

**Course Durations: 35 Hours**

**Course Mode: Online/Offline**

## About Company:

EduNextgen extended arm of Product Innovation Academy is a growing entity in education and career transformation, specializing in today's most in-demand skills. A platform with blended learning programs supported by in-trend technology platforms for learning. Engaging organizations for learning development objectives.

Training courses are designed and updated by renowned industry experts. Our blended learning approach combines online classes, instructor-led live virtual classrooms and virtual teaching assistance.

## About The Course:

Angular is a JavaScript framework which is used to create scalable, enterprise, and performant client side web applications. This training provides you the skills needed to create dynamic Single Page Web Applications. This Training covers various Angular modules in Controllers, Routes, Filters, Dependency Injection and Integration. It includes features of Data Binding and Dependency Injection to reduce coding efforts. Angular Framework adoption being high, the performance management of the application is community driven, indirectly driving better job opportunities.

This course is designed for Web Developers who want to use Angular to build sophisticated applications. Even Students who want to make a career in Web Application Development will find this course useful.

\*The course curriculum and contents are made by industries expert.

## Why This Course:

- Covers advanced topics like Angular Material, Security, Deployments and Working with APIs and many more.
- Hands-on Experience and interview based Assignments and Quizzes.
- Industry Grade real-time Projects.
- Live Support (24x7)

## Participants will get the Access to:

- LMS Access
- 50+ Assignments
- 100+ Quizzes
- 5+ Industry Grade Projects
- Live Support via Mail, Call & Screen Sharing
- Course Completion Certificate

## Batch Schedule:

Weekend: 3 Hours per day (Online), 4 Hours per day (Offline)

Weekday: 2 Hours per day (Online), 2 Hours per day (Offline)

**\*Note: All modules are based on practical and hands-on.**

## Course Curriculum

### Module 1: Introduction to Angular (1 hour)

This module will cover about Introduction to Angular, Advantages and setting up Project Environment. Below topics are covered in this module:

- What is Angular Platform
  - Angular Advantages
  - Setup Angular Project and IDE (Integrated Development Environment)
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### Module 2: Basics of Typescript (3 hours)

This module will cover about Typescript, its benefits, Creation of a Class, Interface, Function and many more concepts of Typescript. Below topics are covered in this module:

- What is Typescript
  - Typescript Classes
  - Interface
  - Inheritance
  - Constants and Scoped Variables
  - Arrow function
  - Template String
  - Modules
  - Generics
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### Module 3: Components (2 hours)

This module will cover about Components, Creating Components, Templating, Advantage of Component based App Architecture, Interpolation, Property and Event Binding. Below topics are covered in this module:

- Creating Components
  - Templating
  - Interpolation
  - Property Binding
  - Event Binding
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### Module 4: Components and Data Binding Advance (2 hours)

This module will cover some Advance Concepts of Components, pass data values from one Component to another Component, Application Strategies and Encapsulating Component Styles. Below topics are covered in this module:

- Splitting Apps into Components
  - Nesting Components
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- Component Lifecycle
  - Element Ref
  - Encapsulating Component Styles
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## Module 5: Directives (2 hours)

This module will cover Directives and its types and using Directives and Creating Custom Directives. Below topics are covered in this module:

- Attribute Directives
  - Structural Directives
  - Creating basic Attribute Directives
  - Using the Renderer to build a better Attribute Directive
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## Module 6: Services and Dependency Injection (2 hours)

This module will cover about Building, Registering and Injecting Service. Introduction to Dependency Injection, Injectors and Providers, Registering Providers. Below topics are covered in this module:

- Building Service
  - Registering Service
  - Injecting Service
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## Module 7: Observables (2 hours)

This module will cover about Observables, Building Observables and using Operators. Below topics are covered in this module:

- Understanding Observables
  - Building & Using a First Simple Observable
  - Building & Using a Custom Observable from Scratch
  - Understanding Observable Operators
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## Module 8: Pipes (2 hours)

