# Assessment Mapping (for streamlined units from new Training Packages)

*This document is used to demonstrate content validity of the assessment tool*

Table 1 Main details

| Details | Unique description |
| --- | --- |
| **Unit Code, name and release number** | MSL972001 - Conduct routine site measurements (1) |
| **Skills Team** |  |
| **Region/Campus** |  |
| **SkillsPoint (owned by)** | Innovative Manufacturing Robotics Science |

*NOTES:*

* *Event columns can be added or deleted as required*
* *Rows for elements and performance criteria, etc. can be added or deleted as required*
* *Each component of the unit must be mapped to at least* ***one assessment criteria*** *or* ***question*** *in one or more assessment events*
* *Do NOT delete the section labelled Foundation Skills. If the Foundation skills ARE EXPLICIT in the performance criteria, they do not need to be listed. However, if the Foundation skills ARE NOT incorporated in the performance criteria they must be listed and mapped.*
* *Dimensions of Competency must be considered when selecting assessment types to ensure that the range of tasks you have chosen cover the following:*
  + *Task Skills*
  + *Task Management Skills*
  + *Contingency Planning Skills*
  + *Job Role Environment Skills*

## Unit component mapping to assessment event/s

Table 2 Unit component mapping to assessment event/s

| Element number | Element name | Performance criteria number | Performance criteria description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Prepare for measurements | 1.1 | Confirm the purpose, priority and nature of measurements required |  | Q21 | Q3, 9a, 10a, b | Demo 2.1  Onsite measurement record |
| 1.2 | Liaise with relevant personnel to arrange site access and all necessary clearances/permits |  |  | Q9d | Demo 2.2 |
| 1.3 | Identify site hazards and review workplace safety procedures |  | Q1, 23 | Q4 a-d, 9e | Demo 1.1 |
| 1.4 | Assemble all measuring and safety equipment and check they are fit for purpose |  | Q28 | Q10c | Demo 2.3  Onsite Measurement Record |
| 1.5 | Check all equipment/materials against a given inventory and stow them to ensure safe transport |  |  | Q11 | Demo 2.3, 2.4 |
| 1.6 | Arrange appropriate transport for site access as required |  |  | Q9f | Demo 2.2  Onsite Measurement Record |
| 2 | Perform measurements | 2.1 | Locate measurement points and services at the site |  | Q1, 19 | Q9g | Demo 3.1 |
| 2.2 | Gain access to measurement points by removing covers and locks as appropriate |  |  | Q9h | Demo 3.1 |
| 2.3 | Seek advice if the required measurements cannot be made or if procedures require modification |  | Q21 | Q9i |  |
| 2.4 | Operate measuring equipment in accordance with workplace procedures and manufacturer instructions |  |  |  | Demo 3.2 |
| 2.5 | Take sufficient readings to ensure reliable data |  |  |  | Demo 3.3 |
| 2.6 | Record data with appropriate accuracy, precision and units |  | Q2 |  | Demo 3.3  Onsite Measurement Record |
| 2.7 | Record environmental/site conditions and any other observations that may impact on data quality |  | Q2, 30 | Q9j, n | Demo 3.4  Onsite Measurement r\Record |
| 2.8 | Recognise obvious errors/atypical data and take appropriate corrective action |  | Q27 | Q6, 7 a-c | Demo 3.5  Onsite Measurement Record |
| 2.9 | Secure measuring points by replacing covers and locking as appropriate |  |  | Q9k | Demo 3.6  Onsite Measurement Record |
| 3. | Finalise measurements | 3.1 | Follow workplace procedures for the cleaning/decontamination of equipment and vehicle as necessary |  | Q29 | Q9l | Demo 4.1  Onsite Measurement Record |
| 3.2 | Check all equipment and materials against inventory and stow for safe transport |  |  | Q9m, 11 | Demo 4.2  Onsite Measurement Record |
| 3.3 | Liaise with relevant personnel to restore normal production and/or services as necessary |  |  | Q9o | Demo 3.6 |
| 3.4 | Report all measurements in accordance with workplace procedures |  | Q2, 4, 22, 25 | Q9o | Onsite Measurement Record |
| 3.5 | On return, check and document serviceability of equipment before storage |  |  | Q9p | Demo 4.2, 4.3 |
| 4 | Maintain a safe work environment | 4.1 | Use established work practices and personal protective equipment (PPE) to ensure personal safety and that of others |  |  | Q 4a-d, 5, 10d | Demo 1-4 |
| 4.2 | Minimise environmental impacts of measurements and generation of waste |  | Q9, 24 | Q9q | Demo 1.2, 1.3 |
| 4.3 | Dispose of all waste in accordance with workplace procedures |  |  | Q9r | Demo 1.4 |

## Foundation skills NOT explicit in the performance criteria

Table 3 Foundation skills NOT explicit in the performance criteria

| Foundation skills | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
| Foundation Skills are explicit in the performance criteria | | | | | |

