

VERSION

24

TESBO COURSE

ACADEMY
ELYSIUM
ACADEMY
FULL STACK JS
PROGRAMMER
**ELYSIUM
ACADEMY
FULL STACK JS
PROGRAMMER**

SR. CODE

EAPL/TESBO/TSTC01

COURSE CODE

EATFJ

SUB CATEGORY

FULL STACK DEVELOPMENT

 TOTAL DURATION 180 HOURS	 THEORY TAKEN 130 HOURS	 PRACTICAL TAKEN 50 HOURS
--	--	--

ELYSIUM
ACADEMY
FULL STACK JS
PROGRAMMER
ELYSIUM
ACADEMY

COURSE DESCRIPTION



The Core AngularJS course offers comprehensive training in AngularJS, a powerful JavaScript framework for building dynamic web applications. Participants will learn the core concepts of AngularJS, including directives, modules, controllers, services, and dependency injection.

COURSE GOALS



The goal of the Core AngularJS course is to equip participants with the knowledge and skills needed to become proficient AngularJS developers. By the end of the course, participants will be able to design and develop robust and scalable web applications using AngularJS.

FUTURE SCOPE



Proficiency in AngularJS opens doors to a variety of career opportunities, including roles such as front-end developer, AngularJS developer, web application developer. As AngularJS continues to be widely adopted for building modern web applications, skilled AngularJS developers are in high demand.

01

CHAPTER

Introduction to HTML5

1. Features of HTML5
2. Benefits of Using HTML5
3. Where and How Is HTML5 Used?
4. HTML5 Editors
5. Downloading Visual Studio Code



30
mins



30
mins

02

CHAPTER

Structure of an HTML5 File

1. What Are HTML Tags?
2. Structure of an HTML5 File
3. File and Folder Structure
4. How to Create an HTML5 File?



10
mins



50
mins

03

CHAPTER

HTML5 Basic Building Blocks

1. Heading Tags in HTML
2. HTML5 Quotation and Citation Tags
3. Commenting Out Code in HTML5
4. HTML5 Attributes
5. How to Style in HTML5



10
mins



50
mins

04

CHAPTER

Exploring HTML5 Tags

1. What Are Anchor Tags?
2. What Are Image Tags?
3. What Are Paragraph Tags?
4. What Are Break Tags?
5. What Are Table Tags?
6. List Tags
7. Video Tag
8. Audio Tag



30
mins



1.5
HRS

05

CHAPTER

Building a Form from Scratch with HTML5

1. Form Tags
2. Input Types
3. Input Attributes (Size, Read-Only, Disabled)
4. Additional Input Attributes (Min, Max, Multiple, and Placeholder)
5. Required Inputs



30
mins



1.5
HRS

06

CHAPTER

Block and Inline Elements

1. Introduction
2. Examining Block and Inline Elements



30
mins



1.5
HRS

07

CHAPTER

Exploring HTML5 Tags

1. What Are Anchor Tags?
2. What Are Image Tags?
3. What Are Paragraph Tags?
4. What Are Break Tags?
5. What Are Table Tags?
6. List Tags
7. Video Tag
8. Audio Tag



30
mins



1.5
HRS

08

CHAPTER

Building a Form from Scratch with HTML5

1. Form Tags
2. Input Types
3. Input Attributes (Size, Read-Only, Disabled)
4. Additional Input Attributes (Min, Max, Multiple, and Placeholder)
5. Required Inputs



