ENGR 2012 GRAPHICS 3: 3D ENGINEERING SPECIFICATIONS AND VISUALISATION

Credit Points 10

Legacy Code 301079

Coordinator Jean Payette (https://directory.westernsydney.edu.au/search/name/Jean Payette/)

Description From 2020, this unit will be replaced by 301290 - Design Graphics: Communication for Manufacture. This unit 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 unit 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/) 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.

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

Teaching Periods