

**NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC
QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY**

PRESCRIPTION: OS500 OPERATING SYSTEMS SOFTWARE

AIM OF MODULE:	To provide students with a knowledge of operating systems and an ability to perform basic tasks in both a single-user and a multi-user operating system.
CREDITS:	7
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2004
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level				Suggested Assessment Percentage
	R	C	A	P	
1. Introduction to Operating Systems	*				30
2. Single-User Operating System			*		35
3. Multi-User Operating System			*		35
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LEARNING OUTCOMES

The student will:

- | | | |
|---|---|---|
| R | 1 | Describe the basic components and architecture of an operating system, giving a brief overview of the terminology used. |
| A | 2 | Perform the basic tasks of a single-user operating system, which are necessary to effectively manage a computer system, with such an operating system installed in an office environment. |
| A | 3 | Perform the basic tasks of a multi-user operating system, which are necessary to effectively manage a computer system, with such an operating system installed in a small office environment. |

CONTENT

1 INTRODUCTION TO OPERATING SYSTEMS

- Define the term "Operating System" and briefly state the various types available.
(eg. embedded, real-time, batch, interactive, multi-user)
- Define the following terms as applied to operating systems: processes, threads, scheduling, kernel, queues, priority.
- Briefly outline the hardware requirements of a typical operating system.
- Briefly describe the key features of an operating system.
(eg. graphical interface, command line interface, ease of installation, multi-tasking, plug and play support, networking)

2 SINGLE-USER SYSTEM

- Perform a number of basic tasks.
(eg. create, move, copy, and delete folders and files)
- Use a number of the provided features.
(eg. applets, notepad, paint, file searches, folders, help)
- Perform backups.

3 MULTI-USER SYSTEM

- Perform a number of basic tasks.
(eg. create, move, copy, and delete directories and files)
- Use a number of the provided utilities.
(eg. sort, pr, head, tail, grep, man)
- Use several process control and system management commands.
(eg. ps, kill, passwd)