



# Angular 10 Training Curriculum

## STRUCTURE



## Angular 10 Training Curriculum

*“Master all concepts of Angular and its different versions to build awesome, reactive web apps right away!”*

### **About Croma Campus:**

Croma Campus Training & Development Private Limited is an education platform since 2010 providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty and industry.

- Hands-On Live Projects
- Simulation Test Papers
- Industry Cases Studies
- 61,640+ Satisfied Learners
- 140+ Training Courses
- 100% Certification Passing Rate
- Live Instructor Classroom / Online Training
- 100% Placement Assistance

### **Course Objectives:**

- All Angular topics in one course with loads of Examples
- Learn Angular Framework in-depth & Build many real Angular Apps
- Gain Knowledge Components, Directives, Pipe, Service Layer and Observable data stream.
- Consuming HTTP services
- Learn authentication tips using JSON Web Tokens (JWT)
- Complete Responsive Angular 10 Project Step by Step
- Angular interview questions with answers. Tips and tricks. Daily work tasks.

### **Course Description:**

Mastering Angular is a must for developers who want to make a mark in the field of app, desktop and mobile development. It's an extremely popular JavaScript framework that has been widely adopted by organisations because of the unparalleled user experience it provides.

Our comprehensive course on Angular 10 has been designed to help you understand the evolution of Angular from its first to the latest version. On the course completion, you would be able to establish yourself as a front-end developer and build Angular apps with ease.

You will learn through hands-on exercises about the fundamentals such as Forms, Pipes, and CSS Styling to the more complex fundamentals of Routing, Directives, along with exercises on how to build end-to-end, working applications that are highly responsive and interactive.

Our Angular Training Course at Croma Campus is designed as per the Industrial trends with 100% Job Assistance. We have a team of highly experienced professionals' faculties with more than 12 years of experience in Angular and other related Technologies.

Our faculty members are fully aware of industry requirements and ready to deliver full-fledged and industrial based Training to students across India. We provide our students with a perfect platform to learn and explore the subject from corporate trainers & industry experts.

## Croma Campus Training Program Deliverables:

- **Session Recordings** - Original Class Room Voice & Video Recording
- **Training Material** - Soft Copy Handbooks
- **Assignments** | Multiple Hands-on Exercises
- **Test Papers** - We provide **Practice Test** as part of our course to help you prepare for the actual certification exam.
- **Live Case Studies**
- **Live Projects** - Hands-on exercises and Project work. You will work on real time industry-oriented projects and assignments for each module to practice.
- **Key focus on Hands-on exercises and Project work.** You will work on real time industry-oriented projects.
- Faculty with more than **10+ Years of Experience** in the Industry.
- **Technical Resume Designing & Job Assistance:** With more than 100+ Clients across the Globe and we help learners to get a good job in their respective field. We also help learners with resume preparation.
- **Interview Q&A**
- **About Croma Campus Training Certificate:** Croma Campus will provide you with an industry-recognized (Certified by **ISO 9001:2015 & E-Cell IIT Jodhpur**) course completion certificate which has lifelong validity.
- **How I Unlock my Croma Campus Certificate:** Attend Complete Batch & Submit at least One Completed Project.

## Course Content:

### Module 1: Angular Overview

- History of Angular
- The leap from AngularJS to Angular
- What's new in Angular 10
- Angular 10 vs Angular 9
- Desktop Application class User Experience
- Productivity and Tooling
- Performance
- Community
- Full-featured Framework
- Supported Browsers (Angular 10)
- Platform for Targeting Native Mobile not just Web Browsers

### Module 2: All about TypeScript

- Introduction
- What is Typescript?
- Why Typescript?
- Setup and installation
- IDE support
- Different typescript versions
- Typescripts 3.8 for Angular 10

