Unit of Competency

Functional Area: Manufacturing

Title	Master the Application of Computer-aided Design/Manufacturing/Engineering
Code	104824L3
Range	This unit of competency (UoC) is applicable in the production department of timepiece manufacturing companies. It covers the abilities to use computer-aided system in designing timepiece components, such as dial, case and band, except watch movement; and set the computerized numerical control (CNC) programme to manufacture the timepiece components.
Level	3
Credit	9 (for reference only)
Competency	Performance Requirements 1. Understand computer-aided design/manufacturing/engineering process • Understand the operation and functions of computer-aided design/manufacturing/engineering software • Understand the process from computer drawing of timepiece components to the output of products • Understand the production and handling of timepiece components • Understand the preparation of engineering drawing • Understand output file with numerical control machining and engineering analysis 2. Apply computer-aided design/manufacturing/engineering • Master the structural diagram of timepiece components and the operation and functions of computer-aided design software • Apply computer-aided software in drawing simple timepiece component design • Use computer-aided software to build solid models • Use engineering drawing to aid the manufacturing of timepiece components • Use the design file data output to manage the numerical control machining and engineering analysis 3. Exhibit professionalism • Manufacture the timepiece components according to the safety guidelines and code of practice of the Occupational Safety and Health Ordinance
Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: • Use computer-aided software to design timepiece components, such as dial, case and band; and • Use design file and data output to set the numerical control machining programme for timepiece components and carry out engineering analysis.
Remark	