

UNIVERSITY OF PLYMOUTH MODULE RECORD			
MODULE CODE: DSGN 120		CREDITS: 10	LEVEL: 1
MODULE TITLE: Engineering Drawing and CAD			
PRE-REQUISITE(S): None			
CO-REQUISITE(S):			
IF LINKED, MODULE LINKED TO:			
SHORT MODULE DESCRIPTOR (For module catalogue. MAXIMUM four lines 9pt print):			
This module provides: 1) An introduction to the iterative process of design 2) An introduction to the form and role of communicating engineering ideas and designs. 3) Experience of formal sketching and 3D solid modelling using CAD software.			
ELEMENTS OF ASSESSMENT			
COURSEWORK 100% EXAMINATION XX% END MODULE TEST XX% PRACTICE XX%** Give Subject Panel Group to which module should be linked Minimum pass mark for accreditation			
MODULE AIMS:			
1) To enable students to communicate using engineering drawing to an international standard. 2) To introduce the role of engineering drawings and CAD in the design process. 3) To enable students to communicate designs and create engineering drawings using 3D solid modelling software.			
LEARNING OUTCOMES: At the end of this module students should be able to:			
1) Understand engineering design as a procedure. 2) Interpret 1 st and 3 rd angle orthographic projection drawings and isometric projections. 3) Draw by hand a fully dimensioned 1 st and 3 rd angle orthographic projection drawing of a simple component. 4) Draw by hand an isometric projection of a simple component. 5) Understand capabilities of current CAD software, with respect to product design and development. 6) Create 3D parts and assemblies using 3D solid modelling software. 6) Create an orthographic projection drawing from a 3D model using 3D solid modelling software.			
ASSESSED SKILLS ELEMENTS:			
1) Drawing in orthographic and isometric projection. 2) Modelling and drawing creation using 3D solid modelling software. 3) Development of communication, numeracy, IT and independent learning skills.			
INDICATIVE SYLLABUS CONTENT:			
The design process. Orthographic projection in 1 st and 3 rd angle. Pictorial projection. Sections Dimensions. Standard engineering parts and features. Assembly drawings. Current CAD technology. CAD software operation, using 3D solid modelling package.			
VALIDATION: DATE OF APPROVAL: XX/XX/XX DATE OF IMPLEMENTATION XX/XX/XX DATE(S) OF APPROVED CHANGE: XX/XX/XX			
FACULTY: Technology	DEPT: School of Engineering	PARTNER INSTITUTION	(for IHS only) NAME OF SITE
MODULE LEADER: Neill Hughes		Term : Autumn	

** For professional programmes only within Faculty of Human Sciences