

# Assessment Requirements for ICPPRN395 Set up and produce 3D print

Release: 1



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## **Modification History**

| Release   | Comments   |
|-----------|--|
| Release 1 | This version first released with ICP Printing and Graphic Arts Training Package Version 2.0. |

#### **Performance Evidence**

Evidence of the ability to:

- communicate with client to ascertain needs
- interpret specifications and confirm client requirements for a three-dimensional (3D) printed object
- prepare data files, printer and materials to suit the requirements of print job
- use a 3D printer to produce a 3D object that meets client specifications
- prepare, operate and shut down a 3D printer according to manufacturer's safety and organisational requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

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## **Knowledge Evidence**

To complete the unit requirements safely and effectively, the individual must:

- describe the features of common 3D printers including:
  - · files types used
  - · level of precision
  - basic operation
  - common applications
  - hazards associated with use
  - construction materials
  - construction technology
- describe the impact that the file type and graphics quality has on the output of the printed object
- identify and describe the printer parameters including:
  - scale and build platform size
  - number of models to output
  - print speed
- list and describe work health and safety (WHS) considerations for consumables used in current 3D printers
- list and describe WHS requirements for working with technologies currently used for 3D printing
- explain the purpose and process for using and safely removing structure supports in 3D printing
- describe the steps in cleaning a 3D object.

#### **Assessment Conditions**

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing and graphic arts field of work and include access to:

- 3D printer and manufacturers' operating procedures
- 3D printer ready files
- consumables necessary to print 3D models
- relevant personal protective equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

#### Links

Companion volumes are available from the IBSA website - http://companion\_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=17

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