PG DIPLOMA IN SOFTWARE DEVELOPMENT

Six specialisations. One destination.

ABOUT UPGRAD

Ronnie Screwvala
Co-founder & Executive Chairman

upGrad

upGrad is an online education provider that enables individuals to develop their professional potential in the most engaging learning environment. Online education is a fundamental disruption to the traditional model and will be having a far-reaching impact. At upGrad, we work towards transforming this online education wave into a tsunami! We take a full stack approach, by leveraging content, technology, marketing and services, to offer quality education at scale in partnership with corporates and academia. This translates into rigorous industry relevant programs for individuals looking for a professional upgrade.

In the last 10 years, digital technology has had a profound impact on billions of lives and thousands of businesses in India and abroad. The pace of growth is only expected to increase further, as the $150 billion Indian IT the industry is set to double its revenue in the next 10 years. This growth will be driven by new age digital products and services, which will create millions of new developer jobs.

The program will prepare our learners to excel in this rapidly evolving technology landscape, by strengthening their core concepts.

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

PG Diploma in Software Development with IIIT-B

Our outstanding faculty, curriculum and pedagogy ensures that our graduate programs are ranked among the best in the country. Our learners have been well received by the industry and have been placed with some of the leading companies in the IT industry.

We have partnered with upGrad to offer a rigorous, Post Graduate Diploma in Software Development with seven specialisations in trending topics like in Full Stack Development, Blockchain Development, Big data and others - a unique and exciting combination of core Computer Science concepts, development principles and industry-led, hands-on application development experience. In this program, IIIT-B's experienced faculty will teach the core concepts of computer science along with important software development principles. Additionally, learners will get opportunities to work on industry-relevant projects and interact with industry experts through upGrad's strong industry network. The program has been designed keeping in mind that the future belongs to the software developers who can think and implement end-to-end.

"As an independent institution and a deemed university, IIIT-B collaborates with the IT industry, leading academic institutions abroad, eminent scientists and industry leaders to offer learners the best possible education."

Prof. S. Sadagopan

Dean - IIIT Bangalore

upGrad as a thought leader in emerging technologies

We have trained:

10K+
Data Scientists

2K+
Full Stack Developers

5K+
Machine Learning Engineers

1.5K+
Big Data Analysts

1K+
Blockchain Developers

Program Highlights

Dedicated Career Assistance

Receive 360 degree career support. Attend mock interviews with hiring managers, resume building workshops and career fairs. Interact with industry mentors.

Blended Learning

Learn with the ease and flexibility of recorded sessions as well as live sessions, designed to ensure a wholesome learning experience.

For the Industry, by the Industry

Learn from 30+ case studies and industry experts who mentor you throughout the program.

Exclusive Access

Gain free access to micro-courses in Data Science and Machine Learning.

6 Specialisations

Choose from 6 specialisations on the basis of your background and career aspirations and get the learning you want.

Personalised Mentorship

Get unparalleled personalised mentorship and doubt resolution from IIIT-B faculty and our panel of industry experts.

Diploma from IIIT-B

Get certified by IIIT-B and gain alumni status on successful completion of the program.

Learn from Academy & Industry Experts

Chandrashekar Ramanathan
Dean - Academics, IIIT-B

Tricha Anjali
Associate Dean, IIIT-B

TK Srikant
Faculty in charge, Computing, IIIT-B

Sujit Kumar Chakrabarti
Assistant Professor, IIIT-B

Prof S.Balasubramaniam
Ex-Dean Academics, BITS Pilani

Abhijeet Singh
Sr Software Engineer, Microsoft

Cheng-Han Lee
Ex-Program Manager, Microsoft

Ashutosh Shinde
Engineer Manager, Walmart

Vishawanath Pattanshetti
Sr System Analyst, IBM

Varun Sehgal
Director, freecharge

Nitin Gaur
Director- Blockchain Labs, IBM

Prasanna Lohar
Head-Technology & Innovation, DCB Bank

upGrad Learning Experience

Industry-relevant Curriculum

Designed and taught by best in class industry experts and IIIT Bangalore's faculty.

Blended Learning

Learn with the ease and flexibility of recorded sessions as well as live sessions, designed to ensure a wholesome learning experience

Discussion Forums

Learn from your peers and teaching assistants, and for timely doubt resolution.

Interview Guarantee

3 guaranteed interviews or money back*

Re-learn the Concepts

Get program access for upto 3 years to refresh your concepts

Hands-On Projects

30+ case studies to choose from as well as a Capstone Project to apply learnings.

*Terms and conditions apply

360 degree Career Support by upGrad

- **Placement Support***

Gain exclusive access to upGrad's job openings each quarter, giving you the opportunity to be interviewed by upGrad's hiring partners.

- **upGrad Career Fairs***

Regular hiring drives in major cities across India, giving you the opportunity to interview with upGrad's hiring partners ensuring you get every opportunity you deserve.

- **Personalised Industry Mentorship**

Get mentored on the career front by an experienced professional of your desired domain and receive personalised feedback.

- **Just-in-time interviews**

Get company and role-specific preparation with mock interviews right before your actual interviews.

- **Resume Review**

Obtain specific, personalised inputs on your resume structure and content.

- **Career Mentor**

A dedicated career mentor to get alongside you in helping track your weekly company application targets, coach you on your profile and help you on your career transition journey.

- **Company-specific Preparation**

Get company-specific guidance with access to a carefully curated pool of interview resources per company to ensure that you're interview-ready for the company of your choice.

