



Australian Government

NWPHYS001 Identify and analyse information technology for hydrographic surveys

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

This unit involves the skills and knowledge required to identify and analyse information technology for hydrographic surveys.

It includes identifying computer system components, utilising information technology for surveying activities and conducting data processing. It also includes analysing and organising data and producing deliverables.

This unit supports the attainment of skills and knowledge required for leaders with responsibility for performing hydrographic surveying and may lead to certification as a hydrographic surveyor.

Pre-requisite Unit

Not applicable.

Competency Field

Hydrographic Surveyor

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Utilise information technology for surveying activities

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Identify hardware components in surveying information technology

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| | 1.2 | Identify memory storage components within surveying information technology |
| | 1.3 | Use software to produce and manage administrative documentation |
| | 1.4 | Create and manage a database to store information according to relevant workplace procedures and industry standards |
| | 1.5 | Convert survey data from one format to another using software programs |
| | 1.6 | Define web and network communication requirements |
| 2 Conduct data processing and analysis | 2.1 | Maintain data transfer and storage using information technology |
| | 2.2 | Perform spatial data cleaning, identify anomalies and provide solutions |
| | 2.3 | Perform spatial data cleaning using quality control criteria |
| | 2.4 | Conduct survey measurements and computations and analyse results |
| 3 Organise data and produce deliverables | 3.1 | Select appropriate file types to support transfer of hydrographic data acquisition, database and Geographical Information Systems (GIS) between environments |
| | 3.2 | Use GIS within the marine environment according to manufacturer specifications |
| | 3.3 | Produce survey deliverables according to international hydrographic survey and cartographic standards |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This is a new unit. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>