# MOBILE APPLICATION DEVELOPMENT

Course Code	20SA8652	Year	III	Semester	П
Course Category	SC	Branch	IT	Course Type	SKILL
Credits	2	L-T-P	1-0-2	Prerequisites	Java Programming
Continuous Internal Evaluation :	-	Semester End Evaluation:	50	Total Marks:	50

	Course Outcomes				
Upon suc	Upon successful completion of the course, the student will be able to				
CO1	Basics of android mobile application design models and styles.	L2			
CO2	Apply activities, dialog boxes, fragments, intents, views and layouts to android apps.	L3			
CO3	Apply views and layouts to android apps.	L3			
CO4	Design and develop mobile apps for given real time scenario using modern tool android studio.	L3			

	Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3				3								2	2
CO2	3	3			3	3				3			2	2
CO3	3	3			3	3				3			2	2
CO4	3	3	3	3	3	3				3			2	2

	Syllabus				
Unit No.	Contents				
I	GETTING STARTED WITH ANDROID PROGRAMMING: What Is Android?, Versions of android, Features of android, Architecture of android.  ACTIVITIES, INTENTS: Understanding activities, Life cycle of an activity.	CO1, CO2			
II	<b>INTENTS:</b> Linking activities using intents, Calling built in apps using intents, Displaying Notifications.	CO1, CO2			
Ш	<b>GETTING TO KNOW ANDROID UI:</b> Understanding the components of screen - Views and view groups, Liner layout, Absolute layout, Table layout, Relative layout, Frame layout, Scroll view.	CO1, CO3,			

		CO4
IV	<b>DISPLAY ORIENTATION, PICTURES and MENUS:</b> Anchoring views, Resizing and repositioning views, Managing changes to screen orientation, Utilizing	· ·
1 4	the action bar, Creating UI programmatically, Using image views to display pictures and Menus.	
	<b>DESIGNING UI WITH VIEWS:</b> Using basic views - Text view, Button, Image	CO1,
V	Button, Edit text, check Box, Toggle button, Radio button, and Radio group views,	CO3, CO4
	Progress bar view and Auto complete text view.	

#### **Lab Course**

Expt. No.	Contents	Mapped CO	
1	Installation of Android studio, its required tools and Android Virtual Device (AVD).	CO1	
2	Develop an android program to displaying your name in AVD.	CO1	
3	Develop an android program to illustrate how to create a basic Activity and applying themes, styles to it.	CO1	
4	Develop an android program to displaying various types of Dialog objects.	CO2	
5	Develop an android program to illustrate linking activities with Intents.	CO2	
6	Develop an android program to illustrate passing data using intent object.	CO2	
7	Develop an android program to illustrate different layouts.	CO3	
8	Build an Android application.	CO4	

## **Learning Resources**

### Text Book

1. Wei-Meng Lee, "Beginning Android Application Development", 1st Edition, John Wiley & Sons, Inc., 2012.

#### References

- 1. Raimon Refols Montane, Laurence Dawson, "Learning and Android Application Development", 1st Edition, PACKT Publishing, 2016.
- 2. Adam Gerber and Clifton Craig, "Learn Android Studio", 1st Edition, Apress, 2015

# e-Resources and other Digital Material

- 1.https://www.coursera.org/specializations/android-app-development#courses
- $2. https://infyspringboard.onwingspan.com/web/en/app/toc/lex\_auth\_0130944503427072002808\_shared/overview$