



**Australian Government**

# **ICTPRG444 Analyse software requirements**

**Release: 1**

# ICTPRG444 Analyse software requirements

## Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

## Application

This unit describes the skills and knowledge required to research and analyse client requirements, produce a range of options for business process efficiencies and create a software-requirements document.

It applies to those who are required to perform an analysis role in formulating software requirements in a range of work environments. They may work as database or computer developers, business analysts, or project managers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Unit Sector

Programming and software development

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Gather and confirm client requirements	1.1 Confirm requirement and scope of project with required personnel 1.2 Gather information regarding requirements via sources of information and business processes 1.3 Analyse client requirements and problem context and opportunity faced by client 1.4 Document client requirements, project scope, related problems and sources of information according to organisational procedures 1.5 Submit document to required personnel and seek and respond to feedback

2. Analyse functional and related non-functional requirements and feasibility of project	2.1 Map business processes using modelling tool including unified modelling language (UML) 2.2 Determine opportunities in business process efficiencies 2.3 Document functional and non-functional processes according to organisational procedures 2.4 Analyse technical and operational feasibility of project 2.5 Determine budget and schedule feasibility of project 2.6 Examine purpose and intent of project within organisation
3. Develop high-level system solutions	3.1 Develop and document feasible solutions according to client requirements 3.2 Explore and document the feasibility of each solution 3.3 Examine alternatives against project constraints 3.4 Document assumptions, dependencies and required resources 3.5 Produce a project risk analysis according to project requirements 3.6 Document future requirements according to organisational procedures
4. Prepare and publish software-requirements documentation	4.1 Develop software-requirements document according to organisational procedures 4.2 Submit software-requirements report to required personnel and obtain project approval

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.*

SKILL	DESCRIPTION
Numeracy	<ul style="list-style-type: none"> <li>Selects from, and applies an expanding range of mathematical and problem-solving techniques when determining project budget and schedule feasibility</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Uses listening and questioning techniques to obtain information and requirements using industry language for intended audience</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Interprets and critically analyses and applies strategies and constructs meaning from complex texts when gathering and</li> </ul>

<b>SKILL</b>	<b>DESCRIPTION</b>
	analysing information
Writing	<ul style="list-style-type: none"> <li>Develops documentation detailing requirements, scope of work and solutions using appropriate structure, layout and technical programming language</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>Sequences and schedules complex activities, monitors implementation and manages communication</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>Decides on a course of action using analytical processes</li> <li>Uses a systematic process and identifies possible solutions to a difficult problem</li> <li>Uses systematic processes in predictable and unpredictable situations, setting goals and gathering information</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>Identifies and responds to both explicit and implicit protocols when submitting report to required personnel for approval</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Accesses, organises, analyses and displays information applicable to software requirements using a range of digital systems and tools</li> </ul>

## Unit Mapping Information

Supersedes and is not equivalent to ICTPRG419 Analyse software requirements.

## Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>