MANNAR THIRUMALAI NAICKER COLLEGE

PASUMALAI, MADURAI-625 004

(An Autonomous Institution Re-accredited with 'A' Grade by NAAC)

ANDROID MOBILE APPLICATION DEVELOPMENT

SYLLABUS AND REGULATIONS

Conducted by Department of Computer Science

UNDER
CHOICE BASED CREDIT SYSTEM (CBCS)
(For those who joining in 2019-2020 and after)

Objective

To introduce basic working knowledge in Android Programming

Eligibility of Admission

Undergraduate and Postgraduate Students belonging to Computer Science discipline are eligible for admission in to this course provided that they must havebaisc computer programming knowledge.

Scheme and Regulations

The Certificate course will be conducted during 3 months.

The course will have 60 contact hours

Hours per week will be 4 hours

Hours per week for Theory 4 hours

Total hours per semester will be 60 hours

Examination

The examination the papers will be conducted at the end of the semester.

Maximum marks for each paper is 100 and the passing minimum is 35 marks out of 100.

Paper:	Written	Theory :	75 Marks
	Vivavoce	Internal :	25 Marks

		Total	**100 Marks**

Pattern of the question paper (External Examination)

The question paper may have 3 parts.

Duration of the external examination is 3 hours

Part – A

Ten questions (answer all)   10 X 1   =   10 Marks

Part – B

Five questions ('either ….or 'type)   05X 07=   35 Marks

Part – C

Three questions ('either …. or 'type)   03X10   =   30 Marks

Total   75 Marks

CURRICULAM FOR TRADE OF
ANDROID MOBILE APPLICATION DEVELOPMENT

S. No	Subject	Hours per Week		Marks			
		Theory	Practical	Credits	Internal	External	Total
1	**Android Mobile Application Development**	2		1	25	75	100
2	**Android Mobile Application Development -Lab**	-	(2)	1	40	60	100
	Total	2	2	2	65	135	200

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
CERTIFICATE COURSE IN ANDROID MOBILE
APPLICATION DEVELOPMET
Course Structure – Semester CBCS (w.e.f.2019-2020)

Programme : Android Mobile Application Development   **Paper   : Certificate Course**
                                                          Hours   : 45
Subject Code :   **Credits : 01**

ANDROID MOBILE APPLICATION DEVELOPMENT

Course Outcomes:
CO1: To create an Android project with Android Studio and run a debuggable version of the app.
CO2: Learn some Android architecture and the key principles underlying its design.
CO3: Understanding of the processes that are involved in an **Android developed application** and familiar with **Android development** tools and user interface.
CO4: Design and develop user Interfaces for the Android platform

UNIT I

Getting Started with Android Programming: Introduction **–** What is Android? – **Obtaining the Required Tools**.**Android Activities , Fragments and Intents**: Understanding Activities – Linking Activities Using Intents – Fragments – Calling Built in Application Using Intents.

UNIT II

Android   User   Interface   : Understanding   the   Components   of   a   Screen**. Designing   Your   User   Interface   with   Views:** Using   Basic   Views   **–** Using Picker Views**–** Using List Views to Display Long List.

UNIT III

Displaying Picture and Menus with Views: Using Image View to Display Pictures – Using Menus with Views .**Data Persistence**: Creating and Using Databases. **Content Providers:** Using a Content Provider**.**

UNIT IV

Messaging: SMS Messaging – Sending Email**. Location- Base Services:**
Displaying Maps – Getting Location Data – Monitoring a Location**.**

UNIT V

 Networking : Consuming Web Service Using HTTP. **Publishing Android Applications:**Preparing for Publishing – Deploying APK Files**.**

TEXT BOOKS:

1. Wei-Meng Lee, **Beginning Android 4 Application Development**, Wiley India Pvt. Ltd., First Edition, New Delhi, 2012.

Unit I:	Chapters: 1, 2.
Unit II:	Chapters: 3, 4.
Unit III:	Chapters: 5, 6,7.
Unit IV:	Chapters: 8, 9.
Unit V:	Chapters: 10, 12.

Reference books:

1. John Horton, **Android Programming for Beginners**, Packt Publishing, First edition, Mumbai, 2015.

2. Dawn Griffiths & David Griffiths, **Head First Android Development**, O'Reilly, Second Edition, California, 2018.

3. Mahe L.Murphy, Android Development, Commonware, Third Edition, United states of America, 2011.

Online Reference:

1. https://www.edx.org/course/android-app-development-beginners-galileox-caad002x-21.
2. https://www.simplilearn.com/mobile-and-software-development/android-app-development-training

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CERTIFICATE COURSE IN ANDROID MOBILE
APPLICATION DEVELOPMET
Course Structure – Semester CBCS (w.e.f.2019-2020)

Programme : Android Mobile Application Development - lab   **Paper   : Certificate Course**

Hours   : 45

Subject Code :   **Credits : 01**

Course Outcomes:

CO1: Understand different mobile application models/architectures and patterns.

CO2: Design and develop User Interfaces for the Android platform

CO3: Apply a mobile development framework to the development of a mobile

application

List of Programs:

1. Create " Hello Android" Application

2. How to create and display a new form, window or activity

3. Working With Different Layouts

4.   Create simple and effective Login form on Android

5. Create registration form in android

6.   Build a simple user interface

7. How to use Toast and Intents in android programming

8. Build android app using Widgets

9. Create Simple Browser

10. Add a simple List View on App

11. Changing the font for Android Text views

12. Context menu for Android

13. Android App using Color Picker

14. Create simple app with database

15. Create Age Calculator App