

**APPENDIX**  
**Program documents**

Document 1 Engineering Practical –1 Memorandum of Understanding P-1 Pg-1

|   |  |   |
|---|--|---|
| <b>D</b>  | <b>Memorandum of Understanding [MoU]</b> | <i>Completion of this document does not apply or constitute an offer of employment or that the learner is registered.</i> |
| <p>This section serves as a company validated indication of what WIL is to be conducted, the duration and the specific portfolio reports to be developed by the learner in the academic portfolio.</p> <p><b>Please note:-</b></p> <p>[1] The full duration of a minimum of 26 weeks may be made up as follows:-</p> <ul style="list-style-type: none"> <li>• Compulsory training section D-2A</li> </ul> <p style="text-align: center;">---- PLUS ----</p> <p>Elective training from section D-2B or Company motivated training from section D-2C</p> <p>[2] <i>6 portfolio reports, marked sequentially, must be indicated for generation in the portfolio</i></p> <p>Reports may be indicated as covering from 3 to 5 weeks of training.</p> |  |   |

|  |  |             |
|--|--|-------------|
| <i>Applicable RHS shaded blocks MUST be initialled by the company representative</i> |  | <b>Sign</b> |
| 1  | A training contract will be in existence between the above parties at the time of final registration of the learner for a minimum period of six months <i>in a full time capacity.</i> |             |

| <b>Section D2-A P-1 Compulsory FORMAL training</b> |  |  |               | 12 weeks minimum |      |  |
|--|--|--|---------------|------------------|------|--|
|  | Item   | Training Description   | Duration      | Report           | Sign |  |
| A<br>1   | Certificated First Aid and Safety training courses   | Basic first-aid and safety proficiency certificates required.  | 1 Week credit | Nil              |      |  |
| A<br>2   | Basic hand and power tools skills  | Terminology, symbols, diagrams, marking off, accuracy, gauging, mounting technologies. Basic hand, and power tools .   | 3 weeks       | 1                |      |  |
| A<br>3   | Measurement instruments, methods and metering. Fault finding methods   | Terminology, symbols, diagrams, types, connections, measurement methods. Energy meters, metering connections. Fault finding methods.   | 2 weeks       | 2                |      |  |
| A<br>4   | Motors/Generators controls, motor starters and fault finding   | Terminology, symbols, diagrams, types, connections, sequencing, control, protection & fault finding. <b>Specification of equipment from manufacturers data.</b>                                      | 2 weeks       |                  |      |  |
| A<br>5   | Lighting and Illumination systems and control gear   | Terminology, symbols, diagrams, types, connections & control gear. <b>Specification of equipment from manufacturers data.</b>  | 1 week        | 3                |      |  |
| A<br>6   | Wire-ways, conduit and electrical installation work. - <b>Alternatively</b> ---- Overhead wires and under ground cables. | Terminology, symbols, diagrams, types, connections, termination gear, ratings, protection and fault finding <b>Specification of equipment from manufacturers data in accordance with SANS 10142.</b> | 3 weeks       |                  |      |  |
| Sub-total section D2-A Compulsory FORMAL training  |  |  |               | weeks            | 12   |  |

| <b>Section D2-B P-1 Elective Training</b> |  |  |          |        |      |
|---|--|--|----------|--------|------|
| #   | Item   | Training Description   | Duration | Report | Sign |
| B1  | Basic process control and instrumentation.     | Terminology, symbols, diagrams, systems [temperature, level, pressure, flow, mass and stress]                              | 1 week   |        |      |
| B2  | Drive-trains, hoisting and vibration analysis. | Terminology, symbols, diagrams, regulations, equipment. validation, testing and reporting.                                 | 2 weeks  |        |      |
| B3  | Energy management principles.                  | Terminology, investigation, interventions, audit plans, retro-fitting, validation.   | 1 week   |        |      |
| B4  | Flame and explosion proof equipment.           | Terminology, symbols, diagrams, regulations, termination, equipment, inter-connections, validation, testing and reporting. | 2 weeks  |        |      |
| B5  | Refrigeration and Air-conditioning.            | Terminology, symbols, diagrams, regulations, termination, equipment. Processes & systems                                   | 3 weeks  |        |      |
| B6  | Automation - PLCs                              | Terminology, symbols, diagrams, inter-connections, programming & applications.   | 1 week   |        |      |
| B7  | Automation - variable speed drives.            | Terminology, symbols, diagrams, inter-connections, programming & applications.   | 1 week   |        |      |
| B8  | Electro-hydraulic systems.                     | Terminology, symbols, diagrams, regulations, termination, equipment, inter-connections.                                    | 1 week   |        |      |
| B9  | Electro-pneumatics                             | Terminology, symbols, diagrams, regulations, termination, equipment, inter-connections.                                    | 1 week   |        |      |
| B 10                                      | Basic welding                                  | Terminology, symbols, diagrams, layouts and profiling. Electric arc, inert gas and gas welding                             | 2 weeks  |        |      |
| Sub-total section D2-B Elective training  |  |  | weeks    |        |      |

