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

Functional Area - Product Design and Development

Title	Computer aided engineering (CAE) analysis on processing and tooling design
Code	106577L5
Range	This unit of competency is applicable to design and development departments of Manufacturing Technology Industry. Practitioners should be familiar with computer aided engineering (CAE) system, and capable to carry out analysis and improvement for processing and tooling design stimulation results
Level	5
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand relevant knowledge of computer aided engineering (CAE) • Understand the types, purposes, applications and restrictions of the commonly used CAE system in the industry • Recognise the latest development conditions of CAE • Understand the parameters setting methods and techniques of computer-aided engineering analysis (CAE) process and tooling design 2. Carry out computer aided engineering (CAE) analysis on processing and tooling design • Select and apply commonly used CAE systems to carry out computer simulation tests for product and tooling design • According to the results of computer simulation analysis, target the possible defect in the all processes of forming products • Collect and store the relevant information and data of CAE analysis results • According to customers requirements, make a detailed report of the results of computer simulations tests • According to the results of computer simulation tests, suggest feasible solutions to improve the product and tooling design 3. Professional handling of computer aided engineering (CAE) analysis on processing and tooling design • Ensure the data of CAE analysis is accurate
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable to select and apply commonly used CAE systems to carry out computer simulation tests for product and tooling design • Capable to make a detailed report of the results of computer simulations tests and ensure its accuracy
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