



# Angular

Digital Pioneers

ACADEMY

# Module 1: Introduction to Angular

- Understanding Angular framework and its architecture
- Comparison with other frameworks (React, Vue)
- Setting up the development environment (Angular CLI)
- Creating a basic Angular project

# Module 2: TypeScript Fundamentals

- Introduction to TypeScript
- Types, interfaces, classes, modules
- Arrow functions, generics
- Decorators
- TypeScript in Angular context

# Module 3: Angular Components

- Component lifecycle hooks
- Data binding (property, event, two-way)
- Template syntax
- Directives (structural and attribute)
- Pipes
- Component interaction (parent-child, child-parent)

# Module 4: Angular Services

- Dependency injection
- Creating and injecting services
- Sharing data between components
- RxJS for observable data streams

## **Module 5: Angular Routing**

- Router module and configuration
- Navigation and route parameters
- Lazy loading modules
- Guards and resolvers
- Child routes

## **Module 6: Angular Forms**

- Template-driven forms
- Reactive forms
- Form validation
- Custom validators

## **Module 7: HTTP in Angular**

- HttpClient module
- Making HTTP requests (GET, POST, PUT, DELETE)
- Error handling
- Interceptors

## **Module 8: Angular Material**

- Introduction to Angular Material
- Using pre-built components
- Theming and customization

## **Module 9: Advanced Topics**

- Angular CLI commands
- Deployment strategies
- Performance optimization
- Testing (unit, integration, end-to-end)
- State management (NgRx)

## **Module 10: Real-world Project**

- Building a complete Angular application
- Integrating backend services (optional)
- Deployment to a hosting platform