**Information and Communications Technology Industry Training Advisory Committee**
**Software Products and Software Services (SW) branch**
**Unit of Competencies**

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| 1. Title | Debug a program |
| 2. Code | ITSWDM403A |
| 3. Range | Locate and fix defects in a program with appropriate debugging tools in the context of development of software products / services within an organisation or for a client<br>[Design Development Maintenance – Software Quality Assurance] |
| 4. Level | 4 |
| 5. Credit | 1 |
| 6. Competency | <u>Performance Requirement</u><br><br>6.1 Have the knowledge to select appropriate debugger<br><br>Be able to<br>▪ understand the selection criteria for an appropriate debugger for debugging programs<br>▪ understand the various debuggers available<br><br>6.2 Locate and fix the logical error<br><br>Be able to<br>▪ select and make use of an appropriate debugger to help in debugging programs<br>▪ systematically locate any logical errors<br>▪ effectively fix the logical error, if any<br>▪ record the locations of the errors, if any, and the corresponding fixing methods<br><br>6.3 Perform debugging of programs in a professional manner<br><br>Be able to<br>▪ debug programs in an efficient and effective manner<br>▪ follow organisation's standards and guidelines where applicable<br>▪ prepare the debugging report for stakeholders |
| 7. Assessment Criteria | The integrated outcome requirements of this UoCs are the abilities to:<br>(i) select appropriate debuggers to help debug programs;<br>(ii) use debugger to locate and fix the bug; and<br>(iii) prepare report on debugging. |
| Remark | |