6 MONTHS

offenso
Tech School

{AFAC}

Advanced FLUTTER
APP Development

Advanced Flutter App Certification (AFAC)

About
Offenso
Tech School

Offenso Tech School is an innovative **coding and programming academy** founded by the team behind **Offenso Hackers Academy**, Kerala's most-followed cybersecurity institute. Our mission is to **redefine how coding is taught** by moving beyond traditional classroom methods and creating a **practical, industry-aligned learning experience**.

We aim to build the **best academy to learn programming in Kerala**, empowering students and professionals to confidently enter the tech workforce.

#Code the Future

About
FLUTTER APP DEVELOPMENT

The Flutter App Development program equips you with the complete skill set to build **modern, high-performance mobile applications** for both Android and iOS.

Over the span of 6 months, you will master Dart programming, UI/UX, state management, backend integration, real-time apps, offline-first development, and deployment — all through **hands-on projects and real-world applications.**

Course **Outline**

FOUNDATIONS OF DART & FLUTTER

Master Dart fundamentals and build your first UI components using
Flutter's rich widget system.

Develop strong basics in mobile UI design and version control.

- Dart fundamentals (variables, functions, OOP)
- Flutter environment setup
- Widgets & layouts (Row, Column, Container, Stack)
- Navigation (Navigator 1.0)
- Handling user inputs & forms
- Git & GitHub basics
- Mini Project: Flutter UI Showcase

UI/UX DEVELOPMENT & STATE MANAGEMENT

Learn to design interactive, scalable, and visually appealing mobile interfaces with proper
state management.

- Material & Cupertino theming
- Dark mode, custom colors, styling
- Form validation & controllers
- State management: setState, Provider
- Reusable components & clean architecture basics
- Mini Project: Interactive App Interface

NETWORKING, AUTHENTICATION & BACKEND
INTEGRATION

Build apps that communicate with servers and implement secure authentication systems.

- REST API integration (http, Dio, JSON parsing)
- JWT authentication & secure local storage
- Firebase Auth, Firestore, Realtime Database
- Social logins (Google, Facebook, Apple)
- API error handling & data modeling
- Project

DATABASES & OFFLINE-FIRST DEVELOPMENT

Develop apps that work even without internet connectivity.

- Hive, SQLite, SharedPreferences
- Offline caching patterns
- Firestore CRUD operations
- Local → Cloud data syncing
- Data encryption & secure storage
- Project

ADVANCED FEATURES & NATIVE INTEGRATIONS

Integrate powerful real-world features using device hardware and animations.

- Hero animations & Lottie animations
- Custom animations & transitions
- FCM push notifications
- Background tasks
- Native device integrations: camera, GPS, sensors, contacts
- Project

CAPSTONE PROJECT

Develop a fully functional real-time chat and communication app.

- Progressive Chat App
- Firebase + WebRTC
- Text, media & group chat
- Voice & video calling
- Read receipts, typing indicators
- Real-time sync & push notifications

TESTING, DEPLOYMENT & MONITORING

Learn production-level testing, automation, deployment, and monitoring.

- Unit, widget & integration testing
- CI/CD pipelines (GitHub Actions / Codemagic)
- App Store & Play Store deployment
- Versioning & secure app signing
- Firebase Analytics, Crashlytics, Performance Monitoring

Why This Course

- **COMPREHENSIVE CURRICULUM**

  Master everything from UI design to backend integration,
  animations, and deployment.

- **HANDS-ON LEARNING**

  Work on multiple real-world mobile apps and a full capstone project.

- **CAREER-ORIENTED PROGRAM**

  Prepare for in-demand roles like Mobile App Developer,
  Flutter Developer, and Frontend Engineer.

- **INDUSTRY-RELEVANT TOOLS & PRACTICES**

  Firebase, REST APIs, CI/CD, GitHub Actions, offline-first systems,
  native integrations — everything required by modern companies.

- **100% PLACEMENT ASSISTANCE**

  Resume building, mock interviews, and dedicated placement support.

#CODE THE FUTURE

Course **Modules**

1 **FOUNDATIONS OF FLUTTER**
Dart · Widgets · Layouts · Navigation · Mini Projects

2 **UI/UX & STATE MANAGEMENT**
Theming · Forms · Provider · Architecture · Mini Projects

3 **NETWORKING & AUTHENTICATION**
REST APIs · JWT · Firebase Auth · Social Logins

4 **DATABASES & OFFLINE-FIRST**
Hive · SQLite · Firestore · Syncing · Caching

5 **ADVANCED FEATURES**
Animations · Notifications · Native Integrations

6 **CAPSTONE PROJECT**
Real-time Chat + Voice & Video App

7 **TESTING & DEPLOYMENT**
CI/CD · Play Store · App Store · Monitoring

Tools Used

- **Frameworks:** Flutter, Dart

- **State Management:** Provider, Riverpod

- **Backend & Auth:** Firebase (Auth, Firestore, Realtime DB), REST APIs, JWT

- **Networking:** http, Dio

- **Storage:** Hive, SQLite, SharedPreferences, Secure Storage

- **CI/CD:** codemagic

- **Testing:** flutter_test, integration_test

- **Monitoring:** Firebase Analytics, Crashlytics

- **Version Control:** Git & GitHub

Career Opportunities

- **Flutter Developer**

- **Mobile App Developer**

- **Frontend Engineer (Mobile)**

- **App Deployment Engineer**

- **UI/UX Engineer**

- **App Deployment Engineer**

- **Mobile QA & Testing Engineer**

FAQs

Q WHAT TOPICS ARE COVERED IN THE FLUTTER DEVELOPMENT COURSE?

A Dart programming, Flutter UI/UX, state management, REST APIs, Firebase, offline-first development, animations, native integrations, testing, deployment, and monitoring.

Q WHO SHOULD ENROLL IN THIS COURSE?

A Beginners, students, IT professionals, or anyone looking to build mobile applications.

Q IS PRIOR PROGRAMMING EXPERIENCE REQUIRED?

A No — the course starts from the basics and progresses to advanced topics.

Q WHAT IS THE DURATION OF THE COURSE?

A 6 months with a minimum of 8–10 hours per week.

Q WHAT ARE THE SYSTEM REQUIREMENTS?

A "8GB RAM , 512 SSD, i5 processor or equivalent, stable internet, and ability to run Flutter SDK & emulators."

Q WHAT JOB ROLES CAN YOU PURSUE AFTER THE COURSE?

A Mobile UI Engineer, Mobile App Developer, Firebase Developer, Frontend Engineer, and more.