

MERN + NestJS 20-Course Mastery Curriculum

Module 1 – MongoDB Fundamentals & Ecosystem:::

BSON && Collections && Replica Sets vs Shards && CRUD Recap

Module 2 – CRUD Deep Dive:::

insertOne/Many && find && Projections && Upserts && updateMany && deleteMany

Module 3 – Data Modeling:::

1–N/N–N Patterns && Embedding vs Referencing && Bucketing && Time-Series

Module 4 – Indexes:::

Single && Compound && Multikey && Partial && TTL && Sparse && Choosing Cardinality

Module 5 – Performance & Query Planning:::

explain() && Query Planner && Covered Queries && Hot Paths

Module 6 – Aggregation Pipeline I:::

\$match && \$group && \$project && \$sort && \$limit && \$lookup

Module 7 – Aggregation Pipeline II:::

Pipelines for Analytics && Facets && Window Functions

Module 8 – Transactions & ACID:::

ACID Semantics && Multi-Document Patterns && Pitfalls

Module 9 – Atlas & Cloud Deployment:::

Clusters && Network Access && VPC Peering && Serverless

Module 10 – Security & Access Control:::

SCRAM && Role-Based Access && Field-Level Encryption && Auditing

Module 11 – Backup & Restore:::

Snapshots && Point-in-Time && mongodump/restore && S3

Module 12 – Drivers & Mongoose:::

Driver CRUD && Sessions && Mongoose Schemas && Middleware && Validators