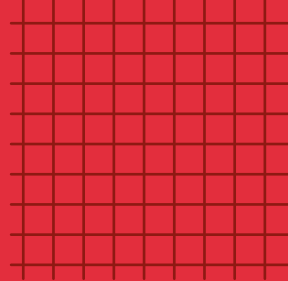


Certification Program in

FULL STACK DEVELOPMENT

Course duration: 6 months





About Us

upGrad campus is a **video learning platform for online education**, with certificate courses specially curated for college goers and young adults. As an affiliate of upGrad, India's largest online higher education company, Campus's goal is to make every graduate job ready, with professional skills and practical know-how for sought-after fields of work.

“Our aim is simple:
We strive to create
high-impact, hands-on
experiences that
prepare learners for
meaningful and
productive careers.”

Ronnie Screwvala

Co-founder & Executive
Chairman, UpGrad



Full stack development is taking the world by storm

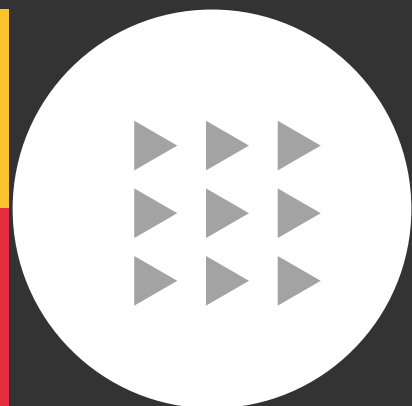
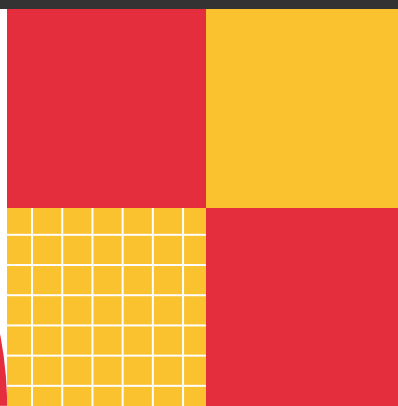
But what is it?

When you navigate easily through a website or see those pretty designs on a website, a full stack developer is at work to make every experience easy for you. A full stack developer has knowledge of each layer of an application and possesses both technical and soft skills to assess a situation. Full Stack Developers are engineers who work on both the client-side and server-side of the software application.

“Full-stack” refers to a group of programming languages and tools a developer learns to handle both the front-end and back-end development of a website and applications.

Who should sign up for our certification course?

If you are a student with an engineering background who aspires to work in a Full Stack Engineer/ Developer position in companies across industries after completing their engineering degree, this is for you.



Why Become a Full Stack Developer?



Tech boom

The IT and Tech industry in India has grown exponentially in the last few years and this industry will be worth around 350 billion by 2025.



No dearth of jobs

According to the United States Bureau of Labour Statistics, there will be 8,53,000 open job roles for Full Stack Developers by the year 2024.



Most sought after in India

In the last year itself, there has been an increase of over 30% of jobs for full-stack developers in India.



High salary

According to a survey by Indeed, the average salary for a talented Full Stack Developer is more than the average salary of any other software developer in the industry.



Learn something new everyday

This job continuously influences you to learn new things constantly. With the very fast-paced technological changes, doing the same work for a long time may bore you. At that particular time, upgrading your skills and knowledge will really help you a lot.



Find what you love most

FSD lets you get comfortable with a wide array of software. It also allows you to dive deep into the areas you like the most.



Why opt for certificate course in full stack development with upGrad Campus?



The best mentors

Learn everything about Full Stack development from the experts in the field,



Customised curriculum

Here we offer you the top skills you need to meander through the world as a full stack developer. You will have an exhaustive curriculum that comes with additional study content that provides extensive programming languages, design tool literacy, and web developer mindset to help students build web pages and apps efficiently and confidently



Strong student support

Strong hand-holding with dedicated student support throughout the program. Live sessions with subject matter experts, discussion forums, and Q&A where queries are answered by experts.



Getting job ready

Students will get to work on case studies that give real insights into the challenges faced by renowned companies in the tech space and can also implement what they have learnt through live projects



All-round development

The object of this program is to make participants confident and skilled Full Stack Developers who are proficient in frontend and backend development. The program intends to make learners familiar with each layer and step of tech stacks involved in building a software product.



Access to jobs

We provide you a pathway to explore and apply to entry-level roles in FSD. The project completed at the end of the course would be beneficial for their resume.

Benefits of the program



Learn skills

The object of this program is to make participants confident and skilled Full Stack Developers who are proficient in frontend and backend development.



Good understanding of programming

In this program, you will possess an intermediate understanding of computer programming, languages, and computational thinking.



