



FAKULTI TEKNOLOGI DAN KEJURUTERAAN

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| PROGRAM | Diploma in IT System Support |
| COURSE NAME | Operating System |
| COURSE CODE | DTC 2013 |
| CREDIT HOUR | 3 |
| SYNOPSIS | The operating system software is most important to be understood by the students that lead to computing science and information technology. This is due to operation of the control system of the organization, the work force and the ability of a computer system. If the microprocessor is often regarded as the brains of computers, the operating systems are that acts as a "soul" of a computer system. There are experts expressed by mastering the operation of our system actually works in the computer system. |
| COURSE STRUCTURE | |
| CHAPTER | TOPICS |
| 1 | Introduction 1.1 What is the Operating System? 1.2 Mainframe System 1.3 Desktop System 1.4 Multiple Processor Systems 1.5 Distribution System 1.6 Real-Time Systems |
| 2 | Structure of Computer Systems 2.1 Operation of Computer Systems 2.2 Put Structure output 2.3 Protective Equipment |
| 3 | Operating System Structure 3.1 System Components 3.2 Operating System Services 3.3 Call System 3.4 System Events |
| 4 | Process 4.1 Concept 4.2 Scheduling |
| 5 | CPU Scheduling 5.1 Concept 5.2 Process Scheduling |



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| 6 | Memory Management 6.1 Concepts 6.2 Satisfaction 6.3 Provision of Continuous memory 6.4 Addressing 6.5 Segmentation |
| 7 | Virtual memory 7.1 Concept 7.2 Prosecute page 7.3 Replacement Page |
| 8 | File System Implementation 8.1 Concept 8.2 File Allocation Methods 8.3 Free Space 8.4 Management |
| 9 | File System Interface 9.1 File Concept 9.2 Access Methods 9.3 Directory Structure 9.4 File System Mounting 9.5 File Sharing 9.6 Protection |
| 10 | I/O System 10.1 I/O Hardware 10.2 Application I/O interface |
| 11 | Protection 11.1 Goals of Protection 11.2 Principles of Protection 11.3 Domain of Protection |
| 12 | Security 12.1 The Security Problem 12.2 Program Threats 12.3 System and Network Threats |
| 13 | The Linux System 13.1 Linux History 687 13.2 Design Principles 692 13.3 Kernel Modules |



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| References: | <ol style="list-style-type: none">1. Andrew S Tanenbaum (2016). <i>Modern Operating Systems</i>. Pearson2. William Stallings (2017). <i>Operating Systems : Internals and Design Principles</i> , 9th Edition. Pearson |
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