



**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Syllabus for Bachelor of Vocation (B.Voc), 5<sup>th</sup> Semester**  
**Branch: Software Development**  
**Subject Name: Mobile Application Development-II Lab**  
**Subject Code: 21150205**

**Type of course:** Core

**Prerequisite:** Basic Knowledge of OOPS concept and Core java

**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 |   |   | Credit  | Examination Marks |         |                 |    | Total Marks |
|-----------------|---|---|---------|-------------------|---------|-----------------|----|-------------|
| L               | T | P |         | Theory Marks      |         | Practical Marks |    |             |
|                 |   |   | ESE (E) | PA (M)            | ESE (V) | PA (I)          |    |             |
| 0               | 0 | 2 | 2       | 0                 | 0       | 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   | Teaching Hrs. | % Weightage |
|---------|---|---------------|-------------|
| 1       | Write a simple Application that uses UI Layout and Control.             | 4             | 10          |
| 2       | Write a simple Application that makes use of Notifications and Dialogs. | 2             | 10          |
| 3       | Write a simple Application that makes use of Intents.                   | 2             | 10          |
| 4       | Write a simple Application that uses Audio and Video.                   | 4             | 10          |
| 5       | Make a location based app.  | 2             | 10          |
| 6       | Write a simple Application that makes use of Camera                     | 2             | 10          |
| 7       | Write a simple Application that makes use of Services.                  | 4             | 10          |
| 8       | Write a simple Application that makes use of Phone Call.                | 2             | 10          |
| 9       | Write a simple Application that makes use of Send SMS and Send Email.   | 4             | 10          |
| 10      | Write a simple Application that makes use of database.                  | 2             | 10          |
|         | <b>Total</b>  | <b>28</b>     | <b>100</b>  |

**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:**

| <b>Sr. No.</b> | <b>CO Statement</b>  | <b>Marks %<br/>Weightage</b> |
|----------------|--|------------------------------|
| CO-1           | Understand and Apply the knowledge to design user interface using fragments, intents, notification and other components. | 20                           |
| CO-2           | Understand concepts of media in development of applications.   | 20                           |
| CO-3           | Understand and Develop applications using map, location and animation.   | 20                           |
| CO-4           | Understand and Develop applications using content provider and services.   | 20                           |
| CO-5           | Understand and Develop applications using Telephony.   | 20                           |

**List of Open Source Software/learning website:**

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

- <https://www.udacity.com/course/ud853www.w3.org>
- [www.w3schools.com](http://www.w3schools.com)
- <https://www.eclipse.org/downloads/www.mysql.com>
- <http://www.codelearn.org/androidtutorial>