Be a problem solver

With this certification course, you can develop innovative thinking along with a problem-solving mindset, and reflect on complete software-related solutions they could generate for different organisations.



Conquer the world

After learning all the key aspects of the program and implementing them through live projects, learners will be able to apply to entry-level jobs or internships in Full Stack Development.



Certificate

Get certified and improve your career opportunities.



Course structure

Live Classes

Live sessions handled by Subject Matter Experts

TA sessions

Interactive doubt clearance sessions, project sessions, Hackathons etc.



Program curriculum

Certification in full stack development

With our certification program, you will be proficient in frontend and backend development with extensive hands-on training. You will also learn how to build robust and scalable websites, back-end APIs, rich and interactive web user interfaces.

Foundations of Programming (Preparatory Course)

On platform

Foundations of Programming (Crash Course)

Topics covered:

- Live session on Introduction to Java
- Operators and Conditionals Loops and Methods
- Strings and Arrays



01 GIT AND OBJECT-ORIENTED ANALYSIS, DESIGN & PROGRAMMING

Topics covered

- Version Control System – Git
- TA Session- Git Usage
- General Introduction to OOP
- Object-Oriented Programming – Abstraction
- Object-Oriented Programming – Encapsulation
- Object-Oriented Programming – Inheritance
- Object-Oriented Programming – Polymorphism
- Object-Oriented Analysis and Design – I

02 DATA STRUCTURES & ALGORITHMS

Topics covered

- Analysis of Algorithm
- Bit Manipulation-I
- TA Session- Coding
- Mathematics
- Recursion
- Arrays
- Searching Algorithms
- Basic Sorting Algorithms
- Advanced Sorting Algorithms-I
- Singly Linked List
- Doubly and Circular Linked List
- Stacks
- Queues

03 INTRODUCTION TO WEB DEVELOPEMENT

Topics covered

- Network Elements and Types of Network
- Network Models
- Networks in Real world
- Introduction to HTML and HTML Elements
- HTML Forms and HTML 5
- Introduction to CSS
- CSS Box Model
- CSS Layouts
- CSS Combinators and Pseudo elements
- CSS Flexbox and CSS Grid
- CSS 3 and CSS Animations
- Bootstrap

04 JAVASCRIPT AND SERVER SIDE COMMUNICATION

Topics covered

- Basics of JavaScript
- Arrays, Objects and Functions in JS
- JS Methods and Introduction to DOM
- DOM Manipulation and Web storage
- Introduction to ES6 and Callbacks and Promises
- Introduction to JSON and AJAX
- Security and Authorization using AJAX



05

ADVANCED FRONTEND DEVELOPMENT USING REACT

Topics covered

- Introduction to React
- Getting Started with React
- React Components
- Props and Event Handling
- React State and Lifecycle
- React Routing
- Introduction to React Hooks
- React Hooks - Part I
- React Hooks Part 2 and Custom hooks
- Forms and Material UI
- Backend Integration
- Redux
- Testing in React
- Course Catalog Project walkthrough

06

SERVER-SIDE DEVELOPMENT USING NODEJS, EXPRESS AND MONGODB

Topics covered

- Introduction to Node.js, Express.js and MongoDB
- Building Web Server in Node.js
- Routes serving static web applications
- Routes serving dynamic web applications
- MongoDB
- Mongoose_ODM
- Mongoose_Relationship Models
- Setting up a Node.js application with Express.js
- Handling Cookies and Sessions in Express.js
- End-to-End App Development
- Integration of backend and frontend - I
- Integration of backend and frontend - II
- Authentication
- Unit Testing, Mocking and deployment

07

CAPSTONE PROJECT

- After sharpening your skills with lectures, it will now be time to get a taste of what the outside world will look like with our Capstone Project where you will be mentored by the best in the industry.

Placement and career support



Help polish your CV

How you introduce yourself to the industry will help you in your path. So an impressive resume is the way to go. With constructive feedback from industry experts, we will make sure your CV stands out.



Make you job ready

Mock interviews with industry experts will prepare you for employers in the real world.



Soft skill training

We will Train you for group discussion and work on your presentation skills.



Get access to upGrad's exclusive job portal

Here you can increase your chances of landing an interview with a prospective employer by three fold.



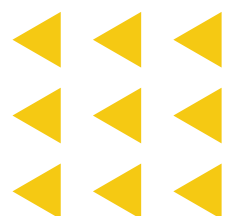
Help you know what's best for you

Our experts will help you identify the best-suited career opportunities for you.



Job offers

You can secure a job after 3-6 months of enrollment with us through our hassle-free process.





Program details

Course starts: Please refer to the website for program start dates

Duration: 6 months

Fee structure: ₹22,500

Program hours: Online sessions: 100+





Start upskilling today

For admissions contact
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admissions.campus@upgrad.com

upGrad
Campus 