DON BOSCO INSTITUTE OF TECHNOLOGY, KURLA

ANDROID CERTIFICATION COURSE

DEPARTMENT OF COMPUTER ENGINEERING
ACADEMIC YEAR 2019-2020

COURSE CO-ORDINATORS:
Ms. Kalpita Wagaskar
Ms. Mayura Gavhane

DON BOSCO INSTITUE OF TECHNOLOGY, KURLA, MUMBAI
DEPARTMENT OF COMPUTER ENGINEERING

Course Code	**Course Name**
CERC0001	Android Application Development

Course objectives:

To develop android programming skill to solve real life problem

Course outcomes: On successful completion of course learner will be able to:

- Build and deploy his/ her Android application.
- Students understand the operation of the application, application lifecycle, configuration files, intents, and activities.
- Students will be able to develop a working knowledge of the custom UI elements and positioning.
- The trainee may develop a basic application that acts as a working example of all the topics covered in the class.

Prerequisite: Basics of Java, Any Programming Languages

Syllabus
Prerequisite: Basics of Java, Any Programming Languages

Module No.	**Module Name.**	**Topics**	**Hrs**
1	Introduction	**1.1 Introduction to java Concepts** • Classes and objects , inheritance, static • Difference between Parent and Child classes • Difference between overriding and overloading **1.2 Introduction and installation of Android** • Android Versions, API Levels • Devices, Installation & configuration of Android Development Tools	6 hours
2	Application Structure	**2.1 Application Structure** • Devices running on Android platform • Android Architecture • Understanding the Activity Lifecycle • Activity Life Cycle States and working	10 hours

		2.2 Creating the first Android Project • Building a Simple User Interface • Understanding .xml file • Implementing TextView, EditText & Button component • Understanding .Java file • Linking the Java components and xml components • Understanding Manifest file • Debugging and Running Android Application inside Android Smartphone • Android Application Development • Emulator-AVD	
3	Linear Layout and Music App	**3.1 Introduction to Linear Layout** • Implementing Margin, • Padding, Weight & Space components **3.2 Music App** • Implementing Audio files inside Android App • Integrating Play, Pause, Stop button • Developing the Programming Logic	6 hours
4	Menu App	**4.1 Menu App** • Integrating Menu.xml file • Linking up the Menu file & Java file • Creating the Menu UI • Changing Background colour with Menu Options	6 hours
5	Intent,Checkbox and Radio Buttons	**5.1 Intent** • Creating multiple activities in Android • Moving between activities with Intents • Customizing Activities • Difference between Implicit & Explicit Intent **5.2 Checkbox and Radio Buttons** • Create CheckBox • Create Radio Button • Calculator App	6 hours
6	SQLite Database and Google PlayStore	**7.1 SQLite Database** • Creating an Database Android app with Employee Listing • Understanding and integrating the main functions of the Database class • Creating multiple field and adding data inside Database • Programming logic to View modify & delete data inside database	5 hours

		7.2 Google PlayStore • Understanding the process of app deployment • Uploading Android Apps on PlayStore	
7	Project Development	**6.1 App Development** • Login/Registration Project (using SQLite) • App to get current weather details of any city	6 hours

