

# AngularJS Complete Course Outline (25-28 Lectures × 45-60 min)

## Fundamentals & Setup (Lectures 1-3)

- Lecture 1: Introduction to AngularJS, MVC Architecture, Why AngularJS?
- Lecture 2: Setting up Environment, IDEs, Basic HTML & JavaScript Refresher
- Lecture 3: AngularJS Application Structure and Bootstrap Process

## AngularJS Core Concepts (Lectures 4-8)

- Lecture 4: Scope, \$rootScope, Two-way Data Binding, Expressions
- Lecture 5: Controllers and Modules - Creating and Managing Controllers
- Lecture 6: Filters – Built-in & Custom Filters
- Lecture 7: Directives – Built-in, Custom Directives, Directive Lifecycle
- Lecture 8: Events – ng-click, ng-show/ng-hide, ng-disabled

## Data Handling & Forms (Lectures 9-12)

- Lecture 9: Form Handling, Validation, Model Binding, \$error Object
- Lecture 10: Services & Dependency Injection – Concepts and Implementation
- Lecture 11: Working with \$http and AJAX for Server Communication
- Lecture 12: Routing and Single Page Applications (SPA) – Static and Dynamic Routing

## Advanced AngularJS Features (Lectures 13-16)

- Lecture 13: Nested Controllers, Scope Inheritance, Events (\$emit, \$broadcast)
- Lecture 14: Animations Using Angular Animate Module
- Lecture 15: Using UI Frameworks – Angular Material, UI Bootstrap
- Lecture 16: Custom Services, Factories, Providers and Application Architecture

## Performance & Testing (Lectures 17-19)

- Lecture 17: Debugging AngularJS apps, Performance Optimization Techniques
- Lecture 18: Unit Testing and Behavior Driven Development (Karma, Jasmine)
- Lecture 19: Handling Large AngularJS Applications and Best Practices

## Integration & Projects (Lectures 20-23)

- Lecture 20: Integrating AngularJS with REST APIs, Real-time Data
- Lecture 21: Working with External Libraries and AngularJS Ecosystem
- Lecture 22: Building Real World Projects – ToDo App, Dashboard, eCommerce

- Lecture 23: Code Review, Refactoring, and Deployment Basics

## **Latest Trends & Advanced Topics (Lectures 24-25/28)**

- Lecture 24: AngularJS to Angular Migration Overview, Ivy Renderer, Angular CLI
- Lecture 25: Exploring Angular Elements, Angular Universal (SSR), Angular Material Updates
- Optional: Lecture 26-28: Advanced UI/UX, State Management Patterns, Mobile Development with Ionic & NativeScript

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