

Express Mastery

Module 1 – Project Setup & Fundamentals

TypeScript (optional) && dotenv configuration && nodemon && NPM/Yarn scripts

Module 2 – Routing & API Structure

Route params && Query strings && Nested routers && Versioning strategies

Module 3 – Middleware & Request Lifecycle

Built-in vs custom middleware && Execution order && Async error handling

Module 4 – Handling Requests & Responses

Input validation && File uploads && Pagination patterns

Module 5 – Views & Static Content

EJS/Handlebars basics && Serving static files && Caching && Compression

Module 6 – Database Integration

MongoDB driver && Mongoose ODM && Connection lifecycle management

Module 7 – Security Best Practices

Helmet && Rate limiting && CORS && Input sanitization

Module 8 – Authentication & Authorization

JWT && Session-based auth && Role-Based Access Control (RBAC) && Password resets

Module 9 – Observability & Monitoring

Logging with winston/pino && HTTP logging with morgan && Request IDs && Health checks

Module 10 – Deployment & Optimization

Clustering && Reverse proxy setup && Environment matrix && Zero-downtime deployments