

# The Complete ANDROID Syllabus



learn



Design



post



Susant K Rout's  
Center of Excellence

Mr. Prabin Kumar Rout.

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## Prologue to LIT

**LIT- Susant K. Routs Centre of Excellence** would like to introduce ourselves as a young but very experienced IT Education Training Institution. As a training Organization, we concentrate on delivering training programs, which focus on building a strong programming foundation by giving in depth and true conceptual knowledge. Our 15 years of dedication into this field has made us possible to create a milestone for the students who want to expose their technical skill and want grow as a successful technocrat in future. Our complete Endeavour behind the students has helped them to ensure a place in TOP Notch IT companies. With the mutual cooperation of our experts, we have been able to give an end to end solution to our students; Corporate along with colleges in case of any problems arise in their workplaces. We feel fortunate being invited by few colleges as their technical partner for the technical & nontechnical grooming of their students for campus Interview. Our syllabus and method of teaching completely focuses on, how to make students feel confident to crack interview for different industries.

### Profile of Trainer

#### **Mr. Prabin Kumar Rout.**

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**Mr. Prabin kumar Rout**, a Microsoft certified Trainer, is working as the Head of the Department of .NET, PHP & WEBDESIGN in **LIT- Susant K. Rout's Centre of Excellence** along with heading the Department LIT Solution, a Software Developing firm Bhubaneswar. Completed his MTECH from BPUT. His research, interest is on .NET, PHP, WEBDESIGN & Android. Being a Corporate Trainer, with his mutual support& training he could have been possible to generate good number of developers those who are now placed in good multinational Software firms. His keen interest, dedication towards this development sector & training proved him as successful trainer. Besides this training his creativity in terms of designing websites, developing software for some professional firms earned him many appreciations as a good designer& developer in the field of Software Development.

#### **Why Android From LIT**

1. Incomparable Syllabus
2. Learn from MICROSOFT Certificate Professional
3. Learn secret step for Campus requirement
4. Real Industrial Application of using MVC
5. Fully Practical and Interactive Session
6. Study Materials
7. Grooming for Project Demonstration in Campus Interview
8. Weekly Workshop on Respective module for Skill Development
9. Special Guidance for LIVE Project
10. Weekly Online Test for Skill Assessment

11. An Earning and Learning Opportunity to all.
12. Question and Answer for Campus.
13. SEO Tips
14. Industrial Training from the Leader

### ***Message for the student***

#### ***Must Read***

***Decisions never made in a second or minute,*** Taking a decision by yourself “**saying No**” is not going to resolve your worry but puts you down to move ahead in career. If you have a thrust and a little interest to be an engineer in future, so we may get your one day presence at **LIT** to Council you better for your future growth. We understand your feelings and passion. Our Past 15 years of Extensive dedication & Training towards the field of IT has made us possible to reach lakhs of students and make them possible to achieve their place in top notch IT industries . **LIT** is walking ahead with a passion & goal to make every **engineering students** feel the real essence of a beautiful Engineering career. If you think you **know**, lets help u groom more and if you think “**No** “ let your life take a chance to Know .

#### **Our Commitment**

- Register once and learn for 5 years
- NO source faculty. Learn directly from industrial Experts.
- Special focus on Campus & Semester preparation.
- Instant doubt clearing inside the classroom itself.
- Tips & tricks discussion for campus and semester.
- Fully practical class with live demonstration through projector.
- Special Guidance for live project development.
- Weekly test conducted for skill assessment.
- Tips and Tricks on Interview etiquettes.
- Guidance for Resume Building, Personal Interview & tips on how to clear a successful GD session.

Online test (Technical & Nontechnical) for skill assessment.

# ANDROID SYLLABUS - 60 HRS.

**MODULE 1: Introduction**

Introduction to Android  
History and Version  
Programming Language Concept  
Library and Framework  
Application  
Android Application  
Mobile Application

**MODULE 2: Core Java Concept**

Hello LIT Program  
OOPs Concept.  
Collection framework.  
Exception handling  
Package and jar.

**MODULE 3: Software & Components**

Android Emulator  
Blue Stacks  
Eclipse  
Java 8.0  
Android studio

**MODULE 4: File structure**

Manifest.xml  
R.java  
String.xml  
activity\_main.xml  
MainActivity.java

**MODULE 5: Setup and configuration**

Configuration of Android Studio  
Configuration of Eclipse  
Configuration of blue stacks  
Configuration of webserver  
Configuration of MySQL  
Version setup  
Emulator setup  
Environment setup  
Eclipse setup  
Android studio setup

**MODULE 6: Fundamentals**

Hello LIT with TextView

Toast Message  
Favicon  
Setup application name  
Setup shortcut icon  
Real device configuration  
Basic events  
Add two numbers

**MODULE 7: Variable Setup**

String variable  
Array variable  
Vector Array  
List  
Naming Convention

**MODULE 8: Android Controls**

TextView  
Button  
ToggleButton  
Radio Button.  
Radio Group.  
CheckBox  
Spinner.  
Switch.  
RatingBar  
Seek Bar  
ProgressBar  
EditText and different text Area.  
AutoComplete /MultiAutoComplete TextView  
NumberPicker  
ZoomButton  
ZoomControls  
TwoLineListItem

**MODULE 9: Components**

Toast.  
Activities  
Services  
Broadcast Receivers

**MODULE 10: Intent and Intent filter**

About Intents.

Implicit Intent  
Explicit Intent  
Start Activity For Result  
Intent Filters.