| <b>Section D2-C P-1 Company motivated training (if applicable)</b> |      |                                       |          |        |      |
|--|------|---------------------------------------|----------|--------|------|
|  | Item | Training Description (please specify) | Duration | Report | Sign |
| C 1  |      |                                       | weeks    |        |      |
| C 2  |      |                                       | weeks    |        |      |
| Sub-total section D2-C Elective training                           |      |                                       | weeks    |        |      |

| Section E | Item of agreement between Learner and ISP as MoU   | Sign |
|-----------|--|------|
| a         | Registered training is to commence (start) on _____<br>and end on _____ for a minimum period of <b>six months</b>  |      |
| b         | <b>MoU finalisation Reality Check.</b> (Signatures:- ( i ) Company representative. (ii) Learner in training)   |      |
| i         | We as a company providing the WIL training, accept our responsibility to:-<br><ul style="list-style-type: none"> <li>• Provide the training as specified.</li> <li>• Be aware of the fact that the learner should not be considered as a contributor to a business unit whilst conducting training under sections D2-A and D2-B.</li> <li>• Providing evidence of training of the learner which must be developed and retained for inspection by the academic department in terms of work-piece specification, artefact(s) , assessment criteria and outcome reports.</li> </ul> | Sign |
| ii        | As learner, I accept my responsibility in:-<br><ul style="list-style-type: none"> <li>• Following up on the registration process in <b>validating</b> that I am <u>actually</u> registered.</li> <li>• Maximising, retaining and expanding the permanent learning effects of the training provided.</li> <li>• Diligently developing the required reporting materials to the engineering standards expected.</li> <li>• Being available on-site during the pre-arranged academic visit.</li> </ul>   | Sign |

|  |   |
|--|---|
| <b>D Memorandum of Understanding [MoU]</b>   | <i>Completion of this document does not apply or constitute an offer of employment or that the learner is registered.</i> |
| <p>Section D serves as a company validated indication of what WIL is to be conducted, the duration and the specific portfolio reports to be developed by the learner in the academic portfolio.</p> <p><b>Please note:-</b></p> <p>[1] P-2 can only be done in the industry and not at a training centre.</p> <p>[2] The learner’s minimum 6 months of training may be made up in terms of items from: -</p> <p>[i] <b>Three</b> items from section D2-A ---- or ----.</p> <p>[ii] <b>Two</b> items from section D2-A plus <b>ONE</b> item from section D2-B --- or ---</p> <p>[iii] <b>Two</b> items from section D2-A plus <b>ONE</b> item as company motivated.</p> <p>[3] <b>Maximum and minimum duration per item is 2 and 1 month respectively</b> (unless otherwise indicated)</p> <p>[4] 6 portfolio reports (one per month), marked sequentially, must be indicated for generation.</p> <p>[5] A <u>separate</u> technical report on a project conducted in industry during the training is required.</p> |   |

|  |   |  |          |        |             |
|--|---|--|----------|--------|-------------|
| <i>Applicable RHS shaded blocks MUST be initialled by the company representative</i> |   |  |          |        | <b>Sign</b> |
| <b>1</b>   | A training contract will be in existence between the above parties at the time of final registration of the learner for a minimum period of six months <i>in a full time capacity</i> . |  |          |        |             |
| <b>Section D2-A P-2 Standard Electrical Power Engineering options</b>                |   |  |          |        |             |
|  | Item  | Training Description   | Duration | Report | <b>Sign</b> |
| <b>A<br/>1</b>   | Electrical distribution and reticulation. Technology and applications   | Investigate problem & solution methods associated with maintenance, loading, design extensions, modifications & reliability.   | Months   |        |             |
| <b>A<br/>2</b>   | Protection of electrical equipment. Technology and applications   | Investigate problem & solution methods associated with maintenance, design, extensions, modifications & reliability.   | Months   |        |             |
| <b>A<br/>3</b>   | Electrical machinery applications, maintenance. Technology and applications   | Investigate problem & solution methods associated with maintenance, design, extensions, modifications & reliability.   | Months   |        |             |
| <b>A<br/>4</b>   | Installation, commissioning and testing of electrical power equipment. Technology and applications  | Investigate procedures, problem & solution methods associated with commissioning, testing and validation to specification of electrical plant and equipment  | Months   |        |             |
| <b>A-5</b>   | Quality control, quality of supply and energy management. Technology and applications<br><b>1 month maximum time</b>  | Investigate problem, solution methods, strategies assessment, and validation methods associated with the quality control, quality of supply and energy management within the electrical power working environment. | Month    |        |             |
| Sub-total section D2-A   |   |  | months   |        |             |

