

**LEARNING PLAN**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DEPARTMENT: ICT** | | | | **NAME OF TRAINER: DUNCAN NDEGWA** | | | **NUMBER OF TRAINEES:** | | |
| **UNIT CODE: IT/CU/ICT/CR/11/6** | | | | **TERM: I** | **DATE OF PREPARATION: 20/08/2025** | | **CLASS: DICT S23** | | |
| **COURSE: ICT TECHNICIAN** | | | | | | | **LEVEL: 6** | | |
| UNIT OF COMPETENCE:  **MOBILE APPLICATION DEVELOPMENT** | | | | | | | **DATE OF REVISION: 3/9/2025** | | |
| **SCHEDULE** | | | | | | | | | |
| **Week** | **Hours** | **Learning Outcome / Element** | **Sub-Topic / Content** | **Specific Objectives / Performance Criteria** | | **Activities** | | **Resources / References** | **Remarks** |
|  | **REPORTING AND REGISTRATION** | | | | | | | | |
|  | 4 | Identify Mobile App Concepts | Development Approaches (Native, Hybrid Native, Hybrid Web, Progressive Web) | Compare development approaches with examples | | * Group discussion, Presentation | | Android docs |  |
|  | 4 | Identify Mobile App Concepts | Reasons for Mobile App Development | Explain benefits and use cases | | Q&A, Case studies | | Industry reports |  |
|  | 4 | Identify Development Environment | Mobile App Development Architecture (Stack, Kernel, DVM, SDK) | Illustrate Android architecture | | Notes, Diagram drawing | | Android documentation |  |
|  | 4 | Identify Development Environment | Reference Architectures (MVP, Wildlife) & Mobile Frameworks (Flutter, React Native, NativeScript) | Differentiate architectures & frameworks | | Group activity, Presentations | | Journals, Tutorials |  |
|  | 4 | Identify Development Environment | Development Tools (IDE, GUI, Emulator, SDK) | Install IDE & Emulator | | Hands-on setup | | Android Studio, Laptop |  |
|  | 4 | Identify Design Issues | Mobile Development Lifecycle (Setup, Develop, Test, Publish) | Describe stages of lifecycle | | Class discussion, Notes | | E-books |  |
|  | 4 | Identify Design Issues | Design Principles & Guidelines (Platform, Device, Scalability, Customer benefit) | Apply design principles in examples | | Case study, Group work | | Industry case studies |  |
|  | 4 | Identify Design Issues | Navigation Patterns (Hamburger, Tab bar, Gesture based) | Demonstrate navigation options | | Practical demo, Assignment | | Android sample apps |  |
|  | 4 | Develop Mobile Application | AndroidManifest.xml & Resources (Layout, Menu, Values, Drawable) | Configure Manifest and create UI in XML | | Lab session, Coding | | Android Studio |  |
|  | 4 | Develop Mobile Application | Framework Components (Activity, Services, Broadcast Receiver, Content Provider) | Implement Activity & Services | | Practical coding | | Android Studio |  |
|  | **REVISION AND EXAMS** | | | | | | | | |

CHECKED BY VERIFIED BY:

NAME: NAME:

DESIGNATION DESIGNATION