*These services are currently being offered to Indian residents only

Industry Projects

Build a Social Q&A community like Quora

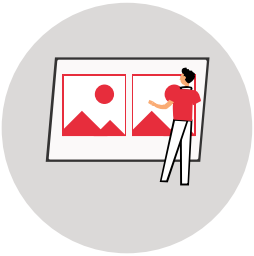


Image viewer web application like Instagram

Image uploader project like Imgur

Blogging website like blogger.com

Decentralised KYC process for banks

Land records and property registration

Supply chain & logistics

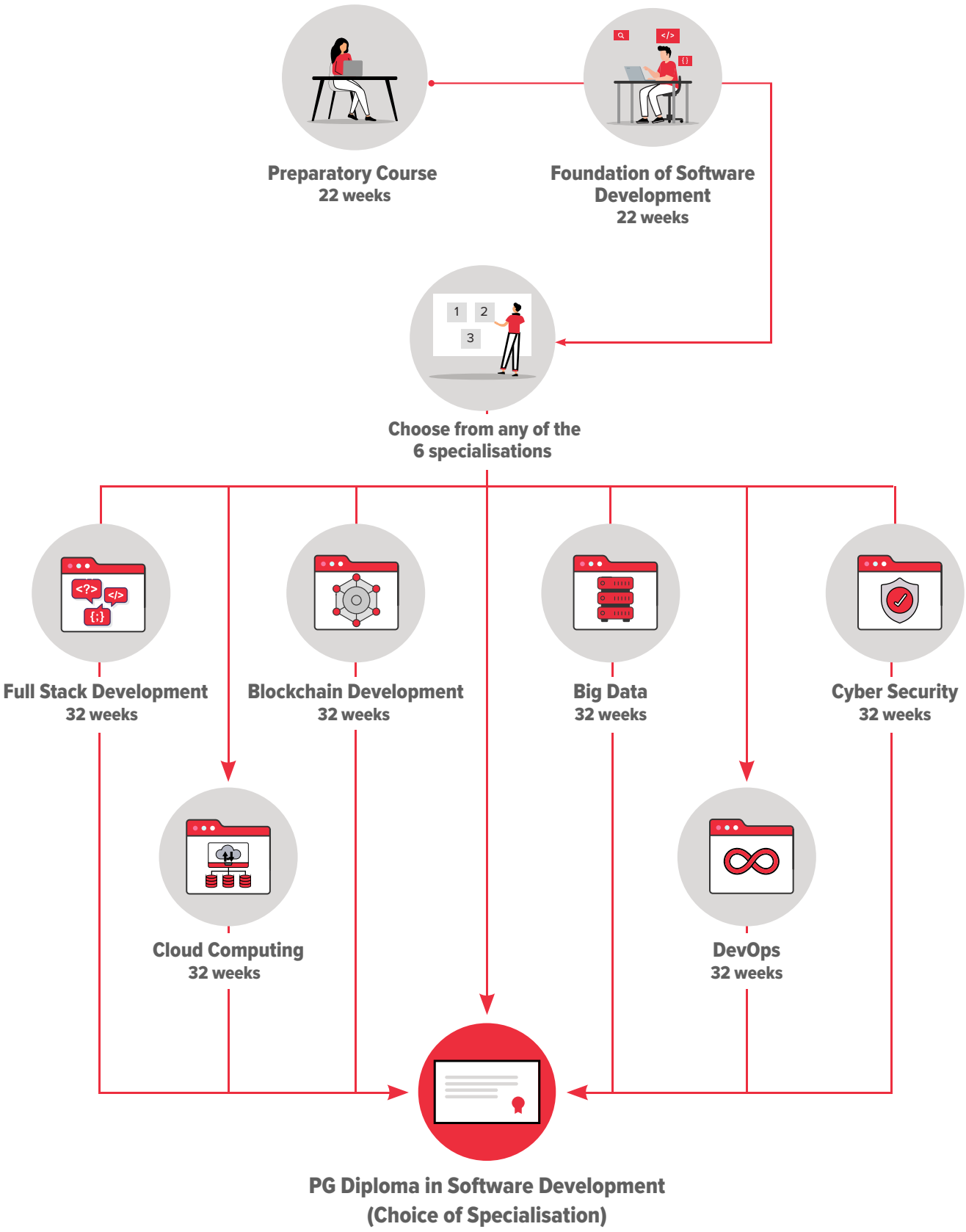
Drug traceability & patient data management- healthcare

Blockchain for cybersecurity

Retail banking

Build music recommendation systems

Our Unique Learning Curve



Full Stack Development Specialisation

Who is this for?

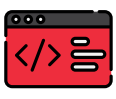
- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, etc across various industries and who wish to acquire expertise in Full Stack Development.**
- **Professional working in quality analyst and testing profiles who wish to make a shift into development roles.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to elevate to CTO Role.**
- **People who are working in non-technical roles and who want to kick-start their career in software development as a Full Stack Developer.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java)

2. Requirements Identification and Understanding the environment(Analytics/IOT/Cloud/Devops)

3. Designing and Prototyping along with Integration and Testing



4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. User Interfaces, User Experience & Design

7. Backend Development

8. Software Architecture

9. Software Deployment

10. Practical Application: Industry project

Blockchain Specialisation

Who is this for?

- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, etc across various industries and who wish to acquire expertise in this new age technology Blockchain.**
- **Professional working in quality analyst and testing profiles who wish to make a shift into development roles of Blockchain Technology.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to elevate to CTO Role.**
- **People who are working in non-technical roles and who want to kick-start their career in software development with specialised knowledge in Blockchain.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java)

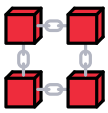
2. Requirements Identification and Understanding the environment(Analytics/IOT/Cloud/Devops)

3. Designing and Prototyping along with Integration and Testing

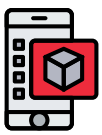
4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. Introduction to Javascripts and Node JS



7. Blockchain Basics & Applications



8. Building a Blockchain Application

9. Foundation & Advanced Blockchain Applications

10. Practical Application: Industry project

Big Data Specialisation

Who is this for?

- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, testers etc across various industries and who wish to acquire expertise in Big Data.**
- **Professional working in data centric roles like data analysts, data scientists who wish to make a shift into big data profiles.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to run big data projects and lead teams.**
- **People who are working in non-technical roles and who want to kick-start their career in software development with specialised knowledge in Big Data.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java)

2. Requirements Identification and Understanding the environment(Analytics/IOT/Cloud/Devops)

3. Designing and Prototyping along with Integration and Testing

4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. Introduction to Python & Libraries

7. Distributed Systems and Programming Models

8. Platforms for Big Data & Large Scale Databases processing

9. Streaming Algorithms and Web mining solutions

10. Practical Application: Industry project

Cloud Computing Specialisation

Who is this for?

- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, etc across various industries and who wish to acquire expertise in Cloud Computing.**
- **Professional working in quality analyst and testing profiles who wish to make a shift into development/engineering roles in Cloud Computing.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to run cloud computing projects and lead teams.**
- **People who are working in non-technical roles and who want to kick-start their career in software development with specialised knowledge in Cloud Computing.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java)

2. Requirements Identification and Understanding the environment(Analytics/IOT/Cloud/Devops)

3. Designing and Prototyping along with Integration and Testing

4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. Cloud Computing - Infrastructure, Services, and Business

7. Visualisation, Virtual Machines, and Deployment on the Cloud

8. Microservices and Building Cloud-Native Applications

9. Deploying Cloud-Native Applications

10. Practical Application: Industry project

Cyber Security Specialisation

Who is this for?

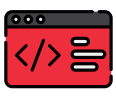
- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, etc across various industries and who wish to acquire expertise in Cyber Security.**
- **Professional working in quality analyst and testing profiles who wish to make a shift into development/engineering roles of Cyber Security.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to elevate to CTO Role.**
- **People who are working in non-technical roles and who want to kick-start their career in software development with specialised knowledge in Cyber Security.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java)

2. Requirements Identification and Understanding the environment

3. Designing and Prototyping along with Integration and Testing



4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. Applied Cryptography and Basic Information Security

7. Computer Networks and Network Security

8. Application Security

9. Practical Application: Industry Project

DevOps Specialisation

Who is this for?

