

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

PRESCRIPTION: PR51n PROGRAMMING

AIM OF MODULE:	The student will use the knowledge and skills acquired in PD500 & PP400, or PP490 & PP590, and PP51n Programming Practice to write scaled-down versions of standard programs, thus developing fluency and efficiency in their application. This will be in a language different from that studied in PR50n.
CREDITS:	7
KNOWLEDGE ASSUMED FROM	PP51n Programming Practice
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2000
PRESCRIPTION EXPIRY DATE:	Nov 2011
NOTE:	This module may be awarded to a student for each language which is learnt to the required standard. The various modules will be identified by the last digit. The language name should be added to the end of the module title.

Level and Assessment Schedule

TOPICS	Highest Skill Level				Suggested Assessment Percentage
	R	C	A	P	
1. Writing Programs			*		60
2. Writing Documentation			*		10
3. Program Fixing			*		10
4. Program Testing			*		10
5. Program Enhancement			*		10
					<hr/> 100 <hr/>

LEARNING OUTCOMES

The student will:

- | | | |
|---|---|--|
| A | 1 | Write well designed programs from given specifications. |
| A | 2 | Design appropriate combinations of test data and ensure results match specification. |
| A | 3 | Document the development of programs and the source code according to installation standards. |
| A | 4 | Identify deviations from installation standards in documentation, code, or procedures, and produce the corrected versions. |
| A | 5 | Given source code with simple logic errors, identify them and correct them without recourse to the computer. |

CONTENT

- Data structures including arrays
- Simple file handling
- Interactive dialogue
- Commercial report programs
- Data validation
- Simple exception handling
- Simple file update
- All standard syntax options
- Efficiency considerations