30
mins



1.5
HRS

09

CHAPTER

Block and Inline Elements

1. Introduction
2. Examining Block and Inline Elements



30
mins



1.5
HRS

10 CHAPTER

Introduction to CSS3

1. Introduction to CSS3
2. Syntax of CSS3
3. Uses of CSS3
4. Types of CSS3
5. Selectors and Colors in CSS3



30
mins



1.5
HRS

11 CHAPTER

Basics Properties of CSS3

1. Background
2. Borders
3. Outline
4. Height and Width
5. Margin and Padding



01
HRS



02
HRS

12 CHAPTER

Typography Properties of CSS3

1. Text Alignment
2. Text Decoration
3. Text Transform
4. Text Spacing
5. Font Family
6. How to Use Font Awesome Icons



20
mins



40
mins

13

CHAPTER

Selectors Properties in Depth of CSS3

1. Positions
2. Pseudo-Classes Part 1
3. Pseudo-Classes part 2
4. Pseudo-Elements



20
mins



40
mins

14

CHAPTER

Extra Features in CSS3

1. Opacity and Important
2. Border-Radius
3. Box Shadow



20
mins



40
mins

15

CHAPTER

Responsive Design with CSS3

1. Grid System
2. Flexbox
3. Media Queries



01
HRS



03
HRS

16

CHAPTER

Introduction to JavaScript

1. Introduction and History of JavaScript
2. Syntax of JavaScript and Overview
3. JavaScript Implementation
4. How to Use HTML Tags in JavaScript



01
HRS



01
HRS

17

CHAPTER

Variables

1. Var in JavaScript
2. Global and Local Var in JavaScript
3. Advanced console.log



15
mins



15
mins

18

CHAPTER

Statements in JavaScript

1. If Statement
2. If Else Statement
3. Condition Ternary Statement
4. Switch Statement
5. If Else If Statement
6. Break and Continue Statement
7. Data Types



20
mins



40
mins

19

CHAPTER

Operators in JavaScript

1. Arithmetic Operator
2. Assignment Operator
3. Comparison Operator



01
HRS



01
HRS

20

CHAPTER

Popup Boxes in JavaScript

1. Alert Boxes
2. Prompt Box



15
mins



45
mins

21

CHAPTER

Events in JavaScript

1. Events in JavaScript



15
mins



45
mins

22

CHAPTER

Loops in JavaScript

1. While Loop
2. Do While Loop
3. For Loop
4. Nested Loop



15
mins



45
mins

23

CHAPTER

Arrays in JavaScript

1. Arrays
2. Modify and Delete Arrays
3. Sort and Reverse Methods
4. Pop and Push Methods



01
HRS



05
HRS

5. Shift and Unshift Methods
6. Concat and Join Methods
7. Slice and Splice Methods
8. The isArray Method
9. Indexof and lastindex Methods
10. The forEach Method
11. The toString(), valueOf(), and fill() Methods
12. Include Method
13. Some and Every Methods
14. Find and findIndex Methods
15. Filter Method

24

CHAPTER

Objects and Methods

1. Objects
2. String and Its Methods
3. JavaScript Number Methods
 - a. Number Methods
 - b. Date Method



01
HRS



04
HRS

25

CHAPTER

DOM Model

1. DOM Model
2. DOM Other Objects
3. DOM Get Methods
4. DOM Styling
5. addEventListener (Events)
6. useCapture
7. classList Method



01
HRS



05
HRS

8. Parent Nodes

9. Children Nodes

10. First and Last Child

11. Next and Previous Siblings

12. Create Element Text Node

13. Append Child and Insert Before

14. Insert Adjacent Element and Insert Adjacent HTML

15. Software Development Training Courses

26

CHAPTER

EVENT

O1. Event Handling

- a. What is Event?
- b. How events work?
- c. Create and change event handler
- d. Mouse events
- e. Keyboard events
- f. The onLoad and onUnload Events
- g. Form events
- h. Event simulation
- i. Event capturing
- j. Event bubbling
- k. Hands on events

O2. Bootstrap

- a. What is bootstraps?
- b. Purpose of bootstraps
- c. Containers
- d. Tables, Images
- e. Colors, Alerts, Buttons
- f. Panels
- g. Spinners, Cards
- h. Drop down, Navbar



02
HRS



04
HRS

27

CHAPTER

PROJECT

O1. Personal Portfolio Website

- a. Create a personal portfolio website to showcase your projects, skills, and resume

O2. Responsive Blog Layout

- a. Design a responsive layout for a blog with multiple posts and a sidebar

O3. To-Do List Application

- a. Build a simple to-do list app where users can add, delete, and mark tasks as completed.