## Performance evidence

Table 4 Performance evidence

| Performance evidence | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
|  | Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of: |  |  |  |  |
| PE1 | Safely making a variety of direct measurements at different sites on at least three (3) occasions |  |  |  | 3 occurrences of Demo 1-4 |
| PE2 | Liaising with others to access sites and perform measurements efficiently |  |  | Q9 | Demo 2.2 |
| PE3 | Correctly locating measurement points and services at sites |  | Q1, 19 | Q9 | Demo3.1 |
| PE4 | Making measurements to minimise environmental impact and/or disruption to normal site operations |  | Q14, Q24 |  | Demo 1.2 |
| PE5 | Safely operating instruments and test kits in accordance with workplace procedures and manufacturer instructions |  |  |  | Demo 3.2 |
| PE6 | Reading scales/displays accurately and taking sufficient measurements to ensure reliable data |  |  |  | Demo 3.2-3.4 |
| PE7 | Recording data that is legible, free of errors and has appropriate accuracy, precision and units |  | Q2 |  | Onsite Measurement Record |
| PE8 | Recognising obvious errors/atypical data and using corrective actions, including: |  |  | Q6, 7b, 8 |  |
| PE8.1 | * logical check of equipment set-up |  |  | Q6, 8b | Demo 3.4-3.5 |
| PE8.2 | * check of calibration, zero error and drift for basic instruments |  | Q10 | Q6, 8c | Demo 3.4-3.5 |
| PE8.3 | * careful re-reading of procedures |  | Q10 | Q8d | Demo 3.4-3.5 |
| PE8.4 | * repeating measurements |  | Q3, 10 | Q8e | Demo 3.4-3.5 |
| PE8.5 | * seeking advice |  |  | Q7a, 8f |  |
| PE9 | Maintaining confidentiality and reporting problems and incidents in accordance with procedures |  | Q5, 25, 26 |  | Onsite Measurement Record |
| PE10 | Following workplace procedures for safely conducting site measurements; recording and reporting data and any relevant legal traceability requirements; and maintenance, storage and transport of measurement equipment |  | Q4, 17, 20, 22, 23 | Q9, 10 | Demo 1-4 |
| PE11 | Recognising own limitations and seeking timely advice. |  | Q15, 21 |  | Demo 2.2 |

## Knowledge evidence

Table 5 Knowledge evidence

| Knowledge evidence | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
|  | Must provide evidence that demonstrates knowledge of: |  |  |  |  |
| KE1 | Concepts of metrology, including: |  |  | Q2 |  |
| KE1.1 | * all measurements are estimates |  | Q16 | Q1 |  |
| KE1.2 | * measurements belong to a population of measurements of the measured parameters |  | Q13 | Q3 |  |
| KE1.3 | * precision, accuracy and significant figures |  | Q3, 11, 12, 13 | Q 2d-f, 3 |  |
| KE1.4 | * sources of error, uncertainty and repeatability |  |  | Q2a, 2c, 8a |  |
| KE1.5 | * traceability |  | Q17 |  |  |
| KE2 | International system of units (SI) |  | Q18 |  |  |
| KE3 | Purpose of measurements performed as part of job role and the principles of operation for the equipment/instruments used |  |  | Q10b, c |  |
| KE4 | Sources of uncertainty in measurement and methods for control |  |  | Q2b, 10f |  |
| KE5 | Workplace safety procedures associated with measurements undertaken as part of job role; the maintenance, storage and transport of measurement equipment; waste management and handling of dangerous goods |  | Q8, 20 | Q4 a-d  Q9 q, r |  |
| KE6 | Workplace and/or legal traceability requirements |  | Q17 |  |  |
| KE7 | Procedures for recognising and reporting of unexpected or unusual results |  |  | Q7a-c | Demo 3.4  Onsite Measurement Record |
| KE8 | Relevant hazards, work health safety (WHS) and environment requirements. |  | Q7, 8, 14, 23, 26 | Q4 a-d, 10g | Demo 1.1 |

## Assessment conditions

Table 6 Assessment conditions

| Assessment conditions | Description | Learning resources | Knowledge Assessment 1 0f 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
| AC1 | Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event. |  | Assessed over time by these 3 events | | |
| AC2 | This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills. |  |  |  | Entire Assessment |
| AC3 | Foundation skills are integral to competent performance of the unit and should not be assessed separately. |  | Foundation Skills are explicit in the performance criteria and assessed by these 3 events | | |
| AC4 | Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate. |  | Entire event | Entire event | Entire event |
| AC5 | Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case). |  | Entire event | Entire event | Entire event |
| AC6 | This unit of competency may be assessed with: |  |  |  |  |
| AC6.1 | * MSL952001 Collect routine site samples |  | Not Applicable | | |
| AC7 | Holistic assessment methods include: |  |  |  |  |
| AC7.1 | * review of the quality of site measurement data and documentation provided by the candidate |  |  |  | Entire event |
| AC7.2 | * observation of the candidate performing a range of site measurements |  |  |  | Entire event |
| AC7.3 | * feedback from supervisors and clients that relevant procedures were followed and that measurements were conducted in an efficient manner |  |  |  | Assessor feedback |
| AC7.4 | * oral/written questioning about workplace procedures for conducting site measurements; maintenance, storage and transport of measurement equipment; waste management and handling of dangerous goods. |  | Entire event | Entire event |  |
| AC8 | Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to: |  | Simulated workplace | | |
| AC8.1 | * a variety of sites and relevant measuring equipment |  |  |  | Entire event |
| AC8.2 | * safe operating procedures for equipment, site measurement procedures and documented safe work practices. |  |  |  | Entire event |
| AC9 | Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator. |  | Details in People @ TAFE | | |
| AC10 | The assessor must demonstrate both technical competence and currency. |  | Details in People @ TAFE | | |
| AC11 | Technical competence can be demonstrated through: |  | Details in People @ TAFE | | |
| AC11.1 | * relevant VET or other qualification/Statement of Attainment AND/OR |  | Details in People @ TAFE | | |
| AC11.2 | * relevant workplace experience. |  | Details in People @ TAFE | | |
| AC12 | Currency can be demonstrated through: |  | Details in People @ TAFE | | |
| AC12.1 | * performing the competency being assessed as part of current employment OR |  | Details in People @ TAFE | | |
| AC12.2 | * having consulted with a laboratory about performing the competency being assessed within the last twelve months. |  | Details in People @ TAFE | | |