

## ***COURSE PREREQUISITES***

The course assumes familiarity with these Javascript ES5 & ES6 topics:

- FUNDAMENTALS: Variables, objects, arrays, functions
- SCOPE: closure, hoisting, this, bind, module-pattern, copy by reference/value
- ES6: Arrow-functions, let, const, destructuring, classes, template-strings, modules.
- FUNCTIONAL: map, reduce, filter, forEach

The course assumes delegates may be new to Angular.

## ***Fundamentals: 2 days***

- Working with the Angular build tools: Angular-CLI Node, Npm, Webpack
- The structure of an Angular-app: how modules, components, markup and style connect.
- Angular concepts: components, decorators, interpolation, annotations, lifecycle-hooks.
- Using built-in directives and pipes
- Composing components together using Inputs and Outputs.
- Dependency Injection
- Using custom Typescript types.
- Read JSON data using a service.

## ***Intermediate: 2 days***

- Understanding Observables and implementing them in Angular.
- Using HTTPclient to read/write data to a Node server.
- Forms including custom validation
- Angular router: route parameters, guards.
- Testing Angular with Jasmine and Karma.
- Creating directives.
- Building custom Pipes

## ***Further topics: 1 day***

- Planning the architecture of an Angular app: how to decide on modules, directives, services and components.
- Custom events and loosely-coupled architecture.
- Using the Redux pattern to isolate state.
- Approaches for testing components in isolation.

## ***Future training***

- Security and data modelling.