



# AppCode.

Coding • Cloud • Security • Data Analytics



ACCELERATE YOUR CAREER IN  
SOFTWARE ENGINEERING WITH OUR  
ADVANCE

# FULL STACK SOFTWARE ENGINEERING PROGRAM

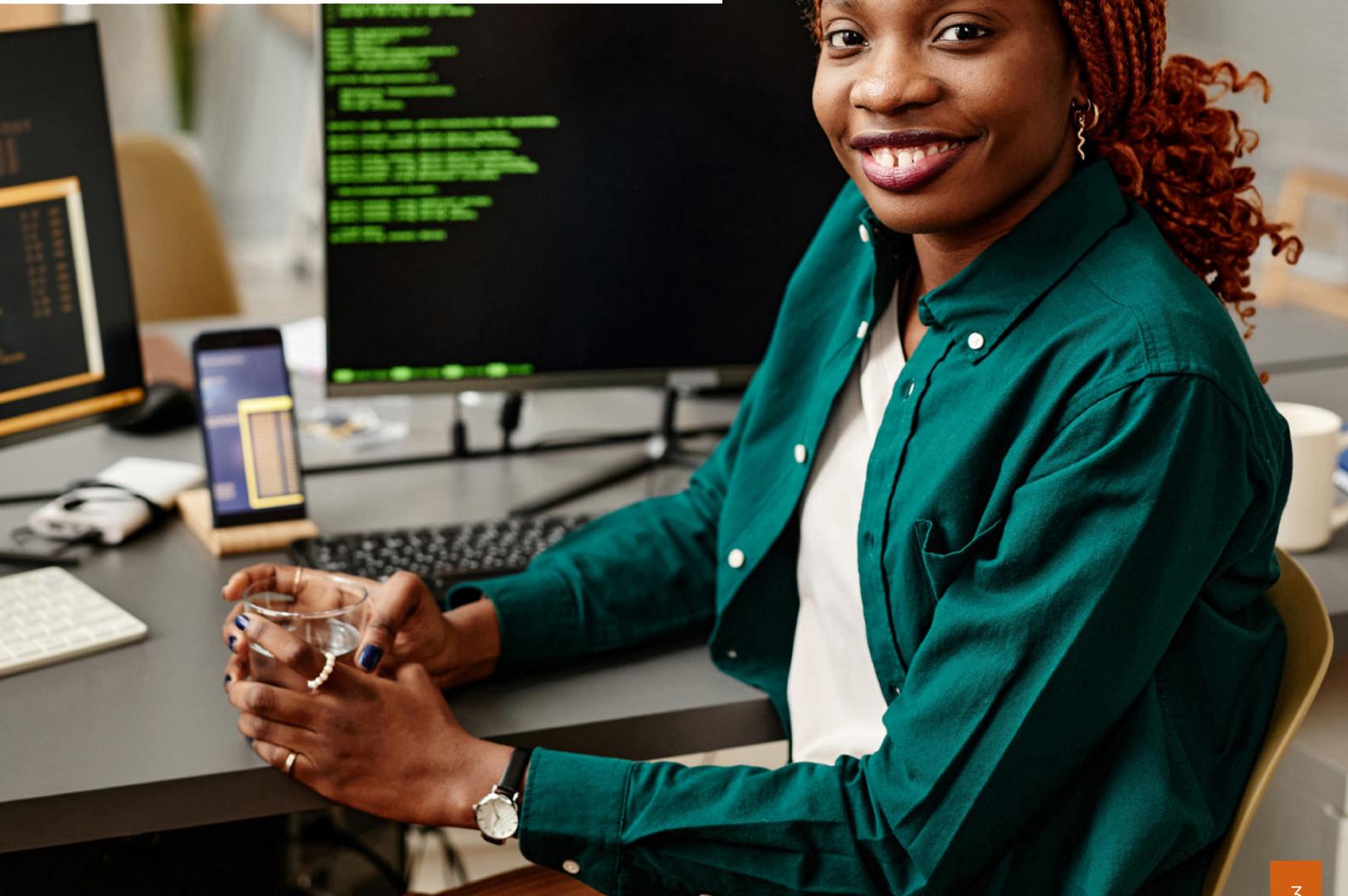
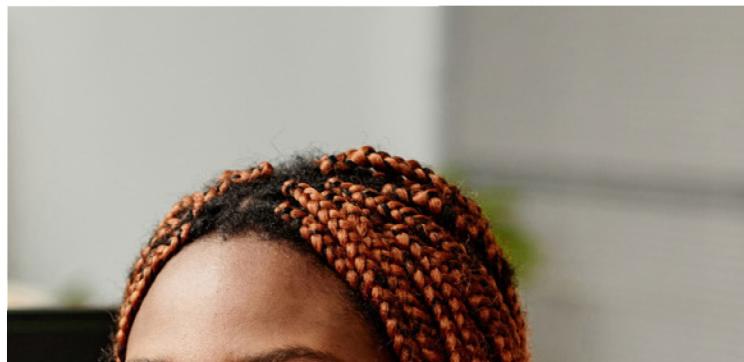
## TAKE ADVANTAGE OF THE NEW UNLIMITED SOFTWARE ENGINEERING OPPORTUNITY

