

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

PRESCRIPTION: SA700 SYSTEMS ANALYSIS

AIM OF MODULE:	To provide students with the ability to work from a user proposal to produce, and present, a Feasibility Report and a Requirements Specification from which a systems designer can work
CREDITS:	7
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2002
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level				Suggested Assessment Percentage
	R	C	A	P	
1. Feasibility Study			*		50
2. Requirements Specification			*		50
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LEARNING OUTCOMES

The student will:

- A 1 Write and present a feasibility report
- A 2 Write and present a Requirements Specification

CONTENT

1. Feasibility Study

- Define the current problem. Define high-level project objectives, (e.g. save \$x over first six months, create a website to deliver a credible corporate image). Determine the scope of the required system. Identify constraints on the project.
- Build models to facilitate developer understanding, and to enable clear definition of the problem.
 - Range: Data Model, Process Model, Domain Model, Use Case Models.
- Write and present a Feasibility Report for user management, including project objective, problem definition, scope statement, broad cost-and-benefit statement, first-guess project plan, and recommendation.

2. Requirements Specification

- Continue information gathering beyond acceptance of the feasibility study to gain all user requirements in detail.
- Develop models beyond feasibility, and keep the models updated as requirements are specified.
- Define each requirement in business language as a measurable system objective.
- Prioritise system requirements and identify project risks.
- Do a full cost-and-benefit analysis of at least one possible architecture for the proposed system. Identify likely costs, savings and intangible benefits, and present using narrative, tables and meaningful graphs. Take into account the variation of value with time, using a method such as Discounted Cash Flow, or Net Present Value.
- Write and present a Requirements Specification for user management, including background, summary of current problems, overview of methodology used, detailed system objectives, detailed cost-and-benefit analysis, revised project plan, and recommendation. The presentation should be brief, business-oriented and non-technical, and may include some preliminary interface designs to help the user understand how the requirements may be realised. The presenter(s) should be able to field questions from users.