

# ENGR 2012 GRAPHICS 3: 3D ENGINEERING SPECIFICATIONS AND VISUALISATION

Assessment	15 to 20	50	N	Individual
3. Product design and detailing	pages x A3 engineering drawings and a short simulation demonstration			

Teaching Periods

**Credit Points** 10

**Legacy Code** 301079

**Coordinator** Jean Payette ([https://directory.westernsydney.edu.au/search/name/Jean Payette/](https://directory.westernsydney.edu.au/search/name/Jean%20Payette/))

**Description** From 2020, this subject will be replaced by 301290 - Design Graphics: Communication for Manufacture. This subject introduces formal graphical communication methods used by professionals engaged in the design, manufacture and management of manufactured items. Students will learn how to follow Australian Standards for engineering drawings, and to use Computer-Aided Design (CAD) software for accurately representing and modelling basic parts and assemblies. The documentation of design concepts in the form of three dimensional (3D) computer models provides data that can be applied in a wide variety of ways to facilitate the understanding and production of parts and assemblies. The objective of this subject is to introduce students to the industry standard software and hardware employed to generate these models, via a "hands on" approach to creating 3D data. Issues such as data transfer, rapid prototyping, computer numerical control (CNC) machining and visualisation will also be discussed.

**School** Eng, Design & Built Env

**Discipline** Other Engineering And Related Technologies

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 2 subject

**Pre-requisite(s)** ENGR 2011 OR ENGR 1024

**Equivalent Subjects** ENGR 2014 Industrial Graphics 2 Transition

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Assessment 1: 3D modeling & Surfaces exercises.	2x solid modelling & surfaces exercises	10	N	Individual
Assessment 2: Reverse engineering of an existing product	15 to 20 pages x A3 engineering drawings	40	N	Individual