

KQL

888 678 4040

Excel Geniuses
DATA ENGINEER

SQL Azure Data Factory PySpark python Azure Data Lake Storage databricks Kusto

Duration: 100 Days

OUR SERVICE

- Training end to end & job succour
- Project-Based Learning (PBL)
- Use Case-Driven Teaching
- Blended Learning (Live + Self-Paced)
- Scenario Based Interview Questions
- Domain+Chat GPT Training

888 678 4040
www.excelgeniuses.com

Data Engineering Azure Data Engineer

Excel Geniuses
DATA ANALYTICS

X SQL python Power BI

Duration: 90 Days

OUR SERVICE

- Training end to end & job succour
- Project-Based Learning (PBL)
- Use Case-Driven Teaching
- Blended Learning (Live + Self-Paced)
- Scenario Based Interview Questions
- Domain+Chat GPT Training

888 678 4040
www.excelgeniuses.com

Data Analytics

SQL (Structured Query Language)

KQL (Kusto Query Language)

Feature/Aspect	SQL (Structured Query Language)	KQL (Kusto Query Language)
Primary Use Case	Relational databases, transactions	Log, telemetry, time-series, analytics
Read/Write Capability	Can read and write data	Read-only (no data modification)
Data Type Support	Structured/tabular	Structured & semi-structured (JSON, nested)
Syntax	Declarative; SELECT, WHERE, GROUP BY	Pipeline style
Joins	Robust, supports many join types	Supports join, but syntax differs

Aggregations	Via GROUP BY, aggregate functions	Native, concise (summarize, bin)
Time-Series Operations	Complex (window functions/subqueries)	Built-in time series functions
Functions & Operators	Rich, standardized	Many built-ins for logs/time-series
Transactions & Procedures	Supported	Not supported
Integration	Universally supported	Azure Data Explorer, Log Analytics, Sentinel
Complexity	Steeper learning curve	Simpler for analytics/log queries
Schema	Fixed	Flexible, dynamic types (dynamic fields)
Visualization	Not built-in	render operator for charts/timeseries
Performance	Relational, row-based	Columnar, built for big data and speed

Module #	Topic	Duration	Key Learning Objectives
1	KQL Fundamentals	30 mins	Pipe syntax
2	Data Exploration	40 mins	Search, filter (where), project, extend
3	Aggregation & Summarize	50 mins	summarize, dcount, countif, top, make-set
4	Time Series Analysis	45 mins	ago(), bin(), timechart, make-series
5	Advanced Filtering	40 mins	Regex (matches regex), has, contains, variables (let)
6	Joins & Multi-Table	35 mins	join kinds (inner, leftouter, rightouter, fullouter, innerunique)
7	Real-Time Intelligence	30 mins	Sentinel logs, Fabric Eventhouse, anomaly detection
8	Visualization Operators	25 mins	render (barchart, columnchart, piechart, timechart, table)
9	Advanced Functions	30 mins	mv-expand, parse, bag_pack, series_fit_line
10	Optimization & Best Practices	25 mins	Query limits, hints, common patterns, performance