This module will cover about Pipes, Creating a Pipe, using Built-in Pipes. Below topics are covered in this module:

- Using Inbuilt Pipes
  - Creating Custom Pipes
  - Chaining Multiple Pipes
  - Parameterizing a Custom Pipe
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## Module 9: Routing (2 hours)

This module will cover about Routing, Configuring the Routes, Child Routes. Below topics are covered in this module:

- How Routing works
  - Configuring Routes
  - Redirecting Route to another Route defining links
  - Using Route Parameters
  - Defining Child Routes
  - Controlling Access to Routes with Route Guard
  - Activating a Route with Code
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## Module 10: Forms (2 hours)

This module will cover form User Input, Template-driven Forms, Form Validation, Reactive Forms, Dynamic Forms. Below topics are covered in this module:

- Template Driven Forms
  - Reactive Forms
  - Form Validations
  - Creating Custom Validations
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## Module 11: Modules (2 hours)

This module will cover about Modules, Creating Module using NgModule, Declarations, Providers, Imports, Bootstrapping, Core Module and Shared Modules. Below topics are covered in this module:

- Why Modules?
  - Creating a Feature Module
  - Adding Component, Pipes and Services
  - Creating a Shared Module
  - Injecting and Accessing Shared Module's Components, Pipes & Services
  - Lazy Loading Module
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## Module 12: Making HTTP Requests (2 hours)

This module will cover about Http Request and how it works with Angular, Communication with backend services over HTTP Protocol, HttpClient as extension of XMLHttpRequest, Making Request of Data, Reading the Response, Error Handling. Below topics are covered in this module:

- Introduction & How Http Requests Work in SPAs
  - Example App & Backend Setup
  - Sending Requests (Example: POST Request)
  - Adjusting Request Headers
  - Sending GET Requests
  - Sending a PUT Request
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- Transform Responses Easily with Observable Operators (map())
  - Using the Returned Data
  - Catching Http Errors
  - Using the "async" Pipe with Http Requests
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## Module 13: Angular Animation (2 hours)

This module will cover about Animations, State & Transitions, Animatable Properties and Keyframes. Below topics are covered in this module:

- Setup
  - States and Transitions
  - Transitioning between two States
  - Animatable Properties and Units
  - Automatic Property Calculation
  - Animation Timing
  - Duration
  - Delay
  - Easing
  - Example
  - Multi-step Animations with Keyframes
  - Parallel Animation Groups
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## Module 14: Testing (2 hours)

This module will cover about Unit Testing, related Tools, and TDD, Introduction to Jasmine Framework, Introduction to Angular CLI, Unit Test Environment and set up using Angular CLI, Other Tool. Below topics are covered in this module:

- Creating the Test Configuration
  - Working with Karma and Jasmine
  - Running the Tests
  - Testing a Controller
  - Testing Logging
  - Testing Other Components
  - Testing a Filter
  - Testing a Directive
  - Testing a Service
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## Module 15: Security (2 hours)

This module will cover about security in Angular, Sanitization and Cross-site Request Forgery. Below topics are covered in this module:

- Security in Angular
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- Sanitization
  - Trusting Values
  - Cross-site Request Forgery
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## Module 16: Advance Topics (4 hours)

This module will cover about some advanced and new features in Angular like Material Design Principle, Change Detection, AoT, Precompiling (AoT), Using ng2-Translate, i18n Custom Attribute and Lifecycle Hooks. Below topics are covered in this module:

- Angular Material
  - Internationalization (i18n)
  - Ahead-of-Time Compilation (AoT)
  - Change Detection
  - Lifecycle Hooks
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## Module 17: Deploying an Angular app (1 hour)

This module will cover about deployment of Angular App in Production Mode. Below topics are covered in this module:

- Introduction to Production Mode
- Deployment Preparations and Important Steps
- Example: Deploying to Github Pages/Heroku/Firebase