FAKULTI TEKNOLOGI DAN KEJURUTERAAN

PROGRAM	**Diploma in Computer Network**
COURSE NAME	**Mobile Operating System**
COURSE CODE	**DNC 2013**
CREDIT HOUR	**3**
SYNOPSIS	Technology moves forward at a quick pace, and this implies growth for the world of apps, which in turn generates changes within companies and industries. There are numerous mobile device operating systems available today, and two of the most widely adopted are the iPhone's OS, Apple iOS, and Google's open source OS, Google Android
COURSE STRUCTURE	
CHAPTER	**TOPICS**
1	Introduction to operating systems, OS Structures and Hardware properties
2	Process concept in modern operating systems, Multi-Processes, Thread Concept and Multi-threading
3	Process synchronization, Deadlocks in Multi-processing
4	Memory management, Virtual Memory management, CPU Scheduling, File System and Disk Subsystem
5	Introduction to mobile systems, Differences between operating systems, and operating systems for devices Mobile
6	Microkernel design in mobile OS, Process and Threads
7	Client Server Resource Access
8	File system in mobile OS
9	Android Operating System
10	Differences between GNU / Linux and Android
11	Java and Dalvik Virtual Machine
12	Overview of the Java SDK for Android
13	The basic elements of Android development
14	The use of network interfaces on Android, Software portability and Native

	applications
References:	1. Andrew S. Tanenbaum and Herbert Bos, 2014, Modern Operating Systems: Global Edition, John Wiley & Sons., Inc. (ISBN-13: 978-1292061429) 2. G. Blake Meike, 2017, Inside the Android OS: Building, Customizing, Managing and Operating Android System Services, 01 Edition, Addison Wesley (ISBN-13: 978-0134096346) **3.** Mohammadreza Moradhaseli and Mohammadreza Moradhaseli, 2011, Mobile Operating Systems and Programming: Mobile Communications, VDM Verlag Dr. Müller (ISBN-13: 978-3639369175)