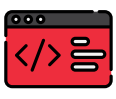
- **Highly driven and ambitious software development professionals working as backend developers, front end developers, IT Professionals, etc across various industries and who wish to acquire expertise in DevOps.**
- **Professional working in quality analyst and testing profiles who wish to make a shift into development/engineering roles of DevOps.**
- **Professionals who are working in industries like IT/ITES, Consulting and many more at senior levels and who need core development skills and cross-functional knowledge to elevate to CTO Role.**

Learning Path

1. Fundamentals of Programming Language with basic data structures (Java).

2. Requirements Identification and Understanding the environment

3. Designing and Prototyping along with Integration and Testing



4. Object Oriented Programming & Software Engineering

5. Data Structures & Algorithms

6. Introduction to Software Engineering and Agile Methodology

7. Deployment Perspective: Agile, Devops, Code, and Versioning

8. DevOps: Continuous Integration (CI) and Continuous Deployment

9. DevOps - Advanced Topics

10. Practical Application: Industry project

Curriculum

COMMON CONTENT

C0. PREPARATORY COURSE

FUNDAMENTALS OF PROGRAMMING LANGUAGE WITH BASIC DATA STRUCTURES (JAVA) — 2 WEEKS

- Learning the fundamentals of Java and its basic building blocks. Start with writing basic Java programs

C1. TOOLKIT FOR EXPERIENTIAL LEARNING

- **ABSTRACTION AND ENCAPSULATION** — 1 WEEK
  Understand & apply the concepts of Abstraction & Encapsulation in OOPs
- **INHERITENCE AND POLYMORPHISM** — 1 WEEK
  Understand & apply the concepts of Inheritance & Polymorphism in OOPs
- **ARRAYS, ARRAYLISTS, ENVIRONMENT SET UP** — 1 WEEK
  Learn about the data structure arrays and ArrayLists, perform some array operations & setup the environment for the upcoming modules
- **ASSIGNMENT (OPTIONAL)**
  Learn to apply your knowledge of OOP to build a simpler version of the Discussion Forum of upGrad platform that can run locally on your computer

C2. EXPERIENTIAL LEARNING

- **REQUIREMENTS IDENTIFICATION** — 4 WEEKS
  "Understand the requirements of a software product and think about the product's features & applications
- **ASSIGNMENT: REQUIREMENTS IDENTIFICATION** — 1 WEEK
  Design Mock UIs, create use-cases for various stakeholders within the application
- **DESIGN AND PROTOTYPING** — 1 WEEK
  Design and architect the blueprint of the product and create a prototype. Connecting all the different components within the product
- **ASSIGNMENT: DESIGN & PROTOTYPING (OPTIONAL)**
  Complete various methods, functions & features wrt to the application

- **MODULE LEVEL IMPLEMENTATION AND UNIT TESTING** — 1 WEEK
  Implement different components of the product, think of and design the flow between them, and find out of possible fault points in it. Perform Unit testing

- **ASSIGNMENT: MODULE LEVEL IMPLEMENTATION**
  Implement various modules within the application

- **INTEGRATION AND TESTING** — 1 WEEK
  Integrate different components of the product to make them work seamlessly. Ensure that any possible fault points are rectified through testing

C3. OOD + SOFTWARE ENGINEERING

- **SDLC AND AGILE METHODOLOGY** — 1 WEEK
  Introduction to Software Development Life Cycle and the various steps involved in the development of software. Learn about Agile methodologies in detail

- **OBJECT ORIENTED DESIGN** — 1 WEEK
  Understand the importance of Objected Oriented Design & UML Diagrams

- **TESTING AND VERSION CONTROL** — 1 WEEK
  Learn about unit testing i.e. testing individual units/components of a software, characteristics of Test Driven Development & Code Refactoring. Along with this you will also learn modern SE practices and skills and contribute to an existing software project or codebase uing version control tools like Git

- **ASSIGNMENT - OOAD** — 1 WEEK
  Design a basic Food Ordering application from scratch using the concepts of SDLC, OOAD, TDD and version control taught in the course

C4. DATA STRUCTURES AND ALGORITHMS

- **ALGORITHM ANALYSIS + RECURSION** — 1 WEEK
  Learn about order of growth, Big-Oh, runtime + memory analysis, and time vs space tradeoff; Learn about algorithmic complexity of problems, and improve the efficiency of their implementations

- **SEARCHING AND SORTING (DIVIDE AND CONQUER INCLUDED)** — 2 WEEKS
  Learn about divide-and-conquer techniques such as merge sort and binary search

- **STACKS & QUEUES** — 1 WEEK
  Learn about Stacks & Queues and their applications

- **SETS AND DICTIONARIES (HASHTABLE, TREES AND BSTS, HEAPS)** — 2 WEEKS
  Understand the usage and application of various important data structures such as Hashtables, Trees, Binary Search Trees and Heaps. Learn about their interesting features, their utility and also find solutions of important problems related to these data structures

- **GRAPHS & GRAPH ALGORITHMS** — 1 WEEK
  Learn various applications and use cases of Graphs. Work on problems which require the application of Graph principles and also practice essential Graph related questions

- **MANDATORY ASSIGNMENT** — 1 WEEK
  An assignment based upon coding questions of all preceding topics

- **GREEDY, DYNAMIC PROGRAMMING - OPTIONAL** — 0 WEEK
  Learn about the greedy algorithm and how to use it to solve optimisation problems. Learn about dynamic programming, which is a popular technique to solve a particular kind of problem where you are required to find the best possible solution from a number of different solutions

Exam Week: Exam (Course 2, Course 3, Course 4) — 1 WEEK

- **INTERVIEW SKILLS** — 2 WEEKS
  Learn about the essential soft skills.(Resume Building, Linkedin Building, Networking, Job Interview Skills, Salary Negotiation, etc.) , Communication Skills (Critical Thinking, Business Writing, Confidence Building, Speaking, Listening, Art of Conversing, Business Etiquettes), etc

Buffer Week — 1 WEEK

FULL STACK DEVELOPMENT

C5. USER INTERFACES & FRONTEND DEVELOPMENT

- **HTML & CSS** — 1 WEEK
  Learn how to create basic websites using HTML & CSS
- **JAVASCRIPT & DOM** — 2 WEEKS
  Learn the basics of JavaScript and DOM manipulation to create an interactive website
- **ADVANCED JAVASCRIPT** — 1 WEEK
  Learn the advanced concepts of JavaScript
- **AJAX & BACKEND INTEGRATION** — 1 WEEK
  Make REST API calls to the backend server and integrate the response accordingly to the front-end
- **WEB DEVELOPMENT FRAMEWORKS (REACT)** — 2 WEEKS
  Write applications using the React Framework and develop professional grade applications
- **ASSIGNMENT/PROJECT - FRONTEND** — 1 WEEK
  Creating the front-end of a blogging website using HTML, CSS and JavaScript

C6. BACKEND DEVELOPMENT

- **MULTITHREADING & STEAMS API** — 0 WEEK
  Learn about multithreading & Streams API
- **MVC ARCHITECTURE** — 1 WEEK
  Understand a popular software design architecture called MVC and implement MVC architecture using Spring MVC. Create the backend of a simple project using Spring Boot framework. Understand the basic concepts of Spring framework
- **DATA AND DATABASES IN APPLICATION DEVELOPMENT (JDBC, ORM)** — 3 WEEKS
  Learn how data and databases form an integral part of the application development. Also, understand the NoSQL databases
- **WEB BACKEND AND REST APIS (INTRODUCTION TO SPRING FRAMEWORK, ORM CONNECTION, REST API)** — 3 WEEKS
  Implement the REST API endpoints using the JPA specifcation and Spring Boot framework
- **ASSIGNMENT/PROJECT - BACKEND (GROUP)** — 1 WEEK
  Develop the backend for a Q&A website like Quora