| Section D2-B P-2 Company Speciality options (if applicable) |   |   |          |        |      |
|---|---|---|----------|--------|------|
| #   | Item  | Training Description  | Duration | Report | Sign |
| B<br>1  | Generation of Electrical Energy. Technology and applications.<br>----- Reserved ---<br><b>1 month maximum</b>   | <i>Applicable <u>only</u> to learners directly exposed to large scale power generation plant.</i><br>Investigate problem & solution methods, maintenance, loading, optimisation, modifications & reliability engineering of alternators.  | months   |        |      |
| B<br>2  | Heavy industrial Electro-mechanical plant, steam generation or process. Process, technology & applications.<br>----- Reserved ----<br><b>3 months maximum.</b><br><br><b>Time schedule document is required</b> | <i>Applicable <u>only</u> to learners with a <u>Power Plant Diploma Option</u> who are directly exposed to heavy plant, viz. boilers, process, mining and or refining processes.</i><br>Electro-mechanical - investigate problem & solution methods, maintenance, loading, scheduling, modifications & reliability engineering of plant.<br><b>A separate fully motivated weekly based planning/exposure schedule must accompany this application form in support of this option.</b> | months   |        |      |
| B<br>3  | Rural development projects based on appropriate technology development. Development & application<br>----- Reserved ----<br><b>3 months maximum.</b><br><b>Time schedule document is required</b>               | <i>Applicable <u>only</u> to NON-electrical consultant based learners involved with appropriate technology development, viz Renewable Energy Technologies and applications .</i><br>Sustainability, energy poverty solutions, design, implementation, maintenance and project management<br><b>A separate fully motivated weekly based planning/exposure schedule must accompany this application form in support of this option.</b>   | months   |        |      |
| Sub-total section D2-B                                      |   |   | months   |        |      |

| Section D2-C P-2 Company motivated training (if applicable)       |      |                                       |          |        |        |
|---|------|---------------------------------------|----------|--------|--------|
|   | Item | Training Description (please specify) | Duration | Report | Sign   |
| C<br>1  |      |                                       | months   |        |        |
| Sub-total section D2-C Elective training                          |      |                                       | months   |        |        |
| <b>Grand total of training period (must be 6 months or more )</b> |      |                                       |          |        | months |

| Section E | Item of agreement between Learner and ISP as MoU  | Sign         |
|-----------|---|--------------|
| a         | Registered training is to commence (start) on _____<br>and end on _____ for a minimum period of<br><b>six months</b>  |              |
| b         | <b>MoU finalisation Reality Check.</b> (Signatures:- ( i ) Company representative. (ii) Learner in training)  |              |
| i         | We as a company providing the WIL training, accept our responsibility to:-<br>• Provide the industrial exposure training as specified.  | Sign<br><br> |
| ii        | As learner, I accept my responsibility in:-<br>• Following up on the registration process in <b>validating</b> that I am <u>actually</u> registered.<br>• Maximising, retaining and expanding the permanent learning effects of the training provided.<br>• Diligently developing the required reporting materials to the engineering standards expected.<br>• Being available on-site during the pre-arranged academic visit.. |              |



Portfolio reports ..... continued **Template 5**

|   |    |
|---|----|
| <b>4. Skills developed in procedures of equipment use and or industry practice.</b> | Cr |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |

|  |    |
|--|----|
| <b>5. Integration of prior academic knowledge with WIL skills &amp; practices developed.</b><br>(For instance what past academic theories and skills developed at P-1 to date, were integrated into this current task. What energy efficient or modern technologies are or could be incorporated in this task? ) | Cr |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |

|  |    |
|--|----|
| <b>6. Skills developed in providing &amp; validating specification &amp; design of equipment systems.</b><br>(Here you provide your design and specification of developments in the technology and the validation there of.) | Cr |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |

|  |    |
|--|----|
| <b>7. Skills developed in observation &amp; application of South African National Standards, other regulations and safety aspects linked to your current task.</b> | Cr |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |

|  |    |
|--|----|
| <b>8. Cross- disciplinary skill development, applications or observed potentials, linked to other branches of engineering during the task.</b> | Cr |
|  |    |
|  |    |
|  |    |



Portfolio reports continued Template 5 Compilation order

|   |    |
|---|----|
| 9. Skills development in your technical approach to personal, inter-personal & workplace attitudes. | Cr |
|   |    |
|   |    |
|   |    |

|  |    |
|--|----|
| 10. Competencies developed to function, independently or as a team member. | Cr |
|  |    |
|  |    |

Learner’s validation:- I \_\_\_\_\_ validate that the reporting details above is my own and original developments of the WIL experiences that took place.

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

**Report Assessment by Mentor**

|  |   |                   |                |          |                    |
|--|---|-------------------|----------------|----------|--------------------|
| <b>Instruction to the mentor</b>   |   |                   |                |          |                    |
| Please complete the matrix in assessing this report. Conduct the assessment for each final report entry with the learner, AFTER the learner has COMPLETED the report for compilation into the portfolio. |   |                   |                |          |                    |
| <b>Please, compile a composite assessment score out of 5 for the grading of this report.</b>   |   |                   |                |          |                    |
| <b>Outcomes assessment</b>   | Outcomes from ISP developed and conducted assessments may also be included. |                   |                |          |                    |
| Key  | 5 = Excellent   | 4 = Above average | 3 = Acceptable | 2 = Poor | 1 = not acceptable |

