ICTPRG413 Use a library or pre-existing components

# Modification History

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| --- | --- |
| Release | Comments |
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 1.0. |

# Application

This unit describes the skills and knowledge required to identify, evaluate and incorporate pre-existing (re-use) components from a library, or other source, as part of a software project.

It applies to individuals working in a programming role in a variety of information technology areas, who are required to use programming libraries to support their work.

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 |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify potential re-use units | 1.1 Analyse the project design and functionality, to identify re-use components  1.2 Source re-use components with the desired functionality |
| 2. Evaluate re-use components for suitability in parent project | 2.1 Evaluate the re-use component, or libraries, for suitability for use within the parent software project  2.2 Compare the functionality of each potential re-use component to the functionality required by the parent project  2.3 Evaluate the cost of implementing the re-use component  2.4 Consider the technical impact on the parent project design  2.5 Consider re-use component vendor licensing issues  2.6 Finalise the selection of re-use components  2.7 Document selection, evaluation and decision processes, as part of the parent project design documentation |
| 3. Incorporate the re-use components | 3.1 Configure the development environment to include re-use components during the build process  3.2 Construct test programs or use provided example programs, to become familiar with re-use components, in preparation for incorporation into the parent project  3.3 Add re-use components to the parent project incrementally  3.4 Resolve re-use component dependencies  3.5 Assemble and test the parent project, with a focus on the functionality provided by the re-use components |

# Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

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| Skill | Performance Criteria | Description |
| Writing | 2.7 | * Displays a knowledge of structure and layout, employing a broad vocabulary, grammatical structure, and the conventions appropriate to text when preparing documentation |
| Numeracy | 2.3 | * Selects from, and applies, an expanding range of mathematics and problem-solving, when evaluating costs |
| Get the work done | 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5 | * Uses systematic analytical processes in complex non-routine situations, setting goals, gathering relevant information and identifying, and evaluating, options against the agreed criteria * Uses analytical processes to decide on a course of action, establishing the criteria for deciding between options * Utilises a broad range of features within applications to improve personal productivity, optimising software functions * Understands the key principles and concepts underpinning the design, and operation, of digital systems and tools, and applies these to troubleshoot technology |

# Unit Mapping Information

| Code and title  current version | Code and title  previous version | Comments | Equivalence status |
| --- | --- | --- | --- |
| ICTPRG413 Use a library or pre-existing components | ICAPRG413A Use a library or pre-existing components | Updated to meet Standards for Training Packages | Equivalent unit |

# Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>