Exam Week: Exam — 1 WEEK

Buffer Week — 1 WEEK

C7. SOFTWARE ARCHITECTURE AND DEPLOYMENT

- **DISTRIBUTED ARCHITECTURES** — 1 WEEK
  Learn about distributed systems, where the user load is distributed across various server systems, and learn different techniques to efficiently manage user traffic
- **DESIGN PRINCIPLES (SOLID) AND PATTERNS** — 2 WEEKS
  Get introduced to various principles, patterns and styles around which the architectures of a myriad of softwares revolve
- **MICROSERVICES ARCHITECTURE** — 1 WEEK
  Learn about Redis & Kafka, ORM L1 & L2
- **SYSTEM DESIGN** — 1 WEEK
  Understand what a typical full-stack web application system looks like
- **DEVOPS** — 1 WEEK
  Understanding of the process to be followed during the development of an application, from the inception of an idea to its final deployment. Learn about the concept of DevOps and the practices and principles followed to implement it in any company's software development life cycle
- **CLOUD-NATIVE DEPLOYMENT** — 1 WEEK
  Learn how to deploy an application on AWS using Jenkins as a CI/CD tool and following DevOps practices
- **ASSIGNMENT/PROJECT** — 1 WEEK
  Course Assignment/Project

Exam Week: Exam — 1 WEEK

Buffer Week — 1 WEEK

C8. CAPSTONE

- **CAPSTONE PROJECT (GROUP)** — 4 WEEKS
  The capstone project will stitch all the concepts learnt during the program

DEVOPS SPECIALISATION

C5. DEVOPS ESSENTIALS

- **FUNDAMENTALS OF LINUX & SCRIPTING** — 1 WEEK
  Learn the Common linux commands and bash scripting which are frequently used by DevOps engineers in their day to day activities

- **FUNDAMENTALS OF NETWORKING** — 1 WEEK
  Learn the concepts of public/private network, internet protocols, DNS, IP address, OSI model, VPN, tunelling, 3 way handshake, internet protocols such as HTTP and HTTPs, Subnetting - public, private subnets, Nating(Network Address Translation), different security protocols and best practices and SSH

- **INTRODUCTION TO DEVOPS** — 1 WEEK
  Learn about the phases of Software Lifecycle. Get familiar with the concept of Minimum Viable Product (MVP) & Cross-functional Teams. Understand why DevOps evolved as a prominent culture in most of the modern day startups to achieve agility in the software development process

- **GIT AND VERSION CONTROL** — 1 WEEK
  Learn different braching Strategies- Efficient strategies/disciplines for code promotion and code reviews

- **WEB APPLICATION ON CLOUD** — 1 WEEK
  Learn the different architecture patterns of a web application and the ways to deploy it on AWS EC2 instance

- **AWS SERVICES** — 1 WEEK
  Learn deployment of a simple monolithic application on AWS VM using AWS services such as VPC, RDS, S3, CLBs/ALBs. Learn sizing strategies-How to decide the config of the instances for any particular web application?

- **COURSE ASSIGNMENT** — 1 WEEK
  Automating tasks using bash scripting

C6. WEB APPLICATIONS AT SCALE

- **CONTAINERIZATION** — 1 WEEK
  Learn the concepts of docker and the difference between docker and VM. Learn the common commands in docker and deployment of a monolithic application using Docker first on local host and later on AWS VM using AWS ECS service

- **CONTAINERIZATION AT SCALE** — 2 WEEKS
  Using ECS, how to containerise applications at scale. Handling scalability issues with web applications by configuring load balancers, deciding server's geograpghical location, etc

- **CONTINUOUS MONITORING AND LOGGING** — 2 WEEKS
  Learn about what Continuous Monitoring is, its role, impact and the tools & techniques associated with it. Explore and know about Site Reliability Engineering. Aslo, learn about Application Monitoring using Kibana/ELK cluster
- **INTRODUCTION TO CICD AND JENKINS** — 1 WEEK
  Learn about CICD pipleline and get introduced to Jenkins- a tool to create CICD pipelines. Also, learn to setup and configure jobs on Jenkins
- **COURSE ASSIGNMENT** — 1 WEEK
  Deployment of dockerised web application

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C7. CICD PIPELINE, SYSTEM PROVISIONING AND DEVOPS ADVANCED CONCEPTS

- **AUTOMATED TESTING USING JENKINS AND SELENIUM [OPTIONAL]** — 0 WEEK
  Automated Testing. [Selenium and Jenkins as tools for Testing.] Test Automation. [Exercise: Jenkins]. End-to-end Testing. User Acceptance Testing
- **CONTINOUS INTEGRATION** — 1 WEEK
  Learn about build process, continuous integration and automating component assembly. Explore and solve hands-on problems using tools Maven/Gradle and SonarQube
- **CONTINOUS DEPLOYMENT** — 2 WEEKS
  Learn about fully automated deployment and real-time continuous deployment on the Cloud. Practice hands-on cloud deployment on AWS. Learn how fully automated deployment works. (Exercise using shippable.com.) Real-time Continuous Deployment on the Cloud (Amazon Web Services - Exercise and Case Study)
- **SYSTEM PROVISIONING AND CONFIGURATION MANAGEMENT** — 2 WEEKS
  Learn about Configuration Management via tools like Ansible and Terraform
- **INFRASTRUCTURE/NETWORK DIAGRAMS** — 0 WEEK
  Learn how to create network diagrams and system architecture for different scenarios
- **OPTIMISATION** — 0 WEEK
  Learn cost optimisation and performance optimisation using concepts of Serverless Containers, Spot Instances and caching
- **ORCHESTRATION USING KUBERNETTES** — 2 WEEKS
  Learn the ways to orchestrate multiple docker containers using an orchestration tool like Kubernetes. Learn installation, component, architecutre, creating deployment, volumes, secret and creation of CICD pipeline involving Kubernettes

- **COURSE ASSIGNMENT** — 1 WEEK

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C8. CAPSTONE

- **CAPSTONE PROJECT** — 4 WEEKS
  The capstone project will stitch all the concepts learnt during the program

