FAKULTI TEKNOLOGI DAN KEJURUTERAAN

PROGRAM	**Diploma in Information Technology (System Support)**
COURSE NAME	**MOBILE APPLICATION DEVELOPMENT**
COURSE CODE	**DTS 5033**
CREDIT HOUR	**3**
SYNOPSIS	The primary objective of this course is to be able to understand the unique aspects of mobile application design,work in resource sensitive and resolution variant environments, develop applications with location awareness and hardware sensors, understand the use of a mobile device API and develop applications in a client-server environment.
COURSE STRUCTURE	
CHAPTER	**TOPICS**
1	**Topic 1: Introduction** 1.1 Introduction to Mobile Computing 1.2 Introduction to Android development Environment
2	**Topic 2: Mobile Application** 2.1 Factors in Developing Mobile Applications 2.2 Mobile Software Engineering 2.3 Frameworks and Tools
3	**Topic 3: Generic UI Development** 3.1 Android User 3.2 VUIs and Mobile Apps 3.3 Text-to-Speech Techniques 3.4 Designing the Right UI 3.5 Multichannel and Multimodial Uis

4	**Topic 4: Intents and Services** 4.1 Android Intents and Services 4.2 Characteristics of Mobile Applications 4.3 Successful Mobile Development
5	**Topic 5: Storing and Retrieving Data** 5.1 Synchronization and Replication of Mobile Data 5.2 Getting the Model Right 5.3 Android Storing and Retrieving Data 5.4 Working with a Content Provider
6	**Topic 6: Communications** 6.1 Via Network and the Web 6.2 State Machine 6.3 Correct Communications Model 6.4 Android Networking and Web 6.5 Telephony, Deciding Scope of an App 6.6 Wireless Connectivity and Mobile Apps 6.7 Android Telephony 6.8 Notifications and Alarms 6.9 Performance and Memory Management
7	**Topic 7: Graphics and Multimedia** 7.1 Performance and Multithreading 7.2 Graphics and UI Performance 7.3 Android Graphics 7.4 Mobile Agents and Peer-to-Peer Architecture 7.5 Android Multimedia
8	**Topic 8: Location** 8.1 Mobility and Location Based Services

9	**Presentation on the simulation results**
References:	1. John A Estrella and Rossetta Sornabala,2017, Agile Project Management for Mobile Application Development, Wrox (ISBN-13: 978-1118203903 2. Tim Leung, 2017, Beginning PowerApps : The Non-Developers Guide to Building Business Mobile Applications, Kindle Edition, (ISBN-13: 978-1118102275) 3. Andres Colubri, 2017, Processing for Android: Create Mobile, Sensor-Aware, and VR Applications Using Processing. Kindle Edition(ISBN-13: 978-1118199541)