|          |   |   |  |  |  |  |
|----------|---|---|--|--|--|--|
| Matrix A | Learner’s actions & commitment to WIL during the recording period (score out of 5)              |   |  |  |  |  |
| 1        | Punctuality and time keeping  |   |  |  |  |  |
| 2        | Shows a keen initiative in learning practical tasks   |   |  |  |  |  |
| 3        | Courteous and considerate to others in the industrial environment                               |   |  |  |  |  |
| 4        | Shows ability to integrate theory and practice  |   |  |  |  |  |
| 5        | Is able to explain the theory and learn the practice  |   |  |  |  |  |
| Matrix B | At the end of the learner’s reporting period, in the section covered (score out of 5)           |   |  |  |  |  |
| 1        | Demonstrate ability to integrate theory and practice by <i>examples</i>                         |   |  |  |  |  |
| 2        | Can work & learn with minimal supervision   |   |  |  |  |  |
| 3        | Demonstrate ability to integrate safety & regulation in given tasks ( <i>as per examples</i> )  |   |  |  |  |  |
| 4        | Demonstrate ability to relate and integrate cross-disciplinary tasks ( <i>as per examples</i> ) |   |  |  |  |  |
| 5        | Can explain the workings and inter-rations of equipment   |   |  |  |  |  |
| Max = 50 |   | Total (matrix A + B) -----                          |  |  |  |  |
| Score of |   | transferred value out of 5 maximum (Total/10) ----- |  |  |  |  |

Mentor’s name  Signature  Date

**Portfolio reports** **Template 5**

Each report must include FULL completion of the mentor’s assessment report.

The purpose of these reports and their layout is to guide the learner in reporting to a known academic standard (here NQF-6). Each report developed on the specific technology (distribution, protection, maintenance, etc.) as per the registered MoU, is also particular to your workplace specifics of equipment, function and operation. You must analyse your WIL experiences in the specific technology in deciding how best to provide entries under the common headings below.

Please make copies of this blank template, to initially develop drafts for discussion with your mentor and when appropriate, finalised as hand-written reports for compilation. Compile the required 6 reports in the compilation order E1 to E6.

Note: A minimum of 2 cross-references is required per report.

| Key | M = mentor | Cr = Cross reference number | Report # |                                      |
|-----|------------|-----------------------------|----------|--------------------------------------|
|     | M #        | Mentor Name                 |          | Specific Technology under discussion |
|     |            |                             |          |                                      |
|     |            |                             |          |                                      |

|  |    |
|--|----|
| <b>1. Executive Summary</b> <i>(Concise summary of WIL technologies and situations covered in this reporting period)</i> | Cr |
|  |    |
|  |    |
|  |    |
|  |    |

|   |    |
|---|----|
| <b>2. Equipment description/inter-connection</b> <i>(For instance the operating principles, function, methods of connection and precaution in use).</i> | Cr |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |

|  |    |
|--|----|
| <b>3. Skills developed on the preliminaries of engineering PROBLEM identification and assessment.</b> <i>(For instance in this technology and its operation, what is indicated as normal. How is problem indicated and how is it verified?).</i> | Cr |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |
|  |    |

|  |    |
|--|----|
| <b>4. Skills developed in providing and validating specification and design of equipment systems associated with an engineering problem in this technology field .</b> | Cr |
|  |    |
|  |    |
|  |    |
|  |    |



|   |    |
|---|----|
| 9. Skills development in your technical approach to personal, inter-personal & workplace attitudes. | Cr |
|   |    |
|   |    |
|   |    |

|  |    |
|--|----|
| 10. Competencies developed to function, independently or as a team member. | Cr |
|  |    |
|  |    |

**Learner’s validation:-** I \_\_\_\_\_ validate that the reporting details above is my own and original developments of the WIL experiences that took place.

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

**Report Assessment by Mentor**

|  |   |                   |                |          |                    |
|--|---|-------------------|----------------|----------|--------------------|
| <b>Instruction to the mentor</b>   |   |                   |                |          |                    |
| Please complete the matrix in assessing this report. Conduct the assessment for each final report entry with the learner, AFTER the learner has COMPLETED the report for compilation into the portfolio. |   |                   |                |          |                    |
| <b>Please, compile a composite assessment score out of 5 for the grading of this report.</b>   |   |                   |                |          |                    |
| <b>Outcomes assessment</b>   | Outcomes from ISP developed and conducted assessments may also be included. |                   |                |          |                    |
| Key  | 5 = Excellent   | 4 = Above average | 3 = Acceptable | 2 = Poor | 1 = not acceptable |