Software developer is an instrumental job role in any organization's core process. They are strong at coding and understand how the applications function at every level: from the fundamentals of server processes to back-end programming as well as database architecture and front-end design. Among the most valued members of a company, they are able to translate between the layers of a system and are crucial for planning top-notch product performance.

As businesses and organizations across the globe continue to enhance their offering of interactive applications and easy-to-use products, the job market for software developers is set to increase by 22% by 2029 (Source: Seed Scientific), while the average growth rate for all other occupations stands at only 4%.



The Professional Certificate in Full Stack Software Development: Building Scalable Cloud Applications is designed for learners to kickstart a career in software development, with hands-on working knowledge of in-demand tools and programming languages. These skills will enable learners to start a software career post program completion.



IF YOU CHOOSE THIS  
PROGRAM, YOU WILL  
LEARN



This comprehensive **9-month program** helps professionals learn how to **code and master a cutting-edge** programming tool



**A learn-by-doing pedagogy** taught by renowned faculty with 18 + hands-on projects and coding assignments to practice as you learn



**Weekly live classes and mentorship sessions** ensure that learners walk away confident in their knowledge and skills



**Ace coding interviews** through resume review, portfolio-building sessions and mock coding tests



# WHAT IS UNIQUE ABOUT THE ADVANCE SOFTWARE ENGINEERING PROGRAM



Taught by **globally-recognized**  
Experts in software engineers



Hands-on learning with  
**industry-relevant projects and  
assignments** that help you build  
a **job-ready portfolio**



**Coding demos** and insights  
from industry practitioners



**Free 4-week** pre-work course  
to understand the basic  
fundamentals of this program



**Mock interviews and live coding**  
case studies from top industries



**Career support** and portfolio  
building sessions



**Certificate**



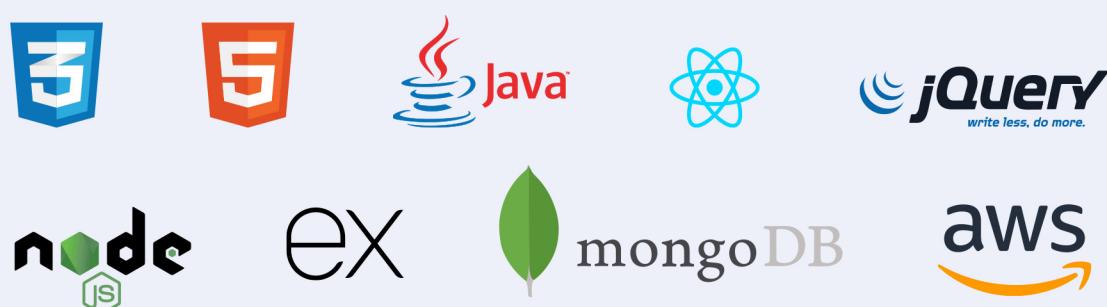
## WHO IS THE PROGRAM FOR



- Recent graduates who want to build a career in software development.
- Early to mid-career tech professionals who want to scale the career ladder with new-age software skills.
- Freelancers and entrepreneurs who want to break into the coding landscape.