CYBER SECURITY SPECIALISATION

C5. INFORMATION SECURITY AND APPLIED CRYPTOGRAPHY

- **INTRODUCTION TO CYBERSECURITY** — 1 WEEK
  Get introduced to Cybersecurity
- **OS FUNDAMENTALS AND SECURITY** — 2 WEEKS
  Linux CLI, Hardening, Bash Scripting and security in Linux
- **INFORMATION PROTECTION AND ENCRYPTION** — 1 WEEK
  Basic Information Protection: Data Secrecy/Confidentiality and Integrity - Requirements. Encryption as a Solution for Secrecy. Encryption vs Encryption as a computationallly difficult to invert function, Symmetric and Asymmetric encryption techniques. Encryption vs Encoding
- **INTRODUCTION TO CRYPTOGRAPHY** — 1 WEEK
  Cryptography - Confusion and Diffusion Properties. Public Key and Private Key Encryption Techniques (RSA and AES as Examples). Password-baed Envcryption. HSM and PKI
- **CRYPTOGRAPHIC KEY MANAGEMENT** — 1 WEEK
  Key Management. Diffie Helman Key Exchange. Java Cryptography Architecture (JCA). Key Stores. Providers
- **MESSAGE DIGESTS AND DIGITAL SIGNATURES** — 1 WEEK
  Message Digests. Hashes and Signatures. Keyed Hashing. Digital Signatures. Digital Signuares as Solutions for Sender Identity, Message Integrity and Non-repudiation
- **IDENTITY ACCESS MANAGEMENT** — 1 WEEK
  IDAM lifecycle, User Authentication: Passwords and Limitations. Challenge Response Protocols. Replay and Man-in-the-middle Attacks. Freshness / Currency. CAPTCHAS; Multi-factor Authentication; Oauth and OpenId
- **ASSIGNMENT/PROJECT - ACCESS CONTROL** — 1 WEEK
  Course Assignment/Project

C6. NETWORK SECURITY IN ETHICAL HACKING

- **INTRODUCTION TO NETWORK SECURITY AND SPOOFING** — 1 WEEK
  Local Area Networks - Switched Ethernet. Switches and Security. Addresses: MAC and IP addresses. Address Spoofing. ARP protocal and spoofing, SNMP and IGMP protocols, (SNMP, SNPP, SFTP, SSH protocol basics)
- **SECURED NETWORKS SYSTEM WITH FIREWALL** — 2 WEEKS
  Broadcast Domains and Isolation; Virtual LANs. Private vs. Public Addresses. Gateways. Network Address Translation. Demilitarized Zones (DMZs). Firewalls, Access Control, and Firewall Rules

- **PACKET INSPECTION AND ATTACK AGAINST AVAILABILITY** — 1 WEEK
  Packet Inspection, Deep Packet Inspection(Intrusions detection system and Intrusion Prevention System), IP Security, ICMP attacks. TCP and UDP Security. Attacking Availability: Denial-of-Service attacks, Distributed DOS attacks, SSL/TLS , IP Table
- **NETWORK ACCESS CONTROL** — 4 WEEKS
  Insider Attacks. Network Access Control. Proxy (Web) Servers. Forward proxy and reverse proxy
- **SIEM TOOLS AND ADDITIONAL SECURITY MEASURES** — OPTIONAL
  SIEM basics, Logs and Monitoring, Endpoint security measures
- **MALWARE THREATS AND ANALYSIS** — OPTIONAL
  Malware threat and analysis
- **ASSIGNMENT/PROJECT - INTRUSION DETECTION SYSTEM/EXPLOITING VIRTUAL MACHINE** — 1 WEEK
  Course Assignment/Project

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C7. APPLICATION SECURITY IN ETHICAL HACKING AND ADVANCED CONCEPTS IN CYBER SECURITY

- **INTRODUCTION TO APPLICATION SECURITY** — 1 WEEK
  Secure Programming. Information Flow and Security. Buffer Overflow Attacks. Managed Execution - JVM. OWASP top 10
- **WEB-BASED APPLICATIONS AND ASSOCIATED VULNERABILITIES** — 1 WEEK
  Web-based applications: Browsers and Browser Security, CSP Policies. Javascript vulnerabilities and Cross-Site Scripting. XSS and CSRF vulnerabilites
- **COOKIES AND TRACKING** — 1 WEEK
  Cookies and Tracking; User Identities and User profiling
- **DATA AND DATABASE SECURITY** — 2 WEEKS
  Data and Database Security - SQL Injection Attacks; Data access and Access Control, Access Control on views, Data Privacy and Anonymity
- **PHISHING AND OTHER ATTACKS ON IDENTITY** — 1 WEEK
  Phishing and other attacks on Identity(Social Engineering)

- **CLOUD APPLICATION SECURITY** — OPTIONAL
  Cloud application Security: DOS attacks on the cloud; Process security and Data Access - Protection against multi-tenancy; Isolation in VMs and Containers
- **MOBILE SECURITY** — OPTIONAL
  Android Security from Admin perspective
- **PENETRATION TESTING, FUZZING** — OPTIONAL
  Pentesting and tools, expoliting OWASP top 10 vulnerabilities in web aplication
- **REGULATION, COMPLIANCE, AND RISK MANAGEMENT** — 1 WEEK
  NIST, ISO 27001, GDPR
- **ASSIGNMENT/PROJECT - EXPLOIT WEB APPLICATION** — 1 WEEK

Exam Week: Exam	**1 WEEK**
Buffer Week	**1 WEEK**

C8. CAPSTONE

- **CAPSTONE PROJECT** — 4 WEEKS

CLOUD COMPUTING SPECIALISATION

C5. DISTRIBUTED SYSTEMS AND CLOUD & DATABASES

- **INTRODUCTION TO DISTRIBUTED SYSTEMS** — 1 WEEK
  Understand the notion of Distributed Systems and learn about the various intricacies of Distributed Systems
- **INTRODUCTION TO CLOUD (USING AWS)** — 1 WEEK
  Get introduced to the cloud and learn about various cloud services, and there use cases. Understand the concept of virtualisation. Learn about the various intricacies involved in provisioning compute and storage resource on the cloud
- **SQL AND RELATIONAL DATABASE MANGEMENT SYSTEMS + 1 WEEK OPTIONAL** — 1 WEEK
  Get introduced the Relational Database Management System and learn about the techniques to module relational databases. Use SQL to perform various DML and DDL queries on the relational database
- **HANDS-ON WITH NOSQL - MONGODB + 1 WEEK OPTIONAL** — 1 WEEK
  Understand the notion of NoSQL Database, take a hands-on approach and learn to model and query using MongoDB
- **ASSIGNMENT/PROJECT - SCHEMA DESIGN** — 1 WEEK
  Design a data model for an applicaiton using both SQL and NoSQL Databases

C6. DESIGN & DEVELOPENT OF MICROSERVICES

- **INTRODUCTION TO SPRING CORE & SPRING BOOT** — 1 WEEK
  Get introduced to Spring boot framework and learn to develop a hello world web-application using Spring-Boot framework
- **DATA ACCESS LAYER & SERVICE LAYER** — 1 WEEK
  Take a hands-on approach and learn about how to build data and service layer in your application
- **INTRODUCTION TO BACKEND ARCHITECTURE WITH MONOLITHIC APPROACH, SERVICE ORIENTED ARCHITECTURE** — 1 WEEK
  Get introduced to web application the various types of software backend architectures and learn about their use-cases and challenges
- **INTRODUCTION TO MICROSERVICES; DISCOVERY OF MICROSERVICES + DESIGNING APPLICATIONS USING MICROSERVICES[HLD]** — 1 WEEK
  Learn about Microsercies and the use cases and challenges of the Microservices based architecture
- **INTRODUCTION TO REST & CONTROLLER LAYER** — 2 WEEKS
  Get introduced to REST and understand its various intricacies to develop REST APIs

