DATAMARCOS

LIVE ONLINE · MENTOR-LED PROGRAM

Data Analytics with AI (SQL, Python, BI)

16 weeks · 8–10 hours a week · Part-time, live online

A 16-week, part-time live program that takes you from spreadsheets to SQL, Python and a BI dashboard, and shows how to use AI as an assistant in that work — with the same care you would give any other analysis. A possible later path is our Advance Data Engineering program if you decide to go further.

Fees and EMI options shared on a counsellor call.

Program guide · Curriculum, projects and format. No prices are listed in this brochure.

Noida One, 303-304, Rasoolpur Nawada, Industrial Area, Sector 62, Noida, Uttar Pradesh 201309, India

www.datamarcos.com · hello@datamarcos.com · +91 88519 30644

About this program

Who it is for

- Career starters and career-switchers who want a structured path into analysis work
- Analysts and operations professionals who want SQL, Python and BI, not only spreadsheets
- Learners in Africa, the Gulf, the UK and other regions who can commit 8–10 hours a week for 16 weeks

Who it is not for

- Experienced data engineers looking for Spark, warehouse architecture or production pipelines — see Advance Data Engineering with GenAI
- People seeking placement or salary guarantees — we do not offer those

Starting point

- No prior programming is required; comfort with spreadsheets is helpful
- You will need a laptop that can run a browser and a Python environment, plus time for weekly labs

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What you will be able to do

These are skills and work products from the program — not placement, salary or promotion promises.

- 1. Clean and describe a dataset in a spreadsheet, and ask a precise analytical question
- 2. Write SQL to filter, join and aggregate tables for an analysis
- 3. Use Python (including pandas) to wrangle tabular data and produce clear charts
- 4. Build a BI dashboard and a short written narrative a decision-maker can read
- 5. Use an AI assistant to draft queries or explanations, then check the results yourself
- 6. Know what a later data-engineering path would involve, without being pushed into it

Projects

Project 1: Cleaned dataset and question brief

A documented, cleaned table and a question the data can actually support.

Project 2: SQL and Python analysis

A SQL workbook and a reproducible Python notebook that answer the same question with checks.

Project 3: Capstone dashboard and narrative

A BI dashboard, a short written brief, and a method note that includes how you used (and verified) AI assistance.

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Curriculum · 16 weeks

8–10 hours a week, live and mentor-led. Open each week in the live sessions for labs and feedback.

Week 1: Asking a useful question

- Descriptive, comparative and diagnostic questions
- What a dataset can and cannot answer
- A first look at the capstone-style dataset you will grow through the program
- Using an AI assistant to critique a question — then tightening it yourself

Lab: Write three candidate questions and reject the ones the data cannot support.

Week 2: Spreadsheets and data hygiene

- Types, missing values, duplicates and units
- Sorting, filtering and lookup patterns
- A reproducible cleaning log, not ad-hoc edits
- When a spreadsheet is enough, and when it is not

Lab: Clean a messy table and record every step.

Week 3: Descriptive statistics that stay honest

- Averages, spreads and simple distributions, in plain language
- Why a single headline number is often misleading
- Comparisons across groups without over-claiming
- Charts that match the question

Lab: Compute and chart a small set of descriptive measures.

Week 4: Phase checkpoint: a clean brief

- Putting the question, the cleaned table and the first charts together
- Peer and mentor feedback
- What SQL will let you do next

Lab: Present your brief and cleaned data.

Week 5: SQL foundations

- Tables, rows and a mental model of a query
- SELECT, WHERE, ORDER BY and LIMIT
- NULL handling and simple expressions
- Drafting a query with an AI assistant, then reading and fixing it

Lab: Rewrite spreadsheet filters as SQL.
You ship: A first SQL workbook.

Week 6: Joins and more than one table

- Inner and outer joins, and why row counts change
- Keys, duplicates and accidental many-to-many joins
- Keeping a query readable
- Checking a join result against a known sample

Lab: Join two or three tables and prove the grain of the result.
You ship: A joined table for your analysis question.

Curriculum (continued)

Week 7: Aggregation and grouping

- GROUP BY, HAVING and common aggregate functions
- Conditional aggregation
- Window functions at a practical introductory level
- Common mistakes with averages of averages

Lab: Answer a grouped comparison in SQL.
You ship: An aggregate query set with checks.

Week 8: Phase checkpoint: a SQL analysis

- Assembling a short SQL analysis of your question
- Documenting assumptions and residual data issues
- Mentor review

Lab: Present the SQL analysis and the checks you ran.
You ship: A SQL workbook and a one-page findings note.

