Sam University of Bristol Design & Computing AENG11600

Computer Aided Design Course outline

This part of the unit will be delivered and supported by:-

Richard Martin

Set A (Lab groups A1.1-A1.15)	Set B (Lab groups A1.16-A1.30)
Rob Worboys	Gordon Clarke
Sam Scott	Max Dixon
Ashwin Kristnama	Aewis Hii
Jonathan Stacey	Jakub Rycerz

(Supporting staff attendance may vary depending on availability, and may include: Muhammad Othman, Oliver Nixon-Pearson, and Bradley Cox)

Session dates

There are 10 sessions on Friday afternoons from 14:00 to 17:00:-

Lab Groups-	Set A	Set B	
Session 1	6/10/17	29/9/17	Introduction and demonstrations. Task 1
Session 2	20/10/17	13/10/17	Task 1 assessed during this session. Task 2.
Session 3	3/11/17	27/10/17	Task 2 assessed during this session. Task 3.
Session 4	24/11/17	10/11/17	Task 3.
Session 5	8/12/17	1/12/17	Task 3 assessed during this session. Task 4.
Session 6	26/1/18	15/12/17	Task 4 assessed during this session. Task 5.
Session 7	9/2/18	2/2/18	Task 5.
Session 8	23/2/18	16/2/18	Task 5 assessed during this session. Task 6.
Session 9	16/3/18	9/3/18	Task 6.
Session 10	20/4/18	23/3/18	Task 6 to be submitted electronically on or before this date.

All CAD tasks must be completed on time to receive maximum marks.

Your attendance is required at all 10 sessions. It will be recorded and contribute to your marks. Make sure you have an attendance mark before you leave the session. They will not be given retrospectively.

Assessment

The CAD sessions and tasks contribute 25% to the overall marks for this module. You will be given 6 tasks to complete, which will attract marks:-.

For attendance 1 mark giving a maximum of 10
Task 1: maximum of 3 marks, assessed in class.
Task 2: maximum of 3 marks, assessed in class.
Task 3: maximum of 4 marks, assessed in class.
Task 4: maximum of 4 marks, assessed in class.
Task 5: maximum of 6 marks, assessed in class.
Task 6 to be marked out of 30, after electronic submission.

The maximum for CAD is therefore 60.

Task content

Task 1 - subject areas
Introduction to file types, project files and libraries.
Sketches and constraints.
Creating solids using extrusion and adding hole and fillet features.

Task 2 - subject areas
Creating solids using rotate, loft and sweep.
Using work planes.
View components in an assembly file.

Task 3 subject areas
Controlling shape and size with parameters.
Assemblies - placing and constraining parts.
Mechanisms - driving constraints.
Presentations - animating assemblies and .avi/.wmv files

Task 4 subject areas
Creating drawings from parts and assemblies.
Base and projected views.
Setting standards and conventions, sheets and title blocks.
Retrieving model dimensions and adding further dimensions and notes.
Plotting.
Two way associativity.

Task 5 subject areas
To include areas covered in previous sessions.
Create sheet metal parts.
Accessing standard content such as fasteners.
Parts lists on assembly drawings.

Task 6
Design and document project.