

*PSOs are to be formulated at institute level

Maharashtra State Board of Technical Education K-1

Teaching Plan (TP)

Academic Year: 2025-26

Institute Code: 0078

Program: TYIF (Param)

Course Code: 316006

Course: Mobile Application Development (MAD)

Semester: Sixth (IF-6K)

Name of faculty: Mrs. D. D. Pawar

Unit No. (Allotted Hrs.)	CO (Mention only Number)	TLO (Mention only Number)	Unit Name and Learning Content Title/ Details	Plan (No. of Lectures)		Actual Execution (From - To & No. of Lectures)		Pedagogy used (Teaching method/ Media)	Remarks
				From	To	From	To		
1 (2)	1	1.1, 1.2, 1.3, 1.4	Basics of Android OS 1.1 Introduction to Android Operating System 1.2 Need and features of Android 1.3 Android Architecture Framework 1.4 Introduction to Android Application Development IDE (Android Studio, Eclipse, Visual Studio with Xamarin etc.)	2 Lectures				Lecture Using Chalk-Board Presentations Video Demonstrations	
				17/12/2025	18/12/2025				
2 (2)	2	2.1, 2.2, 2.3, 2.4 2.5	Introduction to Android Environment 2.1 Use of Java JDK and introduction to Android SDK 2.2 Different Android tools like Android Development Tools (ADT), Android Virtual Devices (AVD) and emulators 2.3 Dalvik Virtual Machine (DVM) , difference between DVM and JVM 2.4 Terminologies in Android : Android Run Time (ART), Over the Air (OTA), Firmware Over The Air (FOTA), Global Positioning System (GPS) , Google Cloud Messaging (GCM) 2.5 Android directory structure	2 Lectures				Lecture Using Chalk-Board Presentations Video Demonstrations	
				24/12/2025	31/12/2025				

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3 (6)	3	3.1, 3.2, 3.3, 3.4	Design UI in Android 3.1 GUI components like : Text View, Edit Text, Button, types of buttons like image button , toggle button, Checkbox, Radiobutton, Radiobutton Group, Progress bar, Scrollbars, List, Custom Toast Alert message etc. 3.2 Introduction to Layouts and types of Layouts : Constraint layout, Linear Layout, Frame Layout, Relative Layout etc.	3 Lectures				Lecture Using Chalk-Board Presenta tions Video Demons trations	
				01/01/2026	08/01/2026				
			3.3 Introduction to views and its types : List view, Grid view, Image view, Scroll view 3.4 Basics of splash screen , adding styles to splash screen	3 Lectures					
				14/01/2026	21/01/2026				
4 (10)	4	4.1, 4.2, 4.3	Android Components and Database Connectivity 4.1 Major components in Android : Intent, Activity, Services, Broadcast Receiver 4.2 Life cycle of Android components like Activity, Broadcast Receiver, Services etc.	3 Lectures				Lecture Using Chalk-Board Presenta tions Video Demons trations	
				22/1/2026	28/01/2026				
			4.3 SQLite/Firebase database, necessity of SQLite/Firebase, creation and connection of the database, extracting data from the databases	7 Lectures					
				29/01/2026	26/02/2026				

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				From	To	From	To		
5 (10)	5	5.1, 5.2, 5.3	Android Application Deployment 5.1 Advanced Concepts : Fragments, Location based services, SMS telephony, Audio capture, Camera, Bluetooth etc. 5.2 Security Concepts : Android security model, declaring and using permissions, using custom permission	8 Lectures				Lecture Using Chalk-Board Presentations Video Demonstrations	
				28/02/2026	25/03/2026				
			5.3 Application Deployment : Process for creating and deploying Android applications on Google Play store, become a publisher	2 Lectures					
				01/04/2026	02/04/2026				

ASSESSMENT METHODOLOGIES/TOOLS

A. Formative assessment (Assessment for Learning)

Continuous assessment based on process and product related performance indicators

Each practical will be assessed considering

60% weightage to process

40% weightage to product

A continuous assessment based on term work

B. Summative Assessment (Assessment of Learning) (SA-TH)

End semester examination, Lab performance, Viva voce

SUGGESTED LEARNING MATERIALS / BOOKS

Sr. No	Author	Title	Publisher with ISBN Number
1	Dixit, Prasanna Kumar	Android	Vikas Publication, New Delhi 2014, ISBN : 9789325977884
2	Maclean David , Komatineni Satya, Allen Grant	Pro Android 5	Apress Publications, 2015, ISBN :978-1-4302-4680-0
3	Hortan, John	Android Programming for Beginners	Packet Publications, 2015, ISBN : 978-1-78588-326-2

LEARNING WEBSITES & PORTALS

Sr. No	Link / Portal	Description
1	https://www.udemy.com/topic/android-development	Introduction to Android Operating system
2	https://onlinecourses.swayam2.ac.in/nou21_ge41/preview	Introduction to Android IDE tools.
3	https://www.geeksforgeeks.org/android-tutorial/	Basics of GUI components, layouts and views in android.
4	https://www.tutorialspoint.com/android/index.htm	Advanced components of android like intents, services, broadcast receiver and activities.
5	https://developer.android.com/training/data-storage/sqlite	Steps to insert and retrieve data from the Databases.
6	https://developer.android.com/guide/topics/permissions/overview	Setting permissions in Android.
7	https://firebase.google.com/docs/database/android/start	Connectivity with Firebase database

Note :

- Teachers are requested to check the creative common license status/financial implications of the suggested online educational resources before use by the students

Mrs. D. D. Pawar
(Name & Signature of Staff)

Ms. M. S. Karande
(Name & Signature of HOD)