



Australian Government

Assessment Requirements for CPPSSI6037 Conduct advanced remote sensing analysis

Release: 1

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Modification History

Release 1 This version first released with CPP Property Services Training Package Release 12.0.

This unit supersedes and is equivalent to CPPSIS6037 Conduct advanced remote sensing analysis.

Performance Evidence

To demonstrate competency a candidate must meet the elements and performance criteria of this unit by using a computer and remote sensing software system to conduct and report an advanced remote sensing analysis for two different projects:

- one project must analyse remote sensing data using spectral indices to transform the image to identify landscape patterns or features.
- one project must focus on performing classifications on datasets using supervised and unsupervised classification algorithms and training samples.

Knowledge Evidence

To be competent in this unit a candidate must demonstrate knowledge of:

- metadata relating to remote sensing data
- characteristics of multispectral imagery, including:
 - spatial resolution
 - spectral resolution
 - radiometric resolution
 - temporal resolution
- spectral response patterns of common landcovers
- geometric and radiometric corrections applied to multispectral imagery
- functions and statistics available in image processing systems:
 - band selections
 - contrast stretches
 - histogram plots
 - univariate and multivariate statistics
- remote sensing indices:
 - vegetation indices
 - water indices

- burn indices
- industry-accepted techniques for applying supervised and unsupervised classification algorithms to remote sensing data
- legislative requirements for data privacy, intellectual property and licensing when using remotely sensed data
- digital image data formats
- sources of spatial datasets
- image enhancement and processing techniques, including convolution matrices
- methods for validating spatial data sources and constraints on use
- key features of coordinate reference systems.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed.

Candidates must have access to:

- computer and software appropriate for conducting remote sensing manipulation and analysis.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>