

**INTRODUCTION TO ANDROID APPLICATION DEVELOPMENT LAB****Course Code: CSE 523****Credit Unit: 01****Total Hours: 30****Course Objective:**

This course provides students with the knowledge of fundamentals of Android application; Android Application Development is a hands-on course which is designed for providing essential skills and experiences to the students in developing applications on mobile platform. The hands-on training is effective for beginners and experienced developers for practical Android Code Application.

**SOFTWARE REQUIREMENTS:** Android Studio**Course Contents :**

Lab Experiments are based on the course Introduction to Android Application Development (CSE 503)

**List of experiments/demonstrations:**

1. Installation and setup of java development kit(JDK),setup android SDK,setup eclipse IDE,setup android development tools (ADT) plugins, create android virtual device: **(2 Hour)**
2. Create “Hello World” application. That will display “Hello World” in the middle of the screen using TextView Widget in the red color: **(2 Hour)**
3. Create application for demonstration of android activity life cycle: **(3 Hours)**
4. Create Registration page to demonstration of Basic widgets available in android.: **(2 Hour)**
5. Create sample application with login module. (Check username and password) On successful login, Change TextView “Login Successful”. And on failing login, alert user using Toast “Login fail”: **(3 Hours)**
6. Create login application where you will have to validate username and passwords till the username and password is not validated, login button should remain disabled.: **(3 Hours)**
7. Create and Login application as above. Validate login data and display Error to user using setError() method: **(3 Hour)**
8. Create an application for demonstration of Relative and Table Layout in android: **(2 Hour)**
9. Create an application for demonstration of Scroll view in android: **(3 Hours)**
10. Create an application that will pass two number using Text View to the next screen, and on the next screen display sum of that number: **(3 Hours)**
11. Create an application that will pass two number using Text View to the next screen, and on the next screen display sum of that number: **(2 Hours)**
12. Create spinner with strings taken from resource folder (res >> value folder). On changing spinner value, change background of screen: **(2 Hours)**

**Course Outcome:**

At the end of the course the participant will. Create a Web Application with server controls.

**Examination Scheme:**

IA			EE			
A	PR	Practical Based Test	Major Experiment	Minor Experiment	LR	Viva
5	10	15	35	15	10	10

Note: IA –Internal Assessment, EE- External Exam, A- Attendance, PR- Performance, LR – Lab Record, V – Viva.

**Text & References:****Text:**

- Professional Android

- Application Development, Reto Meier
- Beginning Android, Mark L Murphy
- Pro Android, S.Y Hashimi & Satya Komatineni

**References:**

- Android Studio Development Essentials, Neil Smyth
- The Definitive Guide to SQL Lite, Michael Owens
- Building Android Apps, IN EASY STEPS