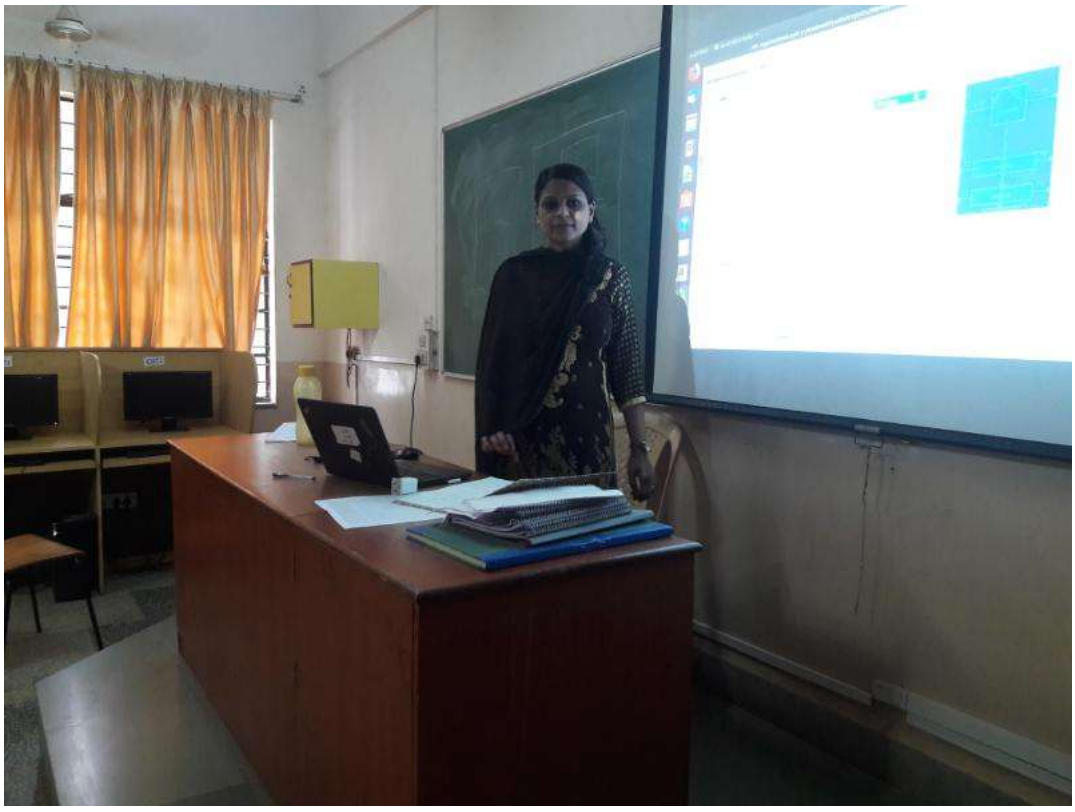
Datewise topics covered

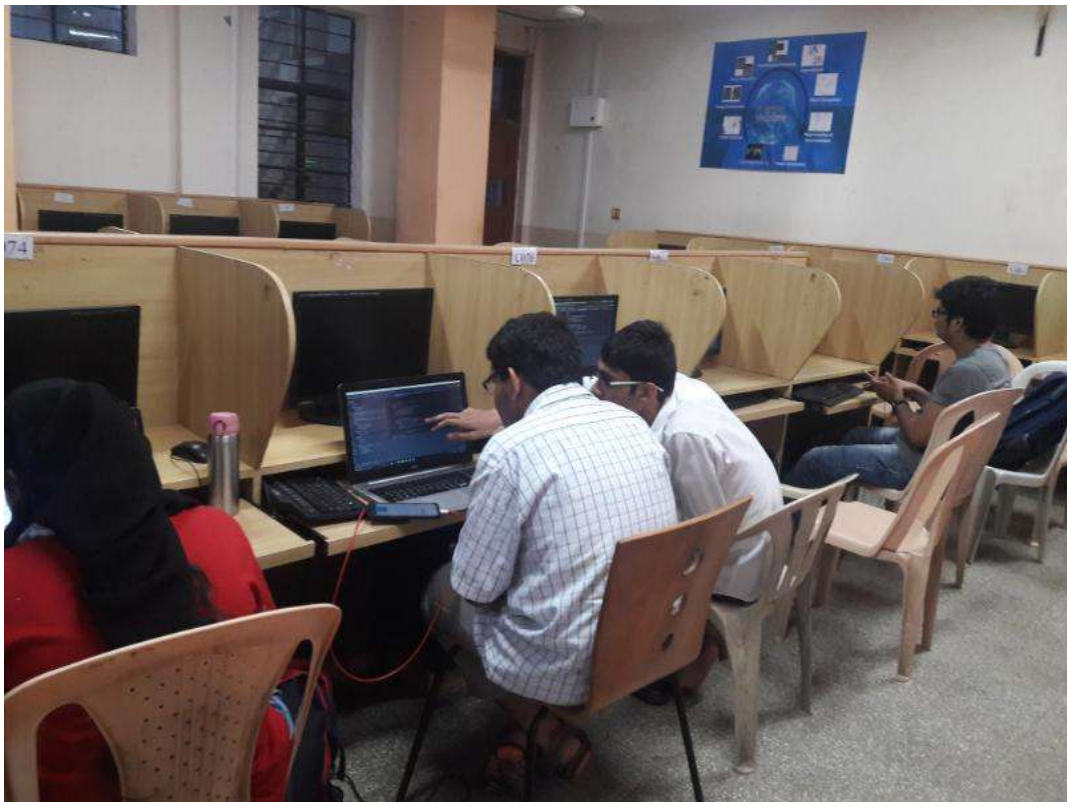
Module No.	**Module Name.**	**Topics**	**Hrs**	**Date**	**Resource**	**Time**
1	Introduction	**1.1 Introduction to java Concepts** • Classes and objects , inheritance, static • Difference between Parent and Child classes • Difference between overriding and overloading **1.2 Introduction and installation of Android** • Android Versions, API Levels • Devices, Installation & configuration of Android Development Tools	4 hours	17th August2019	Kalpita	9:30 to 10:30 10:30 to 12:30 pm 1:30 to 3:30pm
2	Application Structure	**2.1 Application Structure** • Devices running on Android platform • Android Architecture • Understanding the Activity Lifecycle • Activity Life Cycle States and working **2.2 Creating the first Android Project** • Building a Simple User Interface • Understanding .xml file • Implementing TextView, EditText & Button component • Understanding .Java file • Linking the Java	3 hours	17th august 2019	Kalpita	4:00 to 5:00pm