|          |   |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| Matrix A | Learner’s actions & commitment to WIL during the recording period (score out of 5)              |  |  |  |  |  |
| 1        | Punctuality and time keeping  |  |  |  |  |  |
| 2        | Shows a keen initiative in learning practical tasks   |  |  |  |  |  |
| 3        | Courteous and considerate to others in the industrial environment                               |  |  |  |  |  |
| 4        | Shows ability to integrate theory and practice  |  |  |  |  |  |
| 5        | Is able to explain the theory and learn the practice  |  |  |  |  |  |
| Matrix B | At the end of the learner’s reporting period, in the section covered (score out of 5)           |  |  |  |  |  |
| 1        | Demonstrate ability to integrate theory and practice by <i>examples</i>                         |  |  |  |  |  |
| 2        | Can work & learn with minimal supervision   |  |  |  |  |  |
| 3        | Demonstrate ability to integrate safety & regulation in given tasks ( <i>as per examples</i> )  |  |  |  |  |  |
| 4        | Demonstrate ability to relate and integrate cross-disciplinary tasks ( <i>as per examples</i> ) |  |  |  |  |  |
| 5        | Can explain the workings and inter-rations of equipment   |  |  |  |  |  |
| Max = 50 | Total (matrix A + B) -----  |  |  |  |  |  |
| Score of | transferred value out of 5 maximum (Total/10) -----   |  |  |  |  |  |

Mentor’s name  Signature  Date

**Note**  
 This final report is intended to provide feedback on the learner’s training period. It is required that the learner provides a brief formal presentation to the personnel involved in the training received, on the technological and personal skills developed in overview during the period.  
 The company representative should facilitate the entries and compile this report on the learner’s presentation.  
 Kindly complete all sections please – Document is for DUT accreditation purposes. *A copy of this report must be loosely inserted and not bound in the portfolio, to act as feedback for the academic department.*

**Final on-site Assessment and Feedback Report**

- Instructions:-** Please complete and officiate sections as indicated
- 1 Company representative – Sections A, C, D & E
  - 2 Learner – Sections – B 3. Engineering Assessment Team (*if applicable*) – Sections C, D & E.
  4. The most appropriate response is to be indicated, by marking, where applicable

**A**

|                |  |
|----------------|--|
| <b>Company</b> |  |
| Division       |  |

**B**

|  |   |                    |  |   |
|--|---|--------------------|--|---|
| <b>Learner</b>   | Surname & Init  |                    |  |   |
| Student No   |   | Training commenced |  | To end  |
| Plant / section in which the training was based?   |   |                    |  |   |
| Learner’s Comments   | <b>Please indicate the most appropriate option by marking Y = Yes or N =NO</b>            |                    |  |   |
| 1  | Are you satisfied with the level and intensity of work-integrated learning [WIL] offered? |                    |  |   |
| 2  | Has your technical communication skill been improved with this portfolio development?     |                    |  |   |
| 2  | Has this WIL period complimented your academic training in terms of theory & practice?    |                    |  |   |
| 3  | Have you been appropriately supported with training materials and technical references?   |                    |  |   |
| 4  | Would you in the future, like to participate in WIL industrial liaison committees?        |                    |  |   |
| General Comments: .....  |   |                    |  |   |
| .....  |   |                    |  |   |
| .....  |   |                    |  |   |
| Suggestions on future improvements to the WIL program at your company:                         |   |                    |  |   |
| .....  |   |                    |  |   |
| .....  |   |                    |  |   |
| .....  |   |                    |  |   |
| Suggestions on future improvements to the WIL registration and reporting documentation to DUT: |   |                    |  |   |
| .....  |   |                    |  |   |
| .....  |   |                    |  |   |
| .....  |   |                    |  |   |
|  |   |                    |  | <p style="text-align: center;"><i>Trainee under supervision</i></p> <p>Signature: _____</p> |

**Final on-site Assessment Report continued Template 6**

|   |                     |  |     |  |                                  |  |
|---|---------------------|--|-----|--|----------------------------------|--|
| <b>C Engineering Assessment Panel -</b> |                     |  |     |  | <b>Complete where applicable</b> |  |
| M1                                      | Principal Mentor    |  | Tel |  | email                            |  |
| M2                                      | Mentor              |  | Tel |  | email                            |  |
| M3                                      | Mentor              |  | Tel |  | email                            |  |
| M4                                      | Mentor              |  | Tel |  | email                            |  |
| EM                                      | Engineering Manager |  | Tel |  | email                            |  |

|                           |  |   |  |        |        |        |        |        |
|---------------------------|--|---|--|--------|--------|--------|--------|--------|
| <b>D Report - General</b> |  | To be completed by the engineering assessment team member(s). |  |        |        |        |        |        |
|                           | <b>Questions</b>   | Responses by assessment team are:- Y=Yes; N=No                |  | M<br>1 | M<br>2 | M<br>3 | M<br>4 | E<br>M |
| 1                         | Are you satisfied with the learner's overall progress and technical development during the WIL period?                                 |   |  |        |        |        |        |        |
| 2                         | Do you believe that the learner's reported and demonstrated skills developed are acceptable for the general electrical power industry. |   |  |        |        |        |        |        |
| 3                         | From association with the learner's training, would you recommend this person to the industry as proficient in the skills developed?   |   |  |        |        |        |        |        |
| 4                         | Please indicate if you would like to participate in our departmental WIL industrial liaison committee?                                 |   |  |        |        |        |        |        |