Week 9: Python start for analysts

- Notebooks, variables, functions and reading tabular files
- How this differs from a spreadsheet, and why that helps
- Using an AI assistant to explain an error, then fixing it yourself

Lab: Load your dataset in a notebook and print a sound overview.
You ship: A starting notebook with checks.

Week 10: Wrangling with pandas

- Selecting, filtering and deriving columns
- Missing values, types and joins in pandas
- Group-by operations that match your SQL work
- Keeping a reproducible cleaning trail

Lab: Reproduce your SQL cleaning and aggregates in pandas.
You ship: A wrangled dataframe and a cleaning section in the notebook.

Week 11: Charts that answer the question

- Choosing a chart for a comparison, a trend or a distribution
- Labelling, units and honest scales
- What not to decorate
- Writing a one-sentence claim that the chart actually supports

Lab: Build three charts and drop any that do not earn their place.
You ship: A chart set tied to your question.

Week 12: Phase checkpoint: a reproducible notebook

- Cleaning up the notebook so it runs top to bottom
- Mentor review of claims versus evidence
- What a BI tool will add next

Lab: Walk through the notebook with the cohort.
You ship: A reproducible analysis notebook.

Curriculum (continued)

Week 13: BI dashboards

- From a notebook to a dashboard a decision-maker can filter
- Pages, grains and the questions a dashboard should not try to answer
- Practise in a modern BI tool such as Looker Studio or Power BI — you may use the one you can access

Lab: Publish a first dashboard from your prepared table.
You ship: A draft dashboard.

Week 14: Dashboard design and review

- Layout, colour and typography that stay out of the way
- Filters, comparisons and a written takeaway on the page
- Peer review

Lab: Revise the dashboard from review notes.
You ship: A revised dashboard ready for the narrative.

Week 15: AI as an analysis assistant

- Drafting SQL or pandas with an assistant, then verifying every number
- Asking for explanations and alternative cuts — and catching confident errors
- What you must still do yourself: definitions, joins, and the claim you publish

Lab: Use an assistant on one task and document what you accepted, edited or rejected.
You ship: A short method note on AI use in your analysis.

Week 16: Capstone: dashboard and narrative

- A written narrative that a manager can read without opening the notebook
- Live capstone presentations and mentor feedback
- Optional next steps, including whether Advance Data Engineering is a later path

Lab: Present the dashboard, the narrative and the checks you ran.

Format, fees and refunds

Part-time and live online, in a small mentor-led cohort. Weekend-morning batches are offered for learners in the US. Evening batches (India time) are offered for learners in the Gulf and Africa. Europe-oriented groups typically meet after work and on Saturdays. Recordings are shared if you miss a live session. Exact days, times and the next cohort date are confirmed on a counsellor call.

Designed with Africa, the Gulf and the UK in mind; join live from anywhere.

A Datamarcos certificate of completion is awarded when you finish the program work. Cohort start dates are shared on a counsellor call — we do not publish a date until then.

Fees and EMI options shared on a counsellor call.

7-day refund policy: if the program is not right for you, ask within 7 days of enrollment.

Mentor

Live sessions are mentor-led by Deepesh Mishra, founder of Datamarcos, a BITS Pilani alumnus, and a solution architect and corporate trainer in data and AI who has trained teams at 200+ organizations.

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Questions, answered

Do I need prior programming experience?

No. Comfort with spreadsheets is helpful. SQL and Python are taught in the program, with weekly labs. You will need a laptop and 8–10 hours a week.

How long is the program?

Sixteen weeks, part-time and live online, at about 8–10 hours a week including live sessions and labs.

What will I build?

A cleaned dataset and question brief, a SQL analysis, a reproducible Python notebook, and a capstone BI dashboard with a written narrative. You will also practise using an AI assistant and verifying its output.

Are the sessions live?

Yes. Sessions are live and mentor-led, with recordings if you miss a class. Evening batches on India time are offered for learners in the Gulf and Africa, with other regional times available. Exact times are confirmed on a counsellor call.

Is this a data-engineering program?

No. This is an analysis program: spreadsheets, SQL, Python, BI and careful AI assistance. If you later want pipelines, warehouses and production data engineering, Advance Data Engineering with GenAI is a possible next path. A counsellor can help you compare.

What about fees?

Fees and EMI options shared on a counsellor call.

Is there a refund policy?

Yes. Datamarcos has a 7-day refund policy. If the program is not right for you, ask within 7 days of enrollment.

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Talk to a counsellor

Share a few details on datamarcos.com and a counsellor will talk through program fit, the next cohort, fees and enrollment.

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This brochure does not promise placement, salary or promotion outcomes. It is not legal, immigration or official-government certification advice.