ME2104 – Mechanical Analysis

Assignment for the group coursework – DAE2

Design and Selection of mechanical elements

GENERAL PROJECT DESCRIPTION

Design teams consisting of 4-6 students are asked to produce short report (5 pages), presentation (5 slides) and calculation program on the design and selection of a mechanical element. Please refer to the list on the reverse for the team members and the mechanical elements. The students will work in a self-managed teams for 5 weeks. They will demonstrate competence in understanding the design and selection of mechanical elements through submitted documents and oral presentation (5 min).

For the specified mechanical element teams are asked to perform research and produce very concise report and power point addressing:

- 1. Application of mechanical element
- 2. Types and variants of mechanical element
- 3. Principles of design and/or selection

Calculation program(s) will allow calculation/selection of majority of variants of a mechanical element

The files to be submitted online are:

1) Short Report of up to 5 pages; 2) computer program (in Excel); 3) Power point presentation up to 5 slides

Week	Date	Analysis C343 - Mondays 16,00-17,50	
1	11-Nov	DAE2: Mechanical Analysis-Lecture	
		DAE2: Mechanical Element – Project Assignment	
2	18-Nov	DAE2: Group work	
3	25-Nov	DAE2: Mechanical Analysis-Lecture	
		DAE2: Group work	
4	2-Dec	DAE2: Group work	
5	9-Dec	DAE2: Mechanical Analysis - Presentation	

Schedule:

Deadlines:

- Project Assignment 11/11/2013
 Online Written report up to 5 pages 06/12/2013 @ 16,00
- Online Power point presentation 06/12/2013 @ 16,00
- Online Power point presentation 06/12/2013 @
- Oral Group presentation and program demonstration 09/12/2013 @ 16,00 in C343
- Online excel program submission 13/12/2013 @ 16,00

1	Ovais	Ahmed	
		Amino	
2	Lamnaouar	Amine]
3	Runui	AZIZ	Bearings
4	Mounir	Charari	
1	Muhamad	Haji Jafar	
2	2 Syed	Hassan	2
3	Iordanis	Kridiotis	Gears
4	Hussain	Ladak	
1	Olabode	Brown	
2	Colin	Graham	3
3	Parmasher	Heer	Shock absorbers
4	Arturs	Kokins	
1	Oystein	Myhre	
2	Hiep	Nguyen	4
3	Mads	Sandal	Springs
4	Edward	Talboys	
1	Leah-Merelle	Ackun	
2	Reem	Al-Halabi	5
3	Alexandra	Foden	Power screws
4	Joel	Fundu	
1	Timothy	Linkens	
2	Malik	Malas	6
3	Bilal	Chah	Shafte & Kovavave
•	Dilai	Shan	Shalls & Reyways
4	Joseph	Sharka	Sharts & Reyways
4	Joseph Manvir	Sharka Bhandal	
4 1 2	Joseph Manvir Muhammad	Sharka Bhandal Humayun	7
4 1 2 3	Joseph Manvir Muhammad Vlad	Sharka Sharka Bhandal Humayun Ivan	7 Belt drives
4 1 2 3 4	Joseph Manvir Muhammad Vlad Muhammad	Shan Sharka Bhandal Humayun Ivan Shahid	T T T T T T T T T T T T T T T T T T T
4 1 2 3 4	Joseph Manvir Muhammad Vlad Muhammad Wajih	Shan Sharka Bhandal Humayun Ivan Shahid Siddigui	7 Belt drives
4 1 2 3 4 1 2	Joseph Manvir Muhammad Vlad Muhammad Wajih Dhiren	Shah Sharka Bhandal Humayun Ivan Shahid Siddiqui Suhang	Belt drives
4 1 2 3 4 1 2 3	Joseph Manvir Muhammad Vlad Muhammad Wajih Dhiren Shen	Shan Sharka Bhandal Humayun Ivan Ivan Shahid Siddiqui Suhang Yan	7 Belt drives 8 Couplings