# UEECS0019 Develop, implement and test object-oriented code

**Release: 1**

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## Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

## Application

This unit involves the skills and knowledge required to develop, implement and test object-oriented code.

It includes following development scope, using appropriate development software, writing code and documenting development activities.

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

## Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

## Competency Field

Computer Systems

## Unit Sector

Electrotechnology

## Elements and Performance Criteria

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| **1  Prepare to develop object-oriented code** | **1.1**  Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied |
| | **1.2**  WHS/OHS risk control measures and workplace procedures in preparation for the work are followed |

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|---|---|---|
| | **1.3** | Scope of code development work is determined from job performance specifications and in consultation with relevant person/s |
| | **1.4** | Activities are planned in accordance with workplace procedures for timelines and in consultation with others involved |
| | **1.5** | Relevant development kit and software are selected in accordance with specified requirements and performance standards |
| | **1.6** | Strategies are implemented to ensure programming is carried out efficiently |
| **2  Develop object-oriented code** | **2.1** | WHS/OHS risk control measures and workplace procedures for carrying out the work are followed |
| | **2.2** | Correct syntax is applied to developing code |
| | **2.3** | Features of object-orientated programming language are applied to develop and test solutions |
| | **2.4** | Code written features data encapsulation, inheritance and libraries |
| | **2.5** | Approaches to issues/problems are analysed to provide effective solutions |
| | **2.6** | Quality of work is monitored in accordance with workplace procedures and relevant industry standards |
| **3  Test and document the development of object-oriented code** | **3.1** | Testing procedures are developed to analyse code in accordance with job performance specifications and workplace procedures |
| | **3.2** | Problems in code are rectified to ensure job performance specifications are met |
| | **3.3** | Intermediate and final documentation is completed in accordance with relevant industry standards and presented to relevant person/s |

# 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.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Developing object-oriented code must consist of multiple user-classes and include at least the following:

- inheritance
- arrays
- graphical user interface (GUI) components
- exceptions
- file input/output (I/O)
- event handling

# Unit Mapping Information

This unit replaces and is equivalent to UEENEED111A Develop, implement and test object oriented code.

# Links

Companion Volume implementation guides are found in VETNet - - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6