- **AOP - ASPECT ORIENTED PROGRAMMING & APPLICATION SECURITY** — 1 WEEK
  Get introduced to Aspect-Oriented Programming. Learn about the various concepts of exception handling and application security
- **COMMUNICATION AMONG MICROSERVICES** — 1 WEEK
  Learn and implement various microservices communication techniques
- **NON-BLOCKING APPLICATION(MESSENING QUEUES) - KAFKA** — 1 WEEK
  Understand the need for messaging services and learn to integrate them into your application
- **ASSIGNMENT/PROJECT - APPLICATION DEVELOPMENT** — 2 WEEKS
  Use the concept learnt so far and work on a industry grade project

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C7. SERVERLESS DEVELOPMENT AND DEPLOYMENT OF CLOUD-NATIVE APPLICATIONS

- **INTRODUCTION TO LAMBDA/SERVERLESS ARCHITECTURE + SERVERLESS DEVELOPMENT COMPOSING MICROSERVICES** — 1 WEEK
  NOTE- CERTAIN TOPICS NEED TO GO OPTIONAL(+1 WEEK OF OPTIONAL CONTENT)
  Get introduced to serverless architecture and understand its pros-cons and indusry use-case
  Learn to develop services using the serverless approach
- **WEB APPLICATION OPTIMISATION** — 1 WEEK
  Understand and implement various application optimisation techniques commonly used in the industry
- **MICROSERVCIES - DEBUGGING AND TRUOBLE SHOOTING** — 1 WEEK
  Learn and apply various strategies to debug a microservice-based application
- **INTRODUCTION TO SPRING CLOUD AND DEPLOYMENT** — 1 WEEK
  Get introduced to Spring Cloud and learn to deploy microservices-based applications using Spring Cloud
- **CONTAINERS VS. VMS. RESOURCE EFFICIENCY. DOCKERS AS CASE STUDY** — 1 WEEK
  Understand the notion of containers and their use cases. Learn about Docker and create Docker images of your application
- **CONCEPTS OF CLOUD DEPLOYMENT & DEPLYOMENT USING KUBERNETES & SERVERLESS DEPLOYMENT + 1 WEEK OPTIONAL** — 2 WEEKS
  Get introduced to serverless architecture and understand its pros-cons and indusry use-case
  Learn to develop services using the serverless approach

- **CONCEPTS OF CLOUD DEPLOYMENT & DEPLYOMENT USING KUBERNETES & SERVERLESS DEPLOYMENT + 1 WEEK OPTIONAL** — 2 WEEKS
  Understanding the various intricacies involved in deploying a application in cloud.
  Learn to deploy a microservice-based application on Kubernetes.
  Learn to deploy a serverless application on the Cloud

- **DEPLOYING WEB APPLICATIONS WITH AWS ELASTIC BEANSTALK (OPTIONAL)** — 0 WEEK
  Learn about AWS BeanStack and deploy a web application using BeanStack

- **ASSIGNMENT/PROJECT - APPLICATION DEVELOPMENT** — 1 WEEK
  Deploying an application on the Cloud

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C8. CAPSTONE

- **CAPSTONE PROJECT (GROUP)** — 4 WEEKS
  The capstone project will stitch all the concepts learnt during the program

BIG DATA SPECIALISATION

C5. BIG DATA FUNDAMENTALS AND PLATFORMS FOR BIG DATA

- **INTRODUCTION TO BIG DATA + AWS SETUP** — 1 WEEK
  Learn what big data is, its various characteristics, and its determining factors. Understand what cloud and setup AWS account which will be required during the program
- **DIMENSIONAL & RELATIONAL DATA MODELLING** — 2 WEEKS
  Learn and apply the approach to design dimensional and relational data models
- **DISTRIBUTED SYSTEMS AND PROGRAMMING MODEL** — 1 WEEK
  Understand what a distributed system is and learn about the design complication of distributed systems
- **HADOOP AND MAPREDUCE PROGRAMMING** — 1 WEEK
  Understand the world of distributed data processing and storage with Hadoop. Learn to write MapReduce jobs in Python
- **LARGE SCALE DATA PROCESSING WITH APACHE SPARK** — 2 WEEKS
  Get introduced to Apache Spark, a lighting fast big data processing engine. Use Spark to create highly optimised large scale data processing applications
- **ASSIGNMENT/PROJECT** — 1 WEEK
  Solve an assignment to brush up the skills learnt so far

C6. BATCH PROCESSING

- **ETL AND DATA INGESTION- SQOOP AND FLUME** — 1 WEEK
  Get familiar with the challenges involed in data ingestion. Use Sqoop and Flume to ingest structured and unstructured data into Hadoop
- **NOSQL DATABASES - HBASE** — 1 WEEK
  Learn the concepts of NoSQL databases. Understand the working of Apache HBase
- **NOSQL DATABASES - MONGODB(OPTIONAL)** — 0 WEEK
  Get a hands-on understanding of the data model of MongoDB
- **HIVE & QUERYING + 1 WEEK OPTIONAL** — 1 WEEK
  Manage and query a data warehouse with Apache Hive. Learn to write optimised HQL for large scale data analysis
- **AMAZON REDSHIFT** — 1 WEEK
  Learn to deploy a Redshift cluster and use it for querying data

- **ASSIGNMENT/PROJECT** — 2 WEEKS
  Make use of Sqoop, Redshift & Spark to design an ETL data pipeline

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C7. REAL TIME DATA PROCESSING

- **STREAMING ALGOS** — 1 WEEK
  Understand the various core techniques to process real-time streams of data
- **REAL-TIME DATA STREAMING WITH APACHE KAFKA + 1 WEEK OPTIONAL** — 1 WEEK
  Understand the producer-consumer architecture of Apache Kafka. Learn to set up a Kafka cluster for managing real-time data
- **REAL-TIME DATA PROCESSING WITH APACHE SPARK STREAMING** — 2 WEEKS
  Learn about the real-time data processing architecture of Apache Spark. Build Spark Streaming applications to process data in real-time
- **FLINK (OPTIONAL)** — 0 WEEK
  Get introduced to Apache Flink and learn query batch data. Use the DataStream API to create a stream processing application
- **BUILDING AUTOMATED DATA PIPELINES WITH APAHCE AIRFLOW** — 1 WEEK
  Learn to automate ETL data pipelines with Airflow
- **DATA PLATFORM - UPSTAC** — 1 WEEK
  An industry demo to design a big data platform for the 'UPSTAC' application
- **DESIGN & DEPLYOMENT - STREAMING APPLICATIONS** — 1 WEEK
  Use the tools and techniques learned in the course to solve an industry problem
- **ASSIGNMENT/PROJECT** — 1 WEEK
  Build an end-to-end real-time data processing application using Spark Streaming and Kafka

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C8. CAPSTONE

- **CAPSTONE PROJECT (GROUP)** — 4 WEEKS
  The capstone project will stich all the components of big data engineering together

BLOCKCHAIN SPECIALISATION

C5. BLOCKCHAIN: BASICS AND APPLICATIONS

- **NODE FUNDAMENTALS** — 1 WEEK
  In this module, you will learn about the fundamentals of NodeJS

- **BLOCKCHAIN BASICS** — 1 WEEK
  In this module, you will learn about Bitcoin and fundamentals of a blockchain network. Basic concepts like decentralised ledgers, architecture, consensus, transaction flow, etc., is taught using Bitcoin as a reference.

