

ASSIGNMENT TASK

Module:	Advanced 3D CAD	Module Level (4, 5, 6, 7):	5
Assignment Title:	M5X01237	Contribution to Overall Module Assessment (%):	A1: 50 A2: 50

Assignment Context

There are **TWO** assessment elements for this module which will be used to assess the Learning Outcomes.

A1: Solid Modelling (Solidworks/Fusion 360)

A2: Surface Modelling (Autodesk Alias/Fusion 360)

THE PRIMARY OBJECTIVE OF YOUR DEVELOPMENT IN THIS MODULE IS FOR YOU TO BE ABLE TO CREATE IN A VIRTUAL ENVIRONMENT AN ASSEMBLY OF PARTS WITH SURFACING AND SOLID MODELLING INTEGRITY REPRESENTING YOUR DESIGN OUTCOME.

In conjunction with the Professional Practice module, you are to model accurately to scale (1:1) a **SOLID** and **SURFACE** model outcome of the design outcome for the first assignment.

Guidance for Students in the Completion of Tasks

A1 & A2: Deliverables for Assessment Component

You are to submit within the specified digital folder of the final assembly that represents your final design outcome from the Professional Practice first assignment, ensure all parts are named and saved appropriately. You must attempt to reproduce the design as accurately as possible. You must demonstrate best practice in the construction of your final outcome in regard to utilising **BOTH** a **SOLID MODELLING & SURFACE MODELLING** workflow, which are equally weighted in the assessment criteria. Within the assembly modelling, try and mate/constraint the associated parts enabling the correct functionality.

Submission Deadline: 10.00am 08.01.18

(All elements)

Digital copy: USB Memory Stick

Digital copy: Folder Name

2016-17-M5X01237-[YOUR SURNAME, FIRST INITIAL]

Please note that **ONLY CAPITALS** should be used for the Folder name and remember to name all your parts and assemblies appropriately within these folders. It is recommended that you create the following sub-directories: Solid & Surface.

Resources:

1. Alias/Solidworks/Fusion 360 on-line Tutorials.
2. CAD Studio.
3. Library & Internet resources.

Assessment & Feedback

A1 & A2 Assessment Criteria:

These elements will be assessed in relation to the specified learning outcome using the common assessment criteria specified below which are all weighted equally.

LO 1: Common Assessment and Marking Criteria 3 (Modelling Workflow)

LO 2: **Technical Skill:** Effective utilisation of appropriate materials, tools and techniques and the level of skill demonstrated in their application to the realisation process.

Common Assessment and Marking Criteria 6 (Formative)

Personal Learning & Development: Personal responsibility demonstrated in managing own learning through programme engagement, self-directed study and reflective practice.

LO 3: Common Assessment and Marking Criteria 3 (Modelling integrity)

Technical Skill: Effective utilisation of appropriate materials, tools and techniques and the level of skill demonstrated in their application to the realisation process.

Feedback:

During the timetabled sessions throughout the semester, **FORMATIVE** feedback will be given regarding your technical skill development in the virtual environment for the surfacing & solid modelling programme packages. It is your responsibility to engage in this process. Failure to engage will mean you are foregoing the formative feedback process which is essential to your skills development and learning experience. You will be provided with written **SUMMATIVE** feedback and the opportunity to discuss your performance in a studio tutorial during the week beginning 22.01.17. For breakdown of Common Assessment and Marking Criteria into grading categories refer to the table on Moodle.

Please note:

1. It is important you bring the appropriate project work with you to every tutorial session.
2. Your attendance is monitored (as per University regulations).