|  |  |   |                |                   |                    |                     |        |   |        |        |
|--|--|---|----------------|-------------------|--------------------|---------------------|--------|---|--------|--------|
| <b>E Outcomes assessment</b>   |  | Outcomes from company developed and conducted assessments may also be included. |                |                   |                    |                     |        |   |        |        |
| Key  | 5 = Excellent  | 4 = Above average   | 3 = Acceptable | 2 = Poor          | 1 = not acceptable |                     |        |   |        |        |
| Abbreviations  |  | M1= Principal mentor; M = mentor  |                | EM = Eng. manager |                    | Ave = Average score |        |   |        |        |
| Matrix 1   | Company assessment of learner's WIL outcomes             |   |                | M<br>ax           | A<br>ve<br>*       | M<br>1              | M<br>2 | M<br>3  | M<br>4 | E<br>M |
| 1  | Learning & enthusiasm capacity displayed                 |   |                | 5                 |                    |                     |        |   |        |        |
| 2  | Ability to integrate theory and practice by examples     |   |                | 5                 |                    |                     |        |   |        |        |
| 3  | Can work & learn with minimal supervision                |   |                | 5                 |                    |                     |        |   |        |        |
| 4  | Ability to integrate safety & regulation in given tasks  |   |                | 5                 |                    |                     |        |   |        |        |
| 5  | Ability to relate and integrate cross-disciplinary tasks |   |                | 5                 |                    |                     |        |   |        |        |
| 6  | Shown initiative in developing and expanding tasks       |   |                | 5                 |                    |                     |        |   |        |        |
| 7  | Neat, correct and thorough in completion of tasks        |   |                | 5                 |                    |                     |        |   |        |        |
| 8  | Capacity shown in integration of lateral thinking        |   |                | 5                 |                    |                     |        |   |        |        |
| 9  | Function as competent individual or as part of a team    |   |                | 5                 |                    |                     |        |   |        |        |
| 10   | Good work ethos and technical communication skills       |   |                | 5                 |                    |                     |        |   |        |        |
| Max = 50 Totals -----  |  |   |                |                   |                    |                     |        |   |        |        |
| Transferred value out of 5 maximum (Total/10) -----                  |  |   |                |                   |                    |                     |        |   |        |        |
| Mentor/Supervisor's comments (as representative of assessment team): |  |   |                |                   |                    |                     |        |   |        |        |
| Recommendations:   |  |   |                |                   |                    |                     |        | <i>Mentor/Supervisor</i><br>Signature:<br>_____ |        |        |

Engineering manager's comments :

*Engineering manager*

Signature:

\_\_\_\_\_

|                                 |                 |  |          |           |
|---------------------------------|-----------------|--|----------|-----------|
| <b>Work-Integrated Learning</b> | Visitation date |  | Level    | <b>P-</b> |
| Visitation Report [WVR-1]R108   | DUT Academic    |  | Distance | km        |

**A**

|                                  |  |          |  |       |  |
|----------------------------------|--|----------|--|-------|--|
| <b>Company</b>                   |  |          |  |       |  |
| Company representative or Mentor |  | Tel Cell |  | email |  |

**B**

|  |  |  |  |                               |
|--|--|--|--|-------------------------------|
| <b>Company representative report and comment</b> |  | To be completed by the engineering person to whom the trainee reports to. <b>Options indicated Y = Yes or N = No</b> |  |                               |
| 1  | Are you satisfied with the trainee's progress and technical development to date?                         |  |  |                               |
| 2  | Is the trainee's attitude and practical learning commitment, acceptable to your industrial environment?  |  |  |                               |
| 3  | Was the trainee's level of academic expertise, acceptable to your industry?                              |  |  |                               |
| 4  | Would you like to participate in our departmental WIL industrial liaison committee?                      |  |  |                               |
| 5  | Please provide a quality rating [1 (lowest) to 5 (highest)] on our WIL programme and its administration. |  |  |                               |
| General Comments: .....                          |  |  |  | <i>Company representative</i> |
|  |  |  |  | Signature: _____              |