### **MODULE 11: Layout**

Linear Layout (horizontal and vertical).  
Relative Layout.  
Grid Layout.  
Frame Layout.  
Table layout.  
Fragment.

### **MODULE 12: View**

List view.  
Expandable List.  
Grid view.  
Scroll view (Horizontal, vertical)  
Search View.  
Sliding Drawer.  
Tab Host and tab widget.  
Web view.  
Request focus  
ViewStub  
GestureOverlayView  
TextureView  
SurfaceView

### **MODULE 13: Image and Image gallery**

Image View  
Image Button  
Gallery  
Camera Controller  
Media Controller  
Video View  
Recording Media

### **MODULE 14: Media**

Audio  
Video  
Audio view  
Video view  
Recording media

### **MODULE 15: Date Time**

Time Picker.  
Date Picker.

Calendar view.  
Chronometer.  
Analog and Digital clock,Text Clock.  
Alarm Manager.

### **MODULE 16: Transition**

Image Switcher.  
AdapterViewFliper.  
Stack view.  
TextSwitcher.  
ViewAnimator.  
View Fliper.

### **MODULE 17: Menu**

Option Menu  
Context Menu  
Popup Menu.

### **MODULE 18: Data Storage**

Internal Data storage.  
External Data Stirage.  
SQLite Tutorial  
SQLite Open Helper Class.

### **MODULE 19: Telephony API**

Telephony Manager  
Get Call State  
Call State Broadcast Receiver  
Simple Caller Talker  
Phone Call  
Send SMS  
Send Email  
Notification Design

### **MODULE 20: Android service**

Create Service.  
Create long time Service.  
Activity from a service.  
Bind Activity to service.  
Repeating Service.  
Create Content Provider

### **MODULE 21: JSON**

JSON Object  
JSON Array  
Http Request to JSON  
Get data from JSON

**MODULE 22: Web service**

Check HttpURLConnection.

Single Webservice Call.

Multi Webservice Call.

SQLITE and MySQL in web Service

**MODULE 23: MySQL**

Introduction to database?

What is information and data?

How to maintain database.

DBMS

SQL

PHP My Admin

Security database

**MODULE 24: MySQL with question and answers**

Create Database.

Create User.

Create Table.

Change

Modify

Insert

Update

Delete

Join

**MODULE 25: Server side script (PHP/JSP)**

Webserver

Client Server Configuration

Page

Comments

Syntax

Variable

Control Structure

Functions

**MODULE 26: Android with Mysql**

GET , POST and Request methods

HttpGet and HttpClient class to connect

ACCESS\_NETWORK\_STATE

**MODULE 27: Login Module**

Registration code

Login code

Forget password code

Change password code

Logout Code

**MODULE 28: Managing Data**

Display records in tabular format

Edit Update Delete table records

**MODULE 29: SMS**

What is SMS Server?

SMS Gateway

SMS Provider

Sending messages

**MODULE 30: Mail**

Mail Class

Attributes

Send Mail

**MODULE 31: Location Based Service(GPS)**

Android GPS to get current location.

Showing Current Location in Google Map.

Events with Google map

**MODULE 32: Animation**

Animation Class

Animation Utils

Load Animation

Set in & Setout Animation

Twin animation

Clockwise animation

Fade animation

**MODULE 33: Graphics**

Canvas

Paint

Drawpaint()

SetColor()

Setstyle()

Rotate()

Drawtext()

**MODULE 34: API**

What is an API?

API Provider

API code

Implementation

Sensor API

**MODULE 35: Putting all APP in android market**

**MODULE 36: How to crack interview and android question and answers**

**CONTENT OF PROJECT - 60 HRS**

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| <p><b>1. INTRODUCTION</b></p> <ul style="list-style-type: none"> <li>• Problem Specification</li> <li>• Approaching the project</li> <li>• About project</li> </ul> <p><b>2. PROJECT PROPOSAL</b></p> <ul style="list-style-type: none"> <li>• Title of the project</li> <li>• Back ground</li> <li>• Present problems</li> <li>• The solutions</li> <li>• Aim of the project</li> <li>• Life cycle</li> </ul> <p><b>3. SYSTEM ANALYSIS</b></p> <ul style="list-style-type: none"> <li>• Problem Specification</li> <li>• Feasibility Study</li> <li>• System Requirements Specification</li> <li>• Existing System</li> </ul> <p><b>4. SYSTEM REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>• Software Requirements</li> <li>• Hardware Requirements</li> </ul> <p><b>5. LITERATURE SURVEY</b></p> <p><b>6. SYSTEM DESIGN</b></p> | <ul style="list-style-type: none"> <li>➤ Detailed Design             <ul style="list-style-type: none"> <li>• UML Diagrams</li> </ul> </li> <li>➤ Database Design             <ul style="list-style-type: none"> <li>• Dataflow Diagrams</li> <li>• E-R Diagrams</li> <li>• Database Tables</li> </ul> </li> </ul> <p><b>7. DEVELOPMENT MODEL</b></p> <p><b>8. USER INTERFACE</b></p> <p><b>9. CODING</b></p> <p><b>10. TESTING</b></p> <p><b>11. VALIDATIONS</b></p> <p><b>12. MAINTENANCE</b></p> <p><b>13. FUTURE SCOPE</b></p> <p><b>14. AUDITING</b></p> <p><b>15. SCREEN DESIGNS</b></p> <p><b>16. IMPLEMENTATION</b></p> <p><b>17. CONCLUSION</b></p> <p><b>18. REFERENCES &amp; BIBLIOGRAPHY</b></p> |
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