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

PRESCRIPTION: RA600 REQUIREMENTS ANALYSIS

AIM OF MODULE:	To enable students to produce a Requirements Definition Document and an Investment Analysis Report.
CREDITS:	7
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	1998
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

	Highest Skill Level				Suggested Assessment Percentage
TOPICS	R	C	A	P	
1. Investment Analysis			*		50
2. Requirements Analysis			*		50
					100

LEARNING OUTCOMES

The student will:

A   1   Prepare an investment analysis report for a proposed project.

A   2   Write and present the requirements definition for a simple system.

CONTENT

1   INVESTMENT ANALYSIS

➢   Describe the factors to be considered during a investment analysis, including:

-    technological advances
-    accuracy of information
-    timeliness of information
-    extent of automation (vs manual)

➢   Identify the following costs of proposed alternatives:

-    intangible costs
-    present operating costs
-    operating costs
-    implementation costs
-    initial investment
-    opportunity costs

➢   Identify typical sources of financial benefits:

-    revenues
-    cost savings
-    intangible benefits

➢   Prepare a typical report showing breakdowns of costs, benefits, discounted cash flows and decision criteria:

-    summaries, (including cash flow analysis)
-    results using the following decision criteria; NPV, IRR and payback)
-    recommendations

2   REQUIREMENTS ANALYSIS

➢   Explain the ways the proposed system can contribute to an improved MIS, including:

-    more rapid access to information
-    more up-to-date information
-    more accurate information
-    information based on more data elements
-    information based on new logical functions

➢   Explain the function of the requirements definition, considering these factors:

-    what must be achieved
-    why it is desirable
-    when it should be achieved
-    who will do the work

➢   Given a case study, write the requirements definition for a simple system using the following headings:

-    **Introduction**
     give a brief background to the current system highlighting shortcomings.

-    **Terms of reference**
     include such items as:

-    possible/preferred/mandatory implementation dates
-    possible resources
-    possible constraints

-    **Objective and Scope**
     define broad objectives of the proposed system, and boundaries and interfaces.

     Define measurable requirements for system performance.

-    **Benefits and Costing**
     describe perceived efficiency and cost benefits. Give a broad view of implementation costs.

-    **Recommendations**
     prioritised.

➢   Prepare and conduct a presentation of the Requirements Definition.