		components and xml components • Understanding Manifest file • Debugging and Running Android Application inside Android Smartphone • Emulator-AVD6				
3	Linear Layout and Music App	**3.1 Introduction to Linear Layout** • Implementing Margin, • Padding, Weight & Space components **3.2 Music App** • Implementing Audio files inside Android App • Integrating Play, Pause, Stop button	6 hours	31st august2019 4th September2019	Mayura	
4	Menu App	**4.1 Menu App** • Integrating Menu.xml file • Linking up the Menu file & Java file • Creating the Menu UI • Changing Background colour with Menu Options	6 hours	4th September2019 14th September2019	Mayura	
5	Intent,Checkbox and Radio Buttons	**5.1 Intent** • Creating multiple activities in Android • Moving between activities with Intents • Customizing Activities • Difference between Implicit & Explicit Intent **5.2 Checkbox and Radio Buttons** • Create CheckBox • Create Radio Button • Calculator App	6 hours	14th September2019	Mayura	
6	SQLite Database and Google PlayStore	**7.1 SQLite Database** • Creating an Database Android app with Employee Listing • Understanding and integrating the main	2hours	05th October 2019	2hrs -Kalpita	

		functions of the Database class • Creating multiple field and adding data inside Database • Programming logic to View modify & delete data inside database **7.2 Google PlayStore** • Understanding the process of app deployment • Uploading Android Apps on PlayStore				
7	Project Development	**6.1 App Development** • Login/Registration Project (using SQLite)	4 hours	05th October 2019	Kalpita	

All the students who attended the course will be ceritified.





ANDROID CERTIFICATION COURSE 2019 -2020
Attendance Sheet
3rd Batch

Sr.No	Name	Roll	Class	17/02/2019		24/02/19		2/3/19	2/03/19	
1	Gaurav Thawal	75	TE COMPS							
2	Mohd. Saad Khan	38	TE COMPS							
3	Allen Frank Cordeiro	6	SE IT	AB	AB	AB	AB	AB	AB	AB
4	Deepak Surendra Bhanda	2	SE IT							
5	Sachin Sanjay Mishra	31	SE IT							
6	Tushar S. Deshpande	11	SE IT	AB	AB	AB	AB	AB	AB	AB
7	Arham Ateeq Pawle	40	SE IT					AB	AB	AB
8	Satyam Diwakar Sharma	51	SE IT							
9	Siddhant Abhijeet Raje	43	SE COMPS			AB	AB	AB	AB	AB
10	Briana Rajan	2	SE COMPS	AB	AB	AB	AB	AB	AB	AB
11	Atharva Dhanwate	8	SE COMPS					AB	AB	AB
	Ishmeet Kaur	14	TE IT							