- . Design and develop software solutions for companies
- . Outline, creat and design code
- . Monitor performance and modify programs
- . Build software applications using new-age programming languages and tools

## LEARN NEW-AGE TOOLS AND LANGUAGES



## TOP ROLES YOU CAN QUALIFY FOR

Front-End (UI/UX) Developer

Full Stack Software Developer

Backend Developer

SQA Engineer

GAME Developer

# CURRICULUM



PRE-WORK: INTRODUCTION TO PROGRAMMING		1 WEEKS
Introduction to Web Development	Web vs. App Development, Webpage - A Building Block of Web Development, Traditional vs. Modern Web App, Server Side Coding Technologies	
Introduction to MERN Stack	Introduction to Node JS, Express JS, MongoDB, React, Understanding a Basic MERN Application	
Introduction to Git	Various Operations in Git - Git Init, Git Pull, Git Commit, Git Add, Git Push, Git Merge, Git Diff	
Setting up the System	Installation of VS Code, GitHub, MongoDB Compass	
MODULE 1: CS FUNDAMENTALS & FRONTEND DEVELOPMENT		14 WEEKS
HTML	Page Structure, Elements, Tags, Input Attributes, HTML5 Tutorial	
CSS	Syntax, Selectors, Specificity, Properties, Layout	
Basics of JavaScript 1	Comments, Data Types, Operators, Branching and Looping in JS, Functions	
Basics of JavaScript 2	IFE, Scope of Variables, Declaring Objects, Working With Objects, JSON Format, Function Call	
DOM Manipulation	Document Object Model, Working With DOM Objects, querySelector, innerHTML, Manipulating CSS, Adding/Removing Classes, Manipulating Attributes, DOM Event Listener	
JavaScript ES6 and OOP	ES6, Let, Const, Destructuring, Rest Operator, Spread Operator, Defining Class in ES6, Inheritance From Class, OOP (Polymorphism, Encapsulation) Using ES6, Iterables, for Each	

Data Structures Using JS	Arrays, Math Functions, String Functions, Data Structure in JS, Time and Space Complexity, Stack, Linear Search and Binary Search
Advanced JavaScript	Hoisting, Prototype, Strict Mode, Try Catch Block, Promises, Ajax, Async Await, Local Storage, Session Storage
JQuery	Syntax, Selectors, DOM Manipulation, CSS Manipulation, Working With Ajax
ReactJS	Creating React App, JSX, React Components and Props, Styling React Components, React Fragments, React Hooks and Context, Conditional Rendering, React Constructors, React Refs

MODULE 2: DATABASES		5 WEEKS
SQL	Relational Database, Querying, Joining Tables, Creating Database and Adding Business Logic, MySQL Tutorial + Normalization	
NoSQL	Introduction to Mongoose DB (Version of MongoDB), Creating Database, Creating Collections, CRUD Operations, Mongoose Schema and Models	

MODULE 3: BACKEND DEVELOPMENT		8 WEEKS
NodeJS	Rendering HTML, Working With Files, MVC Pattern, Sessions and Cookies, Authentication and Authorization	
ExpressJS	Routing and HTTP Methods, Middleware, Cookies REST API, Error Handling, Integrating React and Express	
Testing	Unit Test Case - Unit Testing Using Open Source Tools, Browser and System Testing Automation	

MODULE 4: CLOUD DEPLOYMENT & DEVOPS - APPROACH 2		7 WEEKS
Cloud Foundations	AWS Console, IAM, Roles, EC2, Lambda, DocumentDB	
DevOps	Cloud Formations, Terraform, CloudWatch for Logs, Nginx, PM2 as Process Manager	
Deployment of MERN App on AWS	Code Deployment Using Code Pipeline and Cloud Formations, Configuring Nginx for Backend and Frontend	

READY TO ADVANCE YOUR CAREER ?

APPLY NOW

[wacglobal.org/apply](http://wacglobal.org/apply)



CONTACT US



059 8044825



[info@wacglobal.org](mailto:info@wacglobal.org)



[www.wacglobal.org](http://www.wacglobal.org)

READY TO ADVANCE YOUR CAREER ?

APPLY NOW

[wacglobal.org/apply](http://wacglobal.org/apply)



059 8044825



[info@wacglobal.org](mailto:info@wacglobal.org)



[www.wacglobal.org](http://www.wacglobal.org)