Australian Government

# PMA50116 Diploma of Process Plant Technology

**Release 3**

# PMA50116 Diploma of Process Plant Technology

## Modification History

Release 3. Seven low use units removed from elective bank as determined at December 2020 AISC meeting in response to Skills Ministers' objectives. Equivalent.

Release 2. Elective unit updated to current release. Supersedes and is equivalent to PMA50116 Diploma of Process Plant Technology (Release 1).

Release 1. Supersedes and is equivalent to PMA50108 Diploma of Process Plant Technology.

## Qualification Description

## Entry Requirements

There are no entry requirements for this qualification.

## Packaging Rules

To be awarded the PMA50116 Diploma of Process Plant Technology competency must be achieved in **ten (10)** units of competency:

- **four (4)** core units of competency
- **six (6)** elective units of competency, chosen as specified below:
  - a minimum of **two (2)** from Group A
  - the remainder may be chosen from Groups A, B and C (with a maximum of **two (2)** from Group C) to bring the total number of electives to **six (6)**.

**Note: Two (2)** elective units can be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Group C.

**Note**: Where prerequisite units are identified they must be counted in the total number of units required for achievement of the qualification.

**Core units of competency**

Complete all **four (4)** units from the following list.

| Unit code | Unit title |
|-----------|-----------|
| MSMENV272 | Participate in environmentally sustainable work practices |
| MSMSUP200 | Achieve work outcomes |

| MSMSUP210 | Process and record information |
| MSMWHS200 | Work safely |

**ELECTIVE UNITS**

**Group A – Technical electives**

| Unit code | Unit title | Prerequisites |
|---|---|---|
| PMAOPS500 | Optimise production systems | |
| PMAOPS501 | Provide operational expertise to a project team | |
| PMAOPS505 | Control the process during abnormal situations | |
| PMAOPS511 | Determine energy transfer loads | |
| PMAOPS512 | Determine mass transfer loads | |
| PMAOPS520 | Manage utilities | |
| PMAOPS521 | Plan plant shutdown | |
| PMAOPS522 | Coordinate plant shutdown | |

Up to **one (1)** technical elective unit may be chosen from Group A in PMA60116 Advanced Diploma of Process Plant Technology

**Group B – Support electives**

| Unit code | Unit title | Prerequisites |
|---|---|---|
| MSMWHS503 | Maintain WHS management system | |
| MSMWHS510 | Manage risk | |
| PMAOMIR512 | Establish incident response preparedness and response systems | |

| PMASUP520 | Review procedures to minimise environmental impact of process | |
| PMASUP540 | Analyse equipment performance | |
| PMAWHS502 | Contribute to safety case | |
| PMAWHS511 | Manage emergency incidents | |

## Group C – Other electives

| Unit code | Unit title | Prerequisites |
| --- | --- | --- |
| MSL954004 | Obtain representative samples in accordance with sampling plan | |
| MSMENV472 | Implement and monitor environmentally sustainable work practices | |
| MSMOPS400 | Optimise process/plant area | |
| MSMOPS401 | Trial new process or product | |
| MSMPER300 | Issue work permits | MSMWHS201 |
| MSMPER400 | Coordinate permit process | MSMPER300 |
| MSMSUP390 | Use structured problem-solving tools | |
| MSMSUP400 | Develop and monitor quality systems | |
| MSMSUP404 | Coordinate maintenance | |
| MSMSUP405 | Identify problems in fluid power system | |
| MSMSUP406 | Identify faults in electronic control | |
| MSMWHS400 | Contribute to WHS management system | |
| MSMWHS401 | Assess risk | |
| MSS403085 | Ensure process improvements are sustained | |
| MSS403011 | Facilitate implementation of competitive systems and practices | |

| | | |
|---|---|---|
| MSS405013 | Facilitate holistic culture improvement in an organisation | |
| MSS403086 | Improve cost factors in work practices | |
| MSS403040 | Facilitate and improve implementation of 5S | |
| MSS403054 | Facilitate breakthrough improvements | |
| MSS403087 | Mistake proof an operational process | |
| MSS404084 | Undertake process capability improvements | MSS404052 |
| MSS404060 | Facilitate the use of planning software systems in a work area or team | |
| MSS404085 | Undertake proactive maintenance analyses | |
| MSS404086 | Assist in implementing a proactive maintenance strategy | |
| MSS404054 | Apply statistics to operational processes | |
| PMAOMIR407 | Audit incident preparedness and established response systems | |
| PMAOMIR418 | Coordinate incident response | |
| PMAOMIR424 | Develop and maintain community relationships | |
| PMAOMIR430 | Conduct and assess incident exercises | |
| PMAOMIR444 | Develop incident containment tactics | |
| PMAOPS280 | Interpret process plant schematics | |
| PMAOPS350 | Match and adjust colour | |
| PMAOPS402 | Respond to abnormal process situations | MSMSUP390 |
| PMAOPS405 | Operate complex control systems | |
| PMAOPS410 | Operate remote production facilities | |
| PMAOPS411 | Manage plant shutdown and restart | |
| PMAOPS433 | Manage wells and gathering systems | |

| PMAOPS434 | Commission wells and gathering systems | |
| --- | --- | --- |
| PMAOPS450 | Solve colour problems | |
| PMAOPS460 | Monitor and operate tailings management facilities | |
| PMASUP410 | Develop plant documentation | |
| PMASUP420 | Minimise environmental impact of process | |
| PMASUP440 | Commission/recommission plant | |
| PMASUP441 | Decommission plant | |
| PMASUP444 | Plan plant preparation and isolation | |
| PMASUP445 | Participate in HAZOP studies | PMAOPS280 |
| TAEASS401 | Plan assessment activities and processes | |
| TAEASS402 | Assess competence | |
| TAEASS403 | Participate in assessment validation | |
| Up to **two (2)** relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are packaged in a Certificate IV or above. | | |

## Qualification Mapping Information

Release 3. Supersedes and is equivalent to PMA50116 Diploma of Process Plant Technology (Release 2).

Release 2. Supersedes and is equivalent to PMA50116 Diploma of Process Plant Technology (Release 1).

Release 1. Supersedes and is equivalent to PMA50108 Diploma of Process Plant Technology.

## Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875

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