**C**

|   |  |  |                          |                  |                          |                 |                              |                  |                          |
|---|--|--|--------------------------|------------------|--------------------------|-----------------|------------------------------|------------------|--------------------------|
| <b>DUT visiting official report and comment</b>               |  | <i>Please indicate the most appropriate option Y = YES or N = NO</i> |                          |                  |                          |                 |                              |                  |                          |
| 1   | Training during visitation is conducted  | In-house   | <input type="checkbox"/> | On Contract      | <input type="checkbox"/> | Training Centre | <input type="checkbox"/>     |                  |                          |
| 2   | WIL reporting documentation has been inspected and is in accordance with the registered MoU  |  |                          |                  |                          |                 | <input type="checkbox"/>     |                  |                          |
| 3   | On-site technical training facilities and or recommended industrial exposure locations have been visited and are deemed to be conducive to WIL as specified in the learner's MoU.            |  |                          |                  |                          |                 | <input type="checkbox"/>     |                  |                          |
| 4   | From observations, it is recommended that the learner's WIL training or exposure period be accredited, <i>subject to the final academic assessment of the completed reporting documents.</i> |  |                          |                  |                          |                 | <input type="checkbox"/>     |                  |                          |
| 5   | P-1 Evidence of basic training done in respect of artefacts, work piece specification and assessment have been found, inspected and are deemed to meet the departmental requirements.        |  |                          |                  |                          |                 | <input type="checkbox"/>     |                  |                          |
| 6   | Recommended listing  | Full P-1   | <input type="checkbox"/> | Partial (months) | <input type="checkbox"/> | Full P-2        | <input type="checkbox"/>     | Partial (months) | <input type="checkbox"/> |
| General Comments / Recommendations: <b>Option [ ] applies</b> |  |  |                          |                  |                          |                 | <i>DUT Academic official</i> |                  |                          |
| .....   |  |  |                          |                  |                          |                 | Signature                    |                  |                          |
| .....   |  |  |                          |                  |                          |                 | _____                        |                  |                          |
| HODs Comments: .....  |  |  |                          |                  |                          |                 | <i>Department HOD</i>        |                  |                          |
|   |  |  |                          |                  |                          |                 | Signature                    |                  |                          |
|   |  |  |                          |                  |                          |                 | _____                        |                  |                          |



|          |  |   |  |  |  |
|----------|--|---|--|--|--|
| <b>D</b> | <b>Learner</b>   | Student No, Surname & Init  |  |  |  |
|          | Learner's Comments   |   | <i>Please indicate the most appropriate option Y = YES or N = NO</i> |  |  |
|          | 1  | Are you satisfied with the level of work-integrated learning [WIL] offered?   |  |  |  |
|          | 2  | Has this WIL period complimented your academic training?  |  |  |  |
|          | 3  | Have you been suitably supported, on-site with training materials and technical references?   |  |  |  |
|          | 4  | Are you satisfied with your DUT presented academic knowledge on modern technology in the field of machine/system automation, communication and integration? |  |  |  |
| 5        | Please provide a quality rating [1 (lowest) to 5 (highest)] on our WIL programme and administration. |   |  |  |  |

|  |  |
|--|--|
| General Comments: .....<br>.....<br>** Signature reflect the acceptance of this report as commented and signed off. ** | <b><i>Trainee under supervision</i></b><br><br>** Signature: _____ |
|--|--|

|            |
|------------|
| Follow up: |
|------------|

|                            |
|----------------------------|
| Copies to learner & mentor |
|----------------------------|

[AP-1] Learner’s Portfolio Assessment for WP-1 Portfolios

|  |  |       |  |         |  |
|--|--|-------|--|---------|--|
| Reg#   |  | Inits |  | Surname |  |
| Company  |  |       |  |         |  |
| <p><b>Notes:</b> [Portfolio content/layout &amp; Academic Assessment]</p> <p>[1] Conduct preliminary assessment, if incorrect return to secretary for transmission to learner.</p> <p>[2] Conduct assessment, score above 38 The final on-site assessment must be completed.</p> <p>[3] The portfolio must be compiled as per the check sheet (Pg 2 of the learners portfolio document)</p> <p><b>*** If the above points are not met, the learner must be contacted to re-submit the portfolio ***</b></p> <p>[4] Complete this form in evaluating the attached portfolio.</p> <p>[5] Please provide reasons and guidelines to the learner if re-submission is indicated</p> <p>[6] Return portfolio with completed assessment form to secretary.</p> |  |       |  |         |  |

| A. Preliminary assessment of acceptance |                               |  |  | Tick ✓ or Cross |  |  |  |
|---|-------------------------------|--|--|-----------------|--|--|--|
| 1                                       | Recorded training 24-26 weeks |  |  | 3               | Cross reference entries under Annex 2    |  |  |
| 2                                       | 6 portfolio reports presented |  |  | 4               | All portfolio reports assessed by mentor |  |  |