- Scoping using let and const Keywords (ES6)
- Template Literals (ES6)
- Rest and Spread Parameters (ES6)
- De-structuring (ES6)
- Introduction to Types
- Type inference
- Type Annotations
- Number
- Boolean
- String
- Array
- Tuple
- ENUM
- Any
- Void
- Null and Undefined
- Never
- Introduction to Functions
- Using types in functions
- Function as types
- Optional and default parameters
- Arrow functions
- Introduction to Classes
- Inheritance
- Access modifiers
- Getters and setters
- Read-only & static
- Introduction to Interfaces
- Optional properties and methods
- Strict structural contract
- Extending interface
- Implementing interface
- Introduction to Modules
- Import / Export
- Default
- Decorators

### **Module 3: Angular CLI**

- Angular CLI
- Anatomy of the project
- Setting up a workspace
- Updating Angular apps using ng update
- Adding support for external libraries using ng add
- Debugging Angular apps

- Working with Augury
- Using the Angular Language Service with Microsoft VS Code

### **Module 4: Angular building blocks**

- Modules
- Components
- Templates
- Metadata
- Data binding
- Directives
- Services
- Dependency injection
- Angular Ivy

### **Module 5: Angular Modules**

- Why modules?
- How to create modules?
- Built-in modules
- Root Module
- feature module

### **Module 6: Components in Angular**

- Introduction
- @Component decorator
- Component configuration object
- Custom components
- Component with templates
- Inline
- External
- Component with Styles
- Inline
- External
- Angular Elements

### **Module 7: Templates in Angular**

- HTML basic syntax
- Template expressions
- Template syntax
- Attribute, class, and style bindings
- @Input ()
- @Output
- Template reference variables
- Safe navigation operator

## **Module 8: Data binding**

- Interpolation
- Event binding
- Property binding
- two-way binding
- uses and examples

## **Module 9: Angular Directive and Pipes**

- Introduction to Directives
- Built in Structural Directives
- Built in Attribute Directives
- Building Custom Attribute Directives
- Building Custom Structural Directives
- Introduction to Pipes in Angular
- Using Built-in Pipes
- Creating Custom Pipes in Angular
- Pure and Impure Pipes in Angular

## **Module 10: Angular Forms**

- Types of Form in Angular
- Reactive form in Angular
- Dynamically Adding or Removing Form Control (s) or Form Group (s) using Form Array(s)
- Adding Synchronous Custom Validations to your Reactive Form
- Adding Asynchronous Custom Validations to your Reactive Form
- Resetting the value of a form

## **Module 11: Dependency Injections**

- Introduction
- Why DI?
- @Injectable decorator
- Custom service development
- Registering the service with Ng Module using providers key
- Provider Types
- Class
- Factory
- Value

## **Module 12: Angular Routing with Guards**

- Implementing Routing in an Angular App
- Abstracting the user link to a separate component
- Implementing Child Routes
- Path Match and Route Types

- Introduction to Route Guards in Angular
- CanActivate and CanActivateChild Guards in Angular
- CanDeactivate Guard in Angular
- Prefetching Data for a Component using Resolve

### **Module 13: RxJs Primer**

- Introduction
- Why RxJs?
- Observable interface
- Streams
- Operators
- Subscription
- Subject
- Schedulers

### **Module 14: Back-end services, HTTP Client**

- Setup installing the module
- Making a request for JSON data
- Type checking the response
- Error handling
- Sending data to the server
- Making a POST request
- Configuring other parts of the request

### **Module 15: Angular Advanced Features**

- Creating Libraries
- Angular Material Essentials
- Lazy Loading
- Customizing the Angular CLI using the Builder API
- Server Side Rendering with Angular Universal
- Working with Service Workers
- Building a Progressive Web App

### **Module 16: Testing**

- Creating Libraries
- Angular Material Essentials
- Lazy Loading
- Customizing the Angular CLI using the Builder API
- Server Side Rendering with Angular Universal
- Working with Service Workers
- Building a Progressive Web App

## **Module 17: Learn Deployment**

- Manually
- Using the Angular CLI with Ahead-Of-Time (AOT) Compilation and Tree-Shaking (removing unused library code)
- Deployment Platforms for Angular Apps

## **Module 18: Placement Guide**

- Tips to clear an Interview
- Common Interview questions and answers
- Angular Interview Questions and Answers
- Resume Building Guide
- Attempt for Angular Global Certification Exam
- Earn Credentials and Start applying for Jobs