

**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:	November 2013

**Level and Assessment Schedule**

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