

Angular.JS

Course Outline	Modern JavaScript and programming fundamentals <ul style="list-style-type: none">- Intro to HTML / CSS- ES5/ES6- Become an advanced, confident, and modern JavaScript developer from scratch- JavaScript fundamentals: primitive types, variables, if/else, operators, boolean logic, functions, arrays, objects, loops, conditions, etc.- Modern OOP: Classes, constructors, prototypal inheritance, encapsulation, etc.- Asynchronous JavaScript: Event loop, promises, async/await, AJAX calls and APIs- How to think and work like a developer: problem-solving, researching, workflows- Complex concepts like the 'this' keyword, higher-order functions, closures, etc.- How to architect your code using flowcharts and common patterns
	TypeScript <ul style="list-style-type: none">- Typescript Data Types and Functions- Classes and Interface- TypeScript Supports Type Annotations- TypeScript Parameter Type Annotations- Type Narrowing- Typescript decorators and tsconfig file- Advanced Object Types

	<p>Angular</p> <ul style="list-style-type: none"> - Angular Installation and Basics - Lifecycle Hook and Component Communication - Dependency Injection - HttpClient and RxJs - Routing Basics - Template Driven Forms - Advanced Routing - Route Guards - Reactive Forms - CanDeactivate Guard - Custom Pipes and Errors - Testing Basics
Total duration of the course	120 hours

Python

Course Outline	<ul style="list-style-type: none"> • Introduction • Environment Setup • Github • Basic Operators in Python • Data Types • Strings • Python Lists • Python Tuples • Python Dictionary • Loops and Decision Making • Functions • Global vs. Local variables • Python Modules and Packages • Basic OOPs Concept (Object Oriented Programming) • Decorator, Iterator and Generator Anonymous Function • File Manipulation • Web Development introduction • Introduction to Django • The Basics of Dynamic Web Pages • The Django Template System • Interacting with a Database: Models • The Django Administration Site • Users and Registration • Forms
Total duration of the course	110 hours

DevOps

Course Outline

Networking (switching and routing)

1. **What are computer networks**
2. **TCP/IP and OSI model**
3. **What is IPv4, subnetting**
4. **Switching, purpose of the switch/hub**
5. **Routing, what are routers**
6. **VLAN**
7. **NAT, PAT, DHCP, DNS, FTP, ICMP**

Introduction to operation systems (Windows and Linux)

1. **Windows server 2022 global view**
2. **Windows server roles in general**
3. **Why do we need authentication servers (Active Directory, Radius, etc..)**
4. **Linux in general (CentOS, Ubuntu)**
5. **Difference between Linux distributions, package managers**
6. **Linux basic commands like ls, rm, cp, mv, man, id, who etc...**
7. **Linux file permissions (binary format, chown, chmod, umask)**
8. **Linux logging and monitoring**

Shell scripting (Bash)

1. **Bash syntax**
2. **Variables**
3. **Bash if....else, while, until, for loops**

Python

1. **Python intro, syntax**
2. **Variables and data types, numbers**
3. **Python if....else, while loops, for loops**
4. **Functions and lambda**

Virtualizations (VMware and Hyper-V)

1. **What is virtualization, pros and cons**
2. **Hands on experience with VMware workstation, Hyper-V, Oracle Box**

Cloud Computing (AWS and Azure)

1. **Cloud computing intro**
2. **About AWS and Azure in general**
3. **Manage identities and governance in Azure**
4. **Implement and manage storage in Azure**
5. **Deploy and manage Azure compute resources**
6. **Configure and manage virtual networks for Azure administrators**
7. **Amazon EC2 instance types**
8. **Connectivity to AWS**
9. **Amazon Simple Storage Service**
10. **Amazon EFS, Amazon RDS**
11. **User Permissions and Access in AWS**
12. **Monitoring and Analytics**
13. **AWS Pricing concepts**

Containers (Docker)

1. **What are containers**
2. **Container use cases**
3. **Launching a container**
4. **Publishing the container**
5. **Image Basics**
6. **Building a dockerfile**
- 7.

K8s

1. **K8s Basics**
2. **Building a K8s cluster**
3. **Cluster management**
4. **K8s object management**
5. **Pods and Containers**
6. **Networking**
7. **Services**

Git

1. **Git intro and architecture**
2. **Installation and configuration**
3. **Working with repositories in GIT**
4. **Working with branches in GIT**

	<p>Infrastructure as Code (Terraform)</p> <ul style="list-style-type: none">1. Terraform Fundamentals2. Terraform State3. Terraform Modules4. Terraform CLI <p>CI/CD tools (Jenkins, Azure DevOPS)</p> <ul style="list-style-type: none">1. What is CI/CD (Introduction)2. Jenkins Installation3. Jenkins Graphical User Interface4. Jenkins Plugins5. Freestyle Jobs6. Upstream, Downstream, and Triggers
Total duration of the course	115 hours

Quality Assurance /QA/

Course Outline	<ul style="list-style-type: none">● Fundamental of Testing● Testing during Software Development Life Cycle● Defect Management Process/Testing Documentation● Test Case Development● Workshop: Real project testing, create bugs and design test cases● Static Testing Technique● Black Box Testing Techniques● White Box Testing Technique● Test Management and Control/Test Estimation Mobile testing (Android & IOS)● Agile methodology (Scrum/Kanban)● Database testing (SQL)● Source Control Management● Client-Server Overview (TCP/IP Model)● API testing with Postman● Performance testing with Jmeter● Workshop: API and Performance● Automation testing, Framework introduction● Cypress/JS Introduction Automate manual sample tests with JS + Cypress● Examination● QA Interview preparation
Total duration of the course	55 hours

UI/UX

Course Outline	<ul style="list-style-type: none">• Design Thinking process• Project / Feature List• Persona / Customer journey map• Competitor Analyse• User Flow• Information Architecture• Grid system / Sizing• Typography• Colors• Sketching / Wireframe• Responsive design / Adaptive design/ Firs / Only• UI Elements• General Introduction to Graphic Design• Digital products (1. Landing Page)• Digital products (2. Blog Websites)• Digital products (3. Ecommerce)• Digital products (4. Admin Panel)• Digital products (5. Social Networks)• Interaction Design, Mobile App, UXD, IOS vs• Android• UI KIT / Design System• Prototype, Animations• User Testing
Total duration of the course	65 hours