O4. E-commerce Product Page

- a. Design a product page for an e-commerce website, including product images, descriptions, and reviews.

O5. Movie Search App

- a. Build an app to search for movies and display details such as title, release date, and rating.



O6. Interactive Data Visualization Dashboard

a. Develop an interactive dashboard for data visualization using charts and graphs

O7. Social Media Platform UI

a. Design the UI for a social media platform, including user profiles, posts, comments, and notifications.

O8. Task Management System

a. Create a task management system with features like task assignment, progress tracking, and deadlines.

O9. Healthcare Appointment Booking System

a. Build an appointment booking system for a healthcare facility, including patient registration, appointment scheduling, and doctor availability.



28

CHAPTER

GETTING STARTED

O1. Web Development

- a. Full Stack Development
- b. Popular front-end development technologies
- c. Frontend and backend technology combinations for web development?
- d. Advantages of learning full stack development

O2. About MERN

- a. What is MERN?
- b. Purpose of MEAN
- c. Advantages and disadvantages
- d. Applications of MERN
- e. Installation Setup



2.5
HRS



8.5
HRS

29

CHAPTER

EXPRESS AND NODE JS

O1. About Express

- a. What is Express JS?
- b. Why use Express JS?
- c. Structure of Express JS
- d. Installation setup

O2. Important Terminology

- a. Express JS Request
- b. Express.js Response
- c. Get, post
- d. Routing and cookies
- e. File Upload and Middleware
- f. Express.js Scaffolding
- g. Express.js Template

O3. Overview Node JS

- a. What is Node JS?
- b. Purpose of Node JS
- c. Advantages and drawbacks
- d. Structure of Node JS
- e. Installation Setup

O4. Node JS Modules

- a. Functions
- b. Buffer
- c. Module
- d. Modules Types
- e. Core Modules
- f. Local Modules
- g. Modules Exports



03
HRS



09
HRS

O5. Node JS Package Manager

- a. What is NPM
- b. Installing Packages Locally
- c. Installing package globally
- d. Adding dependency in package Json
- e. Updating packages

O6. Creating web server and file system

- a. Creating web server
- b. Sending and Handling HTTP requests
- c. Read file
- d. Writing a file
- e. Opening a file
- f. I/O operations
- g. Core Node JS Debugger

O7. Events

- a. Event Emitter class
- b. Inheriting Events
- c. Returning event emitter
- d. Serving Static Files
- e. Working with Middle Ware
- f. Hands on events

30

CHAPTER

REACT JS – PART 1

O1. About React JS

- a. What is React JS?
- b. Why we used React JS?
- c. Advantages and drawbacks
- d. React Versions
- e. Structure of React JS
- f. Installation setup

O2. About Components

- a. Significance of component architecture
- b. Types of components
- c. Functional
- d. Class based
- e. Pure
- f. Component Composition
- g. Hands on Component

O3. React Components

- a. React component Properties
- b. Component Lifecycle
- c. Updating Components
- d. Mounting Components
- e. Hands on components

O4. JSX

- a. Expressions & Attributes
- b. JSX Basics



2.5
HRS



10.5
HRS

- c. Namespaced Components
- d. Rendering HTML
- e. Rendering React Components
- f. Fragments

O5. Common Terminologies

- a. What is state and props?
- b. Purpose of state and props
- c. Validating props using prop Types
- d. Event handling
- e. Life cycle methods
- f. Handle errors using error boundaries
- g. Context
- h. Purpose of context
- i. Create context
- j. Hooks
- k. Purpose of hooks
- l. Create hooks
- m. Types of hooks
- n. Hands on context and hooks

