PARAMETRIC & OTHER TESTS

Chi-Square, Correlation, Kolmogorov-Smirnov

• FEATURE
ENGINEERING SCALING &
NORMALIZATION







• INTRODUCTION TO PRODUCT ANALYTICS

Data-Driven Decision Making & Lifecycle

 BUSINESS ACUMEN & PRODUCT METRICS

North Star Metric, AARRR Funnel Engagement Metrics (DAU, MAU)

• ROOT CAUSE ANALYSIS (RCA) - 5 WHYS?

Problem Identification Framework CRM KPIS, RFM MODEL, CUSTOMER ANALYTICS

RFM (Recency, Frequency, Monetary)
Customer Segmentation

• EXPERIMENTATION & TESTING

A/B Testing Fundamentals

• ANALYTICAL PROBLEM SOLVING

GuessEstimates(TopDown & BottomUp)

 ANALYTICAL PROBLEM SOLVING

Market Sizing Problems

• ANALYTICAL PROBLEM SOLVING

Cases & Problem-Solving Frameworks

 ANALYTICAL PROBLEM SOLVING

Storytelling with Data









GEN AI AUTOMATIONS & DATA ANALYSIS



05 Sessions



2 Weeks



• INTRODUCTION TO N8N & AUTOMATION FUNDAMENTALS

No-Code Workflows, Nodes, Triggers, APIs, Webhooks

- GOOGLE SHEETS, CRM & REPORTING AUTOMATION
- Automating Google Sheets Reports Email Campaign & Newsletter Analytics
- ADVANCED WORKFLOW DESIGN
 API Solutions (pagination)
 Performance Boost (parallel processing)
 Automations (finance, HR, e-com, support)

- AI & LLM INTEGRATION FOR ANALYSTS
- LLMs (ChatGPT, Claude, Gemini, Deepseek) Prompting Basics, RAG with Vector DBs
- ANALYTICS-SPECIFIC PROJECTS
- Invoice Processing Lead Gen via APIs Ticketing Analytics

• SELF-HOSTING & DEPLOYMENT







DATA ANALYTICS
INTERVIEW
PREPARATION



08 Sessions



04 Weeks









• SQL PROBLEM SOLVING: REAL WORLD INTERVIEW QUESTIONS

Complex Queries (Joins, Subqueries, CTEs, Window Functions)

 PYTHON INTERVIEW QUESTIONS

Data Structures & Algorithms (Lists, Dicts, Sets, Sorting, Searching)

 PROBABILITY INTERVIEW QUESTIONS

Conditional Probability & Bayes Theorem PROBABILITY INTERVIEW QUESTIONS

Permutations & Combinations in Problem Solving Distribution-based Questions (Binomial, Poisson, Normal)

• STATISTICS INTERVIEW QUESTIONS

Hypothesis Testing Framework (p-value, z-test, t-test, chi-square)

• STATISTICS INTERVIEW QUESTIONS

Central Limit Theorem
Applications

• PRODUCT CASE STUDIES

A/B Testing Scenarios (design & interpretation)
Root Cause Analysis on Metrics
Drop

- APTITUDE, PUZZLES, ANALYTICAL THINKING & LOGICAL REASONING PROBLEMS
- MOCK INTERVIEWS

RESUME PREPARATION

Resume for Analytics Roles
Projects & Impact
Mistakes to Avoid



Junior Data Analyst

Data Analyst

CAREER TRAJECTORY AND SALARY TRENDS



Principal Data Analyst

Lead Data Analyst



Senior Data Analyst





WHY SHOULD YOU INVEST IN THE COURSE?









STARTS SOON



+91-9535713363



www.careerredefine.com



info@careerredefine.com