



GUJARAT TECHNOLOGICAL UNIVERSITY
Syllabus for Bachelor of Vocation (B.Voc), 4th Semester
Branch: Software Development
Subject Name: Mobile Application Development-I Lab
Subject Code: 21140205

**With effective
from academic
year 2022-23**

Type of course: Core

Prerequisite: Object Oriented Programming

Rationale: Mobile Application development is becoming need of the day as webpage development was about ten years ago. Most companies are developing their mobile applications so that customers may interact with them on mobiles itself. Android is most popular mobile operating system of today. Android application development course is therefore designed to enable the diploma information technology students to build mobile applications on this platform. This course covers the basics of Android along with required programming codes for developing necessary programming skills for mobile applications. Thus, this course is an important course for Software Development students with possibilities of self-employment.

Teaching and Examination Scheme:

| Teaching Scheme | | | Credits | Examination Marks | | | | Total Marks |
|-----------------|---|---|---------|-------------------|---------|-----------------|----|-------------|
| L | T | P | | Theory Marks | | Practical Marks | | |
| | | | ESE (E) | PA (M) | ESE (V) | PA (I) | | |
| - | - | 2 | 2 | - | - | 30 | 20 | 50 |

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

Experiments to be covered based on the theory covered in class

Content:

| Sr. No. | Content | Total Hrs. | % Weightage |
|---------|--|------------|-------------|
| 1 | Write a simple Application which will print "Hello World!" | 2 | 10 |
| 2 | Design Login activity and implement control events: Use EditText, Checkbox and Buttons | 4 | 10 |
| 3 | Write a simple application that uses menus. | 2 | 10 |
| 4 | Implement Practical 2 using following layouts: 1. Linear Layout 2. Relative Layout 3. Table Layout | 4 | 20 |
| 5 | Create Activities & implement following 1. Implicit intent 2. Explicit Intent 3. StartActivityForResult | 4 | 10 |
| 6 | Write a simple Application that makes use of Style & Themes | 2 | 10 |
| 7 | Write a simple Application that uses Event Handling | 2 | 10 |
| 8 | Write a simple Application that uses Notification. | 4 | 10 |
| 9 | Write a program that shows the use of database. | 4 | 10 |
| | Total | 28 | 100 |

Reference Books:

1. Beginning Android, Mark L Murphy, Wiley India Pvt Ltd
2. Professional Android, Sayed Y Hashimi and Satya Komatineni, Wiley India Pvt Ltd
3. Android in Action, Chris King, Robi Sen and W. Frank Ableson, Manning Publications
4. Learning Android, Ramesh Bangia, Khanna Publishing House



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Course Outcomes:

| Sr. No. | CO Statement | Marks % Weightage |
|----------------|--|------------------------------|
| CO-1 | Understand the concept of open-source mobile development and Android Architecture. | 10 |
| CO-2 | Design Android UI Layout. | 40 |
| CO-3 | Develop applications using UI Control and events. | 40 |
| CO-4 | Develop applications with database. | 10 |

List of Open Source Software/learning website:

Students must refer to following sites to enhance their learning ability.

1. <https://www.udacity.com/course/ud853www.w3.org>
2. www.w3schools.com
3. <https://www.eclipse.org/downloads/www.mysql.com>
4. <http://www.codelearn.org/androidtutoria>