



University of
Nottingham
UK | CHINA | MALAYSIA

Design, Manufacture and Project (MMME2044)

Outline of Spring Exam

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Learning objectives of MMME2044

- **The overall aim of this module is to**
 - develop **understanding of design methods** and use them in design,
 - demonstrate an **in-depth working knowledge of common machine elements** in designing different machine systems,
 - enhance **practical skills** in creative/critical thinking, use of CAD software and presentation of quality drawings and ability to make sound engineering judgement.
- The MMME2044 **Spring exam** is to evaluate **your understanding and knowledge of topics covered in lectures.**
- To help efficient revision, **NOT all covered topics in Autumn and Spring semesters will be included in the **Spring Exam.****
- **There will be a Revision Lecture and Support sessions after Easter vacation.**

What could be included in the exam?

Topics could be included in the Spring Exam from both Autumn and Spring semesters

✓ **Machine Elements**

- Bearings (1 & 2)
- Bolted joints
- Brakes and clutches
- Gears (1, 2 & 3)
- Linkage mechanism

✓ **Design Methods**

- Design for manufacture/assembly
- Sustainable and inclusive design

What will not be included in the exam?

Topics are excluded from Spring exam

- **Lecture topics**

- Machine system design & Selection of springs
- Pneumatics and Hydraulics
- Seals
- Shaft design

- **Group D&M (Air Motor) and individual (Gearbox Actuator) projects PDR and CDDR related briefings, design, calculations or GA and detail drawings**

- **Any CAE Solidworks related tasks and topics**

A few tips and hints for revision

- **Review lecture slides and handout materials**
 - Study contents & worked examples from lecture slides, handouts & video recordings (available on **Moodle/Echo360**)
 - **Only revise on topics to be included**
 - No questions on SW modelling or animation from lectures, projects or CAE sessions
- **General arrangement/form of MMME2044 exam**
 - **2 hours duration**
 - **2 Questions on Machine Elements and 1 Question on Design Methods (20 marks for each question). Answer all questions in exam.**
- **Exam papers & solutions in past 3 years available in the Assessment Section on Moodle**
- **2019-20 paper included optional questions but not the case in this year's exam**

Any questions?