- **BLOCKCHAIN FEATURES** — 1 WEEK
  In this module, you will learn fundamental features of the blockchain network - immutability and transparency. You will also learn about different use cases, different type of blockchain and their use cases. You will be introduced to smart contracts as a concept

- **DISTRIBUTED APPLICATION DEVELOPMENT ON ETHEREUM** — 4 WEEKS
  As a part of this module, you will learn thebasics of ethereum, it's architecture and the different core concepts of it. You will learn about tokens, wallet creation and how to construct a Dapp on ethereum. Solidity is introduced in this module. You will learn basics of smart contracts and how to write them with an example each. This module will also teach you frameworks like Truffle and how it is used. You will be able to set up your own private ethereum network. By the end of the module, you will learn how to deploy a Dapp on a test network like Ropsten

- **ASSIGNMENT/PROJECT** — 1 WEEK
  As a part of this module, you will be building a Dapp on Ethereum. The Dapp will be for a Bank KYC system. You will learn how to create and deploy the whole project on your own using the concepts taught in the previous modules

C6. BUILDING A DISTRIBUTED APPLICATION ON HYPERLEDGER FABRIC

- **HYPERLEDEGR FUNDAMENTALS** — 1 WEEK
  As part of this module, you will learn about Hyperledger and also about Hyperledger Fabric. You will learn the fundamental concepts, components, transaction flow and characteristics of the Hyperledger Fabric with the help of a simple case study

- **FABRIC NETWORK SETUP** — 1 WEEK
  As part of this module, you will look at an existing problem in the industry for which blockchain could act as a solution. You will learn the different steps required to set up the Hyperledger Fabric network on your local system. You will then start the first step of the solution, which is to set up the network on your computers. You will learn about the different configuration files required to set up the network and their importance

- **CHAINCODE DEVELOPMENT** — 2 WEEKS

  As part of this module, you will first learn about the concept of chaincode. Then you will be looking at the chaincode for the problem statement discussed as part of the previous module. Next, you will deploy this chaincode on top of the network that was set up in the previous module. First, this deployment will be done in the 'dev' mode and then after making sure that all the logics are properly implemented, the chaincdoe will be deployed in 'production' mode. You will also learn how to automate the entire steps done till now using script files

- **DAPP DEVELOPMENT** — 1 WEEK

  As part of this module, you will be building a CLI based node applications to interact with the functions defined inside the smart contract. You will be learning about the Software Development Kit for Node.js provided by the Hyperledger Fabric community. You will learn about the different packages that are included in this SDK. Using these packages, you will then start building the node modules to interact with the functions defined inside the smart contracts. You will then test these modules using the Terminal

- **ASSIGNMENT/PROJECT** — 1 WEEK

  The project is on building a blockchain solution for the supply chain managent. As part of the capstone project, you will first learn the problem statement that a blockchain solution will solve when applied to the supply chain. Post this, you will build a solution to tackle the issue of drug counterfeiting in a pharmaceutical supply chain

Exam Week: Exam	1 WEEK
Buffer Week	1 WEEK

C8. FOUNDATIONS OF BLOCKCHAIN/ DISTRIBUTED COMPUTING AND ARCHITECTING BLOCKCHAIN APPLICATIONS

- **DISTRIBUTED CONSENSUS AND CONSISTENCY MODEL** — 2 WEEKS

  In this module, you will learn about different consensus protocols in detail and their use cases. You will learn what are the observed challenges and what are the plans to overcome those challenges. Understand what distributed computing is and what are Distributed ledgers

- **BASIC CRYPTOGRAPHY FOR BLOCKCHAIN** — 1 WEEK

  In this module, you will learn about cryptography and why it is important in a blockchain network. You will learn about some encryption methods using examples. Core concepts like Hashing, Merkle trees, digital signatures are covered in this module

- **UPSTAC COVID APP ARCHITECTING AND DEPLOYMENT** — **2 WEEKS**
  As a part of this module, you will be building an application on Health care management for Covid patients. You will learn how to create user stories, find out which blockchain framework to use and what will be the different tools to create the whole project. You will learn how to code and deploy the backend using smart contracts. Understand how the whole project works as a unit and deploy the solution on cloud. As a part of deployement, you will also be learning about Baas on AWS

- **ARCHITECTING A DEFI APPLICATION** — **1 WEEK**
  In this module, you will learn about DeFi with a use case. You will learn how to create solution for the use case on Ethereum network. You will learn about some adhoc concepts like Network interoperability, ZKP, Light weight clients, etc

- **OTHER BLOCKCAHIN FRAMEWORKS AND THEIR USE CASES** — **1 WEEK**
  As a part of this module, you will be learning about a few more blockchain frameworks other than Ethereum and Hyperledger. You will have an introduction to networks like R3 Corda, Ripple, Iota, etc

- **ASSIGNMENT/PROJECT** — **1 WEEK**
  Course Assignment/Project

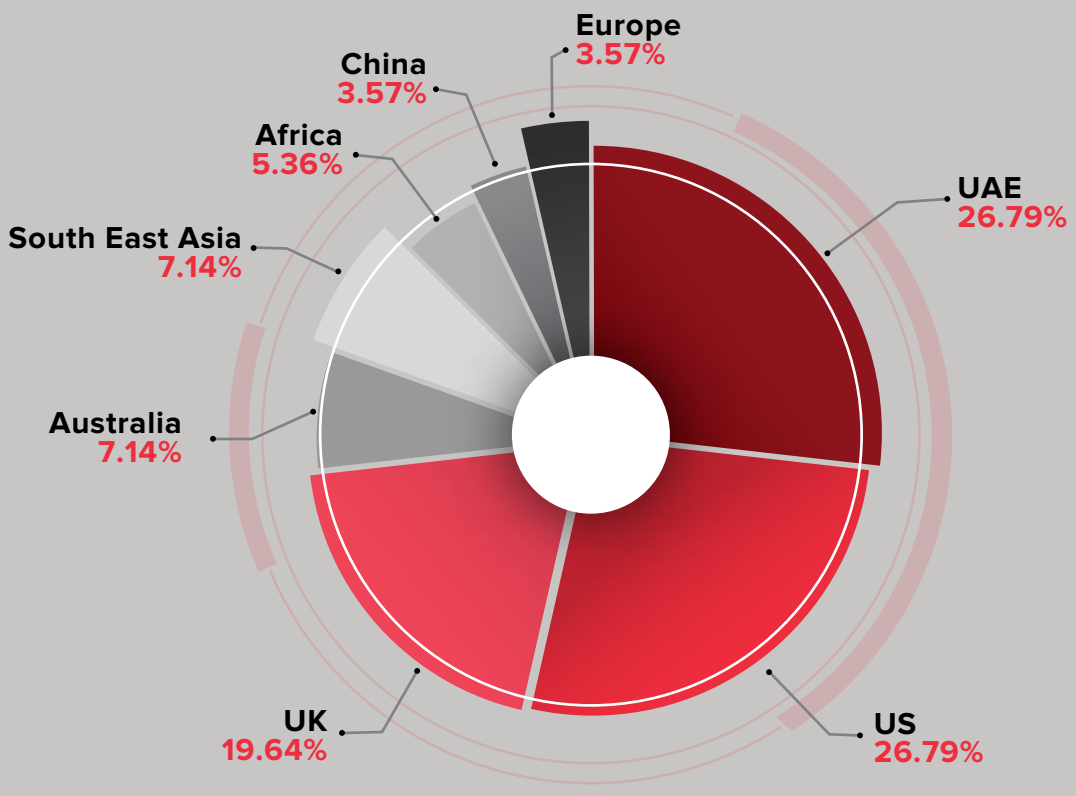
Exam Week: Exam	**1 WEEK**
Buffer Week	**1 WEEK**

