

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

Functional Area - Process Design and Development

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| Title | Plan and define automation system |
| Code | 106586L5 |
| Range | This unit of competency is applicable to all corporations of Manufacturing Technology Industry. Practitioners should be capable to master the corporate needs on automated assembly, so as to plan and set the automation system. |
| Level | 5 |
| Credit | 6 (For Reference Only) |
| Competency | <p>Performance Requirements</p> <p>1. Understand relevant knowledge of planning and defining automation system</p> <ul style="list-style-type: none"> • Understand the overall production process of the corporation • Understand the methods and patterns of all production process • Understand the conditions of applicable automation, such as the quantity of products, types and shapes • Understand the components and their functions of automation system • Understand the data storage / integrated approach and techniques of automated system / • Understand standardized methods and techniques of fixtures • Understand the new technologies, advantages and disadvantages of automation system in the market <p>2. Plan and define automation system</p> <ul style="list-style-type: none"> • With the needs of products, assess the feasibility of implementing automation • Assess the required production machinery, tools and fixtures of automated system • Set priorities of operation and communication methods of automation systems • Set the automation system and select the appropriate fixtures, pneumatic, hydraulic equipment, circuit devices and multi-axis robot • Make adjustments in accordance with technical restrictions and achieve the design concept of automation system • Examine the benefits of automation systems and make improvements • Master the new technologies of automation systems and apply it to the production line <p>3. Professional handling of planning and defining automation system</p> <ul style="list-style-type: none"> • In accordance with the premise of security, capacity and quality of production, plan and set the automation system • Ensure the developed automation systems is safe to be operated |
| Assessment Criteria | <p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to response the needs of the corporation, plan and set the automation system • Capable to make adjustments in accordance with the project limitations and achieve the design concepts of automation system • Capable to examine the efficiency of automation system and make improvements |
| Remark | |