

Native iOS & Android for React Native Developers

Duration: 5 Days (40 Hours)

Participant Prerequisites

- Basic knowledge of JavaScript (ES6+)
- Basic HTML/CSS concepts
- Basic programming concepts
- Understanding of APIs and JSON
- Basic Git knowledge

Hardware Requirements

- Windows 10/11 or macOS(Preferred MacOS)
- Intel i5/Ryzen 5 or Apple M-series
- Minimum 16 GB RAM
- 50 GB free disk space
- Stable Internet connection

Software Requirements

- Node.js LTS
- Visual Studio Code
- Android Studio
- Android SDK
- Java JDK 17
- React Native CLI
- Xcode & CocoaPods (for iOS development on macOS)
- Git

Day 1

Module 1: React Native Fundamentals

- React Native Architecture
- Project Structure
- Development Environment Setup
- Metro Bundler
- JSX Basics
- Components
- Props
- State

- Styling
- Flexbox

Module 2: Navigation & UI Development

- Core Components
- Lists
- Navigation
- Stack Navigation
- Tab Navigation
- Drawer Navigation
- Forms
- User Input
- Responsive UI

Day 2

Module 3: State Management & Data Handling

- Hooks
- Context API
- Redux Toolkit Overview
- Async Storage
- API Integration
- Axios
- JSON Parsing
- Error Handling

Module 4: Device Features

- Permissions
- Camera
- Image Picker
- Location
- File System
- Notifications
- Deep Linking
- Sharing

Day 3

Module 5: Native Modules & Platform APIs

- Native Modules
- Platform-specific Code

- Android Integration
- iOS Integration
- Bridging Concepts
- Third-party SDK Integration

Module 6: Performance Optimization

- Rendering Optimization
- Memoization
- FlatList Optimization
- Lazy Loading
- Code Splitting
- Image Optimization
- Debugging

Day 4

Module 7: Authentication & Security

- Authentication
- JWT
- Secure Storage
- Biometric Authentication
- Environment Variables
- App Permissions

Module 8: Testing & Debugging

- React Native Debugger
- Flipper
- Logcat
- Xcode Logs
- Unit Testing
- Component Testing
- Error Troubleshooting

Day 5

Module 9: Build & Deployment

- Android Build
- iOS Build
- Release Configuration
- App Signing
- Play Store Process
- App Store Process



Module 10: Best Practices & Enterprise Development

- Project Architecture
- Folder Structure
- Reusable Components
- Code Standards
- Version Control
- Production Checklist

