Specification of Competency Standards
for the Manufacturing Technology Industry
Unit of Competency

Functional Area - Process Design and Development

Title	Apply Program Logic Controller (PLC) to compile electronic control program
Code	106498L4
Range	This unit of competency is applicable to the corporations of the Manufacturing Technology Industry. Practitioners should be capable to base on the plan of automation assembly system, apply Program Logic Controller (PLC) to compile electronic control program (PLC)
Level	4
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand relevant knowledge of compiling electronic control program • Understand the principles and techniques of computer mathematics • Understand the concept of the commonly used data encoding, principle of binary encoding (BCD code) and ASC II code • Understand the combination of all kinds of control methods and coding methods • Understand the types and functions of PLC on the market • Understand the coordination methods and techniques of PLC and other automation elements • Understand the debugging methods and techniques of electronic control program 2. Apply Program Logic Controller (PLC) to compile electronic control program (PLC) • According to the plan of automation assembly system, select the appropriate PLC • Make use of PLC foundation programming instructions and intermediate instruction, compile electronic control program • Test the compiled advanced instruction program • Debug and correct the PLC control program • Compare and improve the PLC control program PLC 3. Professional handling of compiling electronic control program • Meet the design, production quantity and quality requirements as a precondition, compile suitable electronic control program • Ensure safe operation of the developed pneumatic, hydraulic and electric devices system
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable to base on the requirements of control functions, make use of PLC foundation programming instructions and intermediate instruction, compile electronic control program, and also carry out testing, debudding and improvement for the control program
Remark	