C8. CAPSTONE

- **CAPSTONE PROJECT (GROUP)** — **4 WEEKS**
  Apply the concepts learnt till now in building an ICO/Crowdfunding platform

Meet the Class

Opportunity to network with our international learners



Placement Statistics

550+
Enroled Learners

₹51 LPA
Highest Salary

200%
Highest Salary Hike

66%
Average Salary Hike

Our learners work at:

Kotak Mahindra | ICICI Lombard | IDFC Bank | Myntra

Microsoft | Amazon | Accenture | Radio Mirchi

HSBC | J.P.Morgan | Capgemini | Quantzig

TATA Consultancy services | Tech Mahindra

Reliance Mutual Fund | American Express | Lenskart

SWIGGY | Infosys | Jio | IBM | TCS | TechMahindra

Adobe | Siemens | Blackbuck | VISA | Microsoft

VMWare | American Express

Career Transitions

Raunak Singh
Associate Solutions Engineer
Sector: Consulting

Consultant July'19

Ernst & Young

Batch: June 2018

Harshal N
Application Support Engineer
Sector: IT

Fullstack developer | Consultant Oct'19

Capgemini

Batch: Sept 2018

Sandipan C
Software Engineer
Sector: IT

Technical Support Engineer Oct'19

ACQUIA

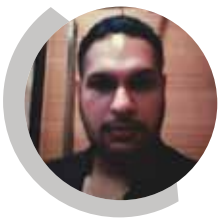
Batch: Sept 2018

Prabhat Tiwari
Technician
Sector: IT

Senior Technician

DELL

Batch: Dec 2018



Ramandeep Singh
APM
Sector: Ecommerce

PM

DELHIVERY

Batch: June 2018

Abhay G
Research Analyst
Sector: IT

Deputy Manager II

ICICI Bank

Batch: June 2018

Vibhu Mishra
Fullstack developer
Sector: IT

Tech Lead

Wipro

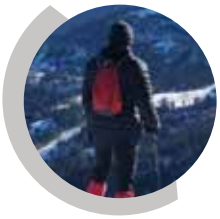
Batch: June 2018

Maulik Trivedi
Fresher/ Intern
Sector: IT

Application Developer (Java)

ORACLE

Batch: Mar 2018



Sachin Gowda
Fresher

Internship

Exathought

Batch: June 2018

Manu Poughat
Trainee
Sector: IT
▼
Analyst
GAIN THEORY
Batch: Dec 2017

Arun Rahul P
Fullstack Developer
Sector: IT
▼
Tech Lead
Wipro
Batch: June 2018

Vinayak Mali
Solutions Architect
Sector: IT
▼
Head of product development
Thynkblynk
Batch: Feb 2019

Prateek Singh
QA Engineer
Sector: IT
▼
Software Technologists 2
PHILIPS
Batch: Dec 2018

Vandana Singh
Assistant System Engineer
Sector: Consulting
▼
Java developer
All Blue Solutions
Batch: Mar 2018

Anirudh Pudhir
Programming Analyst
Sector: IT
▼
Software Engineer
Batch: June 2018

Vaishnav Thej
Associate Professional
Sector: IT
▼
Member Technical
ADP
Batch: June 2018

Deepanshu Ghai
Software Developer
Sector: IT
▼
AEM Developer
Wunderman Thompson
Batch: Jun 2018

Anshu Mishra
Product Solution Engineer
Sector: Consulting
▼
Product Solution Engineer
Sage Intacct
Batch: June 2018

And many more...

Hear from our learners

Joel Varghese
Software Engineer,
Zoreum Blockchain Labs

The program has been very useful and my experience with upGrad and the student mentors at upGrad has been very good. The content taught is very relatable and the method of delivery is also convenient for working professionals like us"

Kriti Jain
Software Engineer,
Ministry of Defence

upGrad teaches complex topics in a very simple manner. The case studies are easily understandable and have added value to my resume and helped me bag a 125% salary hike. The curriculum is very relevant to today's market scenario and the upGrad team has done a good job in bringing education right at our palms "

Akshay Mathur
Software Technologist,
Philips

"The program has taught me a lot and the case studies have been very useful. The student mentors are very helpful and have helped me solve any and every problem that I have faced. It has been a great experience for me, I would definitely recommend the program to my friends. "

Kumar Shubham
SDET - II,
Blackbuck

"With upGrad, my experience has been wonderful. Managing work and studying has been the best decision of my life, thanks to upGrad. While it seemed difficult in the beginning, my student mentor helped me plan my schedule and manage time to maintain a work-life-study balance, which truly saved me! upGrad helped me gain a 60% salary hike "

Program Details & Admission Process

PROGRAM DURATION AND FORMAT

13 months | Online

PROGRAM FEE

INR 2,25,000 (Incl. of all taxes)

PROGRAM START DATES

Please refer to the website for program start dates.

ELIGIBILITY

Bachelor's Degree with 50% or equivalent passing marks. No coding experience required.

WEEKLY COMMITMENT (12-15 hours/week)

6-7 HOURS
Asynchronous learning time.

6-7 HOURS
Assignments and projects.

SELECTION PROCESS

STEP 1: Selection Test

Fill out an application and take a short 20-minute online test with questions

STEP 2: Review and Shortlisting of Suitable Candidates

Our faculty will review all applications, consider the educational and professional background of an applicant and review the test scores wherever applicable. Following this, offer letters will be rolled out so you are assured a great peer group to learn and network with.

STEP 3: Enrolment for Access to Prep Content

Make a quick block payment with assistance from our loan partners where required, receive immediate access to the prep content and begin your upGrad journey.

For further details, call us at +91 9619886686 or drop an email at : international.admissions@upgrad.com

upGrad