B. **Assessment** Please provide the assessment in figures ranging from 1 to 5 as per the key below.

| Key                         | 5 = Excellent   | 4 = Above average | 3 = Acceptable | 2 = Poor        | 1 = not acceptable |           |
|-----------------------------|---|-------------------|----------------|-----------------|--------------------|-----------|
| Matrix 1                    | Overall Portfolio Layout and structure                                    |                   |                | Ms              | Assessor           | Moderator |
| 1                           | Neatness of layout & presentation   |                   |                | 5               |                    |           |
| 2                           | Suitability for 3rd party presentation                                    |                   |                | 5               |                    |           |
| 3                           | Syntax, spelling and grammar  |                   |                | 5               |                    |           |
| 4                           | Brevity and conciseness   |                   |                | 5               |                    |           |
| 5                           | Original work and content presentation                                    |                   |                | 5               |                    |           |
| Matrix 2                    | Overall learning experiences as indicated in portfolio                    |                   |                | Ms              | Assessor           | Moderator |
| 1                           | Executive summary & content as per MoU                                    |                   |                | 5               |                    |           |
| 2                           | Learner’s reporting on actual work conducted                              |                   |                | 5               |                    |           |
| 3                           | Technical competency shown in reports                                     |                   |                | 5               |                    |           |
| 4                           | Technical content presentation at NQF-5 (Theory integrated with practice) |                   |                | 5               |                    |           |
| 5                           | Examples validating integration of theory & practice                      |                   |                | 5               |                    |           |
| 6                           | Specification of equipment from manufacturers catalogues                  |                   |                | 5               |                    |           |
| 7                           | Knowledge / quotations from statutory / regulation documents              |                   |                | 5               |                    |           |
| 8                           | Integration of latest technology in practice (Eng. periodicals)           |                   |                | 5               |                    |           |
| 9                           | Cross referencing of theory in addendum                                   |                   |                | 5               |                    |           |
| 10                          | Rating as given in final on-site assessment at the end of period          |                   |                | 5               |                    |           |
|                             | Total Score = 75 <b>scores &gt;38 signifies a pass</b>                    |                   |                | 75              |                    |           |
| Comments by Assessor:       |   |                   |                | <b>Outcome:</b> |                    |           |
| Signature _____ Dated _____ |   |                   |                |                 |                    |           |
| Comments by Moderator [HOD] |   |                   |                |                 |                    |           |
| Signature _____ Dated _____ |   |                   |                |                 |                    |           |

[AP-2] Learner’s Portfolio Assessment for WP-2 Portfolios

|         |  |       |  |         |  |
|---------|--|-------|--|---------|--|
| Reg#    |  | Inits |  | Surname |  |
| Company |  |       |  |         |  |

**Notes:** [Portfolio content/layout & Academic Assessment]

[1] Conduct preliminary assessment, if incorrect return to secretary for transmission to learner.

[2] Conduct assessment, score above 38 The final on-site assessment must be completed.

[3] The portfolio must be compiled as per the check sheet (Pg 2 of the learners portfolio document)

**\*\*\* If the above points are not met, the learner must be contacted to re-submit the portfolio \*\*\***

[4] Complete this form in evaluating the attached portfolio.

[5] Please provide reasons and guidelines to the learner if re-submission is indicated

[6] Return portfolio with completed assessment form to secretary.

| A. Preliminary assessment of acceptance |                               |  |  | Tick ✓ or Cross |  |
|---|-------------------------------|--|--|-----------------|--|
| 1                                       | Recorded training 24-26 weeks |  |  | 3               | Cross reference entries under Annex 2    |
| 2                                       | 6 portfolio reports presented |  |  | 4               | All portfolio reports assessed by mentor |

**B. Assessment** Please provide the assessment in figures ranging from 1 to 5 as per the key below.

| Key                                       | 5 = Excellent  | 4 = Above average | 3 = Acceptable | 2 = Poor        | 1 = not acceptable |           |
|---|--|-------------------|----------------|-----------------|--------------------|-----------|
| Matrix 1                                  | Overall Portfolio Layout and structure                                   |                   |                | Ms              | Assessor           | Moderator |
| 1   | Neatness of layout & presentation  |                   |                | 5               |                    |           |
| 2   | Suitability for 3rd party presentation                                   |                   |                | 5               |                    |           |
| 3   | Syntax, spelling and grammar   |                   |                | 5               |                    |           |
| 4   | Brevity and conciseness  |                   |                | 5               |                    |           |
| 5   | Original work and content presentation                                   |                   |                | 5               |                    |           |
| Matrix 2                                  | Overall learning experiences as indicated in portfolio                   |                   |                | Ms              | Assessor           | Moderator |
| 1   | Executive summary & content as per MoU                                   |                   |                | 5               |                    |           |
| 2   | Technical competency shown in reports                                    |                   |                | 5               |                    |           |
| 3   | Technical content presentation at NQF-6 (Problem & Solution - Synthesis) |                   |                | 5               |                    |           |
| 4   | Examples validating problem & solution or synthesis investigation        |                   |                | 5               |                    |           |
| 5   | Knowledge / quotations from statutory / regulation documents             |                   |                | 5               |                    |           |
| 6   | Integration of latest technology in practice (Eng. periodicals)          |                   |                | 5               |                    |           |
| 7   | Cross referencing of theory in addendum                                  |                   |                | 5               |                    |           |
| 8   | Rating as given in final on-site assessment at the end of period         |                   |                | 5               |                    |           |
| Pertaining to the separate project report |  |                   |                |                 |                    |           |
| 9   | Academic standard of separate project report                             |                   |                | 5               |                    |           |
| 10  | Technical detail of report in terms of skills developed                  |                   |                | 5               |                    |           |
|   | Total Score = 75 <b>scores &gt;38 signifies a pass</b>                   |                   |                | 75              |                    |           |
| Comments by Assessor:                     |  |                   |                | <b>Outcome:</b> |                    |           |
| Signature _____ Dated _____               |  |                   |                |                 |                    |           |
| Comments by Moderator [HOD]               |  |                   |                |                 |                    |           |
| Signature _____ Dated _____               |  |                   |                |                 |                    |           |