

# DIPLOMA PROGRAM

IN **NATIVE MOBILE**

## APPLICATION DEVELOPMENT

**Program Code:**

2275904

**Course Duration:**

1 Year

**Course Fees:**

Rs. 25,000/- & \$450



## PARUL UNIVERSITY

Parul University is an intellectual and a creative quest for all its stakeholders viz. Indian and International Students, Parents, Alumni, Faculties, Industry & Academic partners as well as society at large. We believe in proliferating our efforts towards quality education and environment. Every year we advance our targets to make headway to our scholarly endeavors.

Our University brings to everyone the best of all worlds. Be it its ethics, global exposure, contemporary educational practices, innovation and growth, PU outshines in all of these. We aim to make successful academic pursuits through entrepreneurship, research, modernization and partnerships with educationally inclined organizations, thus enhancing our position as the finest education destination.

We have been pioneers in accepting various interdisciplinary programs and have included them to our ideal and promising higher education curriculum. Starting with this decade it's our collective effort to empower more youth towards the pursuit to continuously learn, enhance skills, generate better employment opportunities and become competent entrepreneurs. For this very purpose, we are initiating a plurality of short term courses.

## CENTRE FOR CONTINUING EDUCATION & ONLINE LEARNING

In this present day world, each year creates a generation gap which leads to change in the demand of job skills by the employers. Parul University has embarked on filling this gap by enlightening students and working professionals with the most updated skill based education and to transform them into adept industry professionals and talented entrepreneurs.

Parul University is introducing multiple programs under Centre for Continuing Education & Online Learning which are developed as per industry requirements and in compliance with the changing market needs.

## **DUAL DEGREE PROGRAM - LETS YOU EARN TWO CREDENTIALS IN DISTINCT DOMAINS**

With the ever increasing knowledge and skills in today's competitive world, Parul University's Dual Degree opportunities allow you to pursue two degrees at the same time. Pursuing dual degrees will provide you with the most competitive advantage, and will give you diverse knowledge in multiple fields and disciplines. Undergraduate and Postgraduate students can undergo two degree programs in distinct fields. All programs offered by Parul University under Dual Degree are designed in line with NEP 2020 and guidelines suggested by University Grants Commission (UGC).

### **Surprising Benefits of Graduating with a Dual Degree**

- Enhancing Employability and Entrepreneurship Skills
- Increase in Knowledge Base
- Diverse Career Options
- Enhancement of Multi-disciplinary Talent
- Saving of Time and Money

### **PREAMBLE**

Android software development is the process by which new applications are created for devices running the Android operating system. Google states that "Android apps can be written using Kotlin, Java, and C++ languages" using the Android software development kit, while using other languages is also possible. This program is designed to provide students with the knowledge and skills necessary to design, develop, and test native mobile applications for various platforms. The program will focus on the software development life cycle, user-centered design, and the application of various programming languages and development tools. Students will learn to analyze complex mobile app development problems and evaluate the usability and effectiveness of mobile apps. The program will also emphasize the importance of continuous learning and keeping updated with the latest trends and technologies in mobile app development. By the end of the program, students will have the ability to create high-quality, user-friendly mobile applications that meet the needs of users and businesses.

**Program Name:** Diploma Program in Native Mobile Application Development

**Program Type:** Diploma

**Program Duration:** The total duration of the course will be 1 year including practical project work

**For Whom:** Graduate / Post Graduate of any discipline, Working Professionals, Aspirants from Foreign Countries with Bachelor's Degree or equivalent, Marketing / Promotion Executives, Entrepreneurs (SMEs, MSMEs), Consultants, Academicians, Any other Professional. 12th Pass, knowledge of OOP & C++, Diploma Pursuing.

**Who this Course is For:** • Everyone who loved android | • Every developer despite his level  
• Everyone who needs to start his coding career | • Anyone who like to have his own apps published on play store

**Program Fees:** The program fee is Rs. 25,000/- for Indian Candidates and \$450 for International Candidates.

## **PROGRAM HIGHLIGHTS:**

- Programming languages: Students will learn the programming languages commonly used for native app development, such as Java/Swift/C.
- Development Tools: Students will learn about development tools such as Android Studio, Visual Studio Code, which are used to build cross-platform apps.
- User interface design: Students will learn about user interface design principles and how to create visually appealing and user-friendly apps.
- Database management: Students will learn about different types of databases and how to manage and query data within an app.
- Testing and deployment: Students will learn how to test and debug their apps, as well as how to deploy them to app stores and other platforms.
- Mobile app market trends and best practices: Students will gain an understanding of the current trends and best practices in mobile app development.
- Project work: Students will work on real-world projects to gain hands-on experience in the field.
- Industry mentorship: Students will have the opportunity to work with or hear from industry professionals.

## **CAREER OPPORTUNITIES**

A candidate by undergoing this program shall have the following career opportunities:

1. Mobile App Developer
2. Mobile App / UI Developer
3. Java UI Developer
4. Android App Developer
5. Android Development Engineer
6. Associate Android Developer
7. Lead Android Engineer
8. Senior Software Engineer – Android
9. Android Framework Developer
10. Technical Architect – Android
11. Chief Engineer – Android OS Development
12. Android OS Engineer
13. Development Engineer – Android
14. GUI Designer
15. Application Programmer
16. Game Developer
17. Android Application Project Manager

## PROGRAM OBJECTIVES AND OUTCOMES

Program Objectives	Program Outcomes
Recall concepts related to the programming languages useful for developing native mobile applications and software design principles.	Retrieve the syntax and logic of programming languages useful for developing native mobile applications.
Explain the processes involved in developing native mobile applications including software development, life cycle, and user-centered design of the interface for mobiles.	Recognize technical information related to the development of native mobile applications.
Apply programming skills to develop native mobile applications.	Use programming languages for developing native mobile applications.
Test the developed native mobile applications.	Differentiate features of other programming languages used for developing native mobile applications in comparison with java.
Appraise characteristics of distinct approaches to developing native mobile applications.	Critique on developed native mobile applications considering technical aspects and user-friendliness.
Formulate the logic to design native mobile application development.	Develop a native mobile application to cater needs of real-life applications.

## COURSE CURRICULUM:

Semester – I					
Sr. No.	Subject Name	Teaching Scheme (Contact hrs/week)			Credit Assigned
		Theory	Practical/Tutorial	Total	
1	Fundamentals of Software Development	3	2	5	4
2	Java – A Practical Approach	3	4	7	5
3	Basics of Object Oriented Programming Through Java	1	2	3	2
4	Android Development with Hands-on – PHASE I	3	4	7	5
5	Project - I	2	4	6	4
<b>TOTAL</b>					<b>20</b>

**COURSE CURRICULUM:**

<b>Semester – II</b>					
Sr. No.	Subject Name	Teaching Scheme (Contact hrs/week)			Credit Assigned
		Theory	Practical/Tutorial	Total	
1	Java Collection Framework	2	2	4	3
2	Android Development with Hands-on – PHASE II	3	4	7	5
3	Agile Software Development Framework – Scrum	1	2	3	2
4	Fundamentals of UI/UX	2	4	6	4
5	Project - II	2	8	10	6
<b>TOTAL</b>					<b>20</b>