O6. React Router

- a. Navigating Pages
- b. Understanding React Dom
- c. Types of Router

31

CHAPTER

MONGO DB PART-1

O1. About Mongo DB

- a. What is Mongo DB?
- b. No SQL Database
- c. Advantage over RDBMS
- d. MongoDB Data Types
- e. MongoDB Data Modeling
- f. Installation setup

O2. Mongo DB Operators and commands

- a. Incorporating the Router
- b. Nesting Routes
- c. Route Parameters
- d. Express Middleware
- e. Responding with JSON
- f. Express with View Engine
- g. API/ Server-Side rendering

O3. Database and collections

- a. Create database
- b. Drop Database
- c. Create collections
- d. Drop collections
- e. Hands on database and collections



1.5
HRS



07
HRS

O4. CRUD Operations

- a. CRUD Operations (Update and Delete)
- b. Data Modeling
- c. Model Tree Structure
- d. Schema Validation
- e. Hands on CRUD operations

O5. Documents

- a. Insert documents
- b. Delete documents
- c. Update Documents
- d. Query Documents
- e. MongoDB text search
- f. Partial Updates & Document Limits
- g. Removing Documents
- h. Hands on documents

32

CHAPTER

MONGO DB PART-2

O1. Mongo DB shells

- a. MongoDB Shell
- b. Mongo Collection Methods
- c. Mongo Shell Methods
- d. Cursor methods
- e. Database methods
- f. Hands on Mongo DB shells



02
HRS



06
HRS

O2. Replication and sharding

- a. What is Replication?
- b. Replication Set Members
- c. Replication Data Availability
- d. Replication Set Deployment
- e. Member Configuration Deployment
- f. Export and Import Files
- g. Hands on Replication
- h. What is sharding?
- i. Hands on sharding

O3. Administrating Mongo DB

- a. Administration
- b. MongoDB Back Methods
- c. Hands on

O4. Create New Project

- a. Problem Understanding:
E-Commerce Website
- b. How to create an application
- c. Build Front end
- d. Build back end
- e. Create Mongo DB
- f. Connecting React Applications to
Back-End and build complete full-stack
Applications

33

CHAPTER

MATERIAL UI

O1. Introduction

- a. Advantage of material UI
- b. Material UI vs Base UI
- c. Installation

O2. Material Designs

- a. with styled components
- b. peer dependencies
- c. roboto font
- d. google web fonts
- e. Icons, cdn



1.5
HRS



04
HRS

34

CHAPTER

ANGULAR

- a. What is angular
- b. Angular CLI
- c. Setup a project
- d. Setup Node JS with angular
- e. Create your first app



2.5
HRS



04
HRS

35

CHAPTER

MODULES AND COMPONENTS

- a. What is components in angular JS
- b. What is module in angular JS
- c. Create and start component
- d. Why components are important
- e. Create components using CLI
- f. What is nesting component
- g. Component styles and selectors



02
HRS



04
HRS

36

CHAPTER

DATA BINDING

- a. What is data binding
- b. String interpolation
- c. Property binding
- d. Difference between proper binding and string interpolation
- e. What are binding properties and events
- f. Two way binding


02
HRS


05
HRS

37

CHAPTER

DIRECTIVES IN ANGULAR JS

- a. What is directives
- b. What is ng if and else condition
- c. Ng module
- d. Directive properties


02
HRS


05
HRS

38

CHAPTER

DEPENDENCY INJECTION IN ANGULAR JS

- a. What is dependency injection
- b. What is services
- c. Create data service


02
HRS


4.5
HRS

39

CHAPTER

ROUTING

- a. What is routing
- b. Navigation and its path
- c. Styling of router links


02
HRS


4.5
HRS

Placement Assistance

100%

135+ Professional Courses

Practical Sessions

90%

67+ Global Pacts

Corporate Placements

65%

170+ IT Companies Tie-Up

ELYSIUM
GROUP OF
COMPANIES

**ELYSIUM
ACADEMY**

**PRIVATE
LIMITED**

AUTHORIZED INTERNATIONAL

Partners

