

Mechanical Analysis and Design

ME 2104

Lecture 13

Manufacturing

Prof Ahmed Kovacevic

School of Engineering and Mathematical Sciences
Room CG25, Phone: 8780, E-Mail: a.kovacevic@city.ac.uk
www.staff.city.ac.uk/~ra600/intro.htm

Plan for today

- Introduction & principle rules for laboratory
- Laboratory & team meeting

Schedule

Term 2		Return to ME2104 web page		DAE4: Banerjee			
Week	Date	Design <i>ELG01 - Mondays 14,00-15,50</i>		Analysis Geary - <i>Thursdays 15,00-16,30</i>			
11	29-Jan 02-Feb	Detailed design	Date	DAE3: Dynamics Lecture			AE1 & CLG01
		Project work - Embodiment design		Week no	Time		
12	05-Feb 09-Feb	Detailed design - revision	Mon 19/02/2018	Week 4	16:00	18:00	Supervised Manufact.
		Project work - Detailed design	Thu 22/02/2018	(5 hrs)	15:00	18:00	Manufacturing
13	12-Feb 16-Feb	3rd Project Review - Detailed Design	Mon 26/02/2018	Week 5	16:00	18:00	Supervised Manufact.
			Thu 01/03/2018	(5 hrs)	15:00	18:00	Manufacturing
14	19-Feb 23-Feb	Detailed design - revision	Mon 05/03/2018	Reading week week	09:00	12:00	Supervised Manufact.
		Project work - Detailed design	Tue 06/03/2018		09:00	17:00	Manufacturing
15	26-Feb 02-Mar	Manufacturing - briefing and rules	Wed 07/03/2018		(18 hours)	09:00	12:00
		Project - Purchasing/Manufacture	Thu 08/03/2018	09:00		12:00	Manufacturing
RLW	05-Mar 09-Mar	Reflective learning week - Manufacturing	Mon 12/03/2018	Week 6	16:00	18:00	Supervised Manufact.
		Work on the Main Project	Thu 15/03/2018	(5 hrs)	15:00	18:00	Manufacturing
16	12-Mar 16-Mar	Manufacturing - Issues	Mon 19/03/2018	Week 7	16:00	18:00	Supervised Manufact.
		Project work - Manufacturing	Thu 22/03/2018	(5 hrs)	15:00	18:00	Manufacturing
17	19-Mar 23-Mar	Manufacturing - Refining prototypes	Thu 26/03/2018	Week 8	13:00	17:00	FOM Testing Sports Centre
		Project work - Manufacturing					
18	26-Mar 30-Mar	Testing of Prototypes (FOM) (26/3/2018)	Mon 09/04/2018	Week 10	14:00	18:00	"Dragon's Den" 200 Aldersgate
19	02-Apr 06-Apr	Project work Report preparation		DAE4: Deformations&FEM - project work			
20	09-Apr 13-Apr	Final Presentation		DAE4: Deformations&FEM - Assesment			

Technical support

Mr Richard Leach – technical lead

Mr Keith Pammet – general support/
control systems

Mr Phil Beckwith - woodwork

Mr Rob Cherry – general support

Mr Paolo Lo Giudice – general support

Mr Zaheer Hashim – control systems

Tasks for this week

- Finalise detailed designs
- Divide in 2 subgroups: Manufacturing and Administration/Design
- Start manufacturing
- Start preparing final report and presentations
- Meeting on Mondays and Tuesdays and more if needed
- Testing 26th April @ 13,00-17,00 in the Sports Centre
- Presentation – Dragons Den type:
 - » Mon 9th April 2018 @ 14,00-18,00 in ELG01

Content for the Final Project Review

- Final Report.
- Manufacturing Review.
- Updated Manufacturing Drawings and CAD models.
- Sales and Marketing strategy, Business Model.
- Cost Analysis and Break-even diagram.
- FOM and Prototype testing
- Poster
- User Manual
- Logbook

Report (15 Pages + Appendix)

Due: Sunday, 9th April 2018, 12:00 PM

- Introduction 5%
- Updated Manufacturing Drawings and CAD models. 10%
- Sales and Marketing strategy, Business Model. 10%
- Cost Analysis and Breakeven curve. 10%
- FOM and Prototype testing 10 %
- Poster 20%
- User Manual 10%
- Logbook 20%
- Summary 5%

% Indicates weighting of Marks

Presentation (10 Slides, 15 mins + 10min Q's)

Due: Sunday, 8th April 2018, 11:59 PM

Presentation:

9th April 2018 14:00 – 18:00, Room ELG01

% Also indicates weighting of Marks

Q & A