

Department of Mechanical, Materials and Manufacturing Engineering

MMME3049 Engineering Management 2 Introduction & Course Synopsis 2023





- A set of skills and a collection of knowledge that will help you be successful
- A safety net you can fall back on in your future jobs
- Quite a broad thing as you'll see throughout these lectures



DIGITALIZATION







Welcome to Engineering Management 2!

- Teaching team
- Overview of module content
- Module delivery
- What's on moodle
- Assessment in the module

Meet the teaching team









Dr Mike Clifford (convener)

Mike Walsh

Dr Martin Baumers

Overview of module content

Provides students with an introduction to usable concepts of relevance in the broad field of engineering management, consisting of the following:

- Week 20 (Tue): Introduction and course synopsis (Mike Clifford)
- Week 20 (Fri): The economics of digitalization and automation (Mike Walsh)
- Week 21 (Tue): Operations management (Martin Baumers)
- Week 21 (Fri): Financial planning (Martin Baumers)
- Week 22 (Tue): Introduction to financial accounting (Martin Baumers)
- Week 22 (Fri): Financial analysis (Martin Baumers)
- Week 25 (Tue): Lean (Mike Walsh)
- Week 25 (Fri): Quality management (Mike Walsh)
- Week 26 (Tue): Management of people (Mike Walsh)
- Week 26 (Fri): Introduction to contract law (Mike Clifford)
- Week 27 (Tue): Technology, innovation and disruption (Mike Walsh)
- Week 27 (Fri): Marketing (Martin Baumers)
- Week 28 (Tue): Business modelling (Martin Baumers)
- Week 28 (Fri): New business formation (Martin Baumers)

Module delivery

- The module has a credit weight of 20 credits
- The module will be delivered in 13 two-hour lecture engagements
 - There will be one introduction and one revision session
- The lectures will at the following times:
 - TUESDAYS, 9.00am to 11.00am, Physics B1
 - FRIDAYS, 9.00am to 11.00am, Physics B1
- There will be an short <u>optional</u> ExamSys practice test following each Friday lecture

MMME3049 Module structure (2022-23)

| MMME3049 (20 credits) | Syllabus we | eks, as per Uo | oN calendar, | all session wi | ith a 2.00h di | uration, all ir | n Physics B1 | | | | | | | | | | |
|-------------------------------------|--|---|---|----------------|--|---|---|---|---|---------|-----------------------------|---------|---------|---------|---------|----------------------|---------------------------------------|
| | Week 20 | Week 21 | Week 22 | Week 23 | Week 24 | Week 25 | Week 26 | Week 27 | Week 28 | Week 29 | Week 30 | Week 31 | Week 32 | Week 33 | Week 34 | Week 35 | Exam period |
| Lecture | Introductio n and course synopsis (Mike Clifford) | P009 Operations manageme nt w/o Lean (Martin Baumers) | P013 Introductio n to financial accounting (Martin Baumers) | | | L010 Lean (Mike Walsh) | P010 Manageme nt of people (Mike Walsh) | P005 Technology, innovation and disruption (Mike Walsh) | P007 Business modelling (Martin Baumers) | | Easter vacation (Wks 29-32) | | | | | Revision session | |
| Date / time | Tue 31/1/23, 0900 | Tue 7/2/23, 0900 | Tue 14/2/23, 0900 | | | Tue 7/3/23, 0900 | Tue 14/3/23, 0900 | Tue 21/3/23, 0900 | Tue 28/3/23, 0900 | | | | | | | Tue 16/5/23, 0900 | , |
| Lecture | P004 The economics of digitalizati on and automation (Mike Walsh) | P013 Financial planning (Martin Baumers) | P014 Financial analysis (Martin Baumers) | | | B012 Quality manageme nt (Mike Walsh) | Intro to contract law (Mike Clifford) | B011 Marketing (Martin Baumers) | P008 New business formation (Martin Baumers) | - | | | | | | | |
| Date / time | Fri 3/2/23, 0900 | Fri 10/2/23, 0900 | Fri 17/2/23, 0900 | | | Fri 10/3/23, 0900 | Fri 17/3/23, 0900 | Fri 24/3/23, 0900 | Fri 31/3/23, 0900 | | | | | | | | |
| Formative ExamSys practise tests | 5-question practice test, to be set on day of second lecture | 5-question practice test, to be set on day of second lecture | 5-question practice test, to be set on day of second lecture | | | 5-question practice test, to be set on day of second lecture | | | | | | | | |
| Summative ExamSys assessments | | | | | 1.00h ExamSys exam (40% weight) | | | | | | | | | | | | 2.00h ExamSys exam (60% weight) |

... any changes will be communicated via moodle!

Textbook

- Baumers, M. and Dominy, J., 2021. *Practical Management for the Digital Age: An Introduction for Engineers, Scientists, and Other Disciplines*. Boca Raton: CRC Press
- Most lectures in second and third year management teaching in M3 are based on this (MMME2049, MMME3049, MMME2032, and MMME3075)
- Available in the library (hardcopy & ebook) and for purchase
- Contains references to further reading and additional review questions



What you will find on moodle

- Presentations, Echo360 lecture recordings and other course materials for each lecture
- Access links to the ExamSys practice tests and last year's exam papers (once available)
- Module announcements
- Information and instructions for the assessment
- Access to the Engineering Management 2 Q&A Forum





How the module will be assessed

This module will be assessed using ExamSys

- What is ExamSys?
 - ExamSys is UoN's e-assessment system
 - It is a flexible software platform that can be used for many different types of assessment
 - It can be used in formative and summative assessments
- It is a Computerised Classification Testing (CCT) system





Apart from changes to policy and URLs, the disruption to students should be minimal.

This is how it looks like...



| ExamSys: Assessment — Mozilla Firefox | - 🗆 X |
|---|---|
| O A https://examsys.nottingham.ac.uk/paper/start.php?id=282311647258115152746&mode=preview | Ē☆ ☆ ≡ |
| MMME3049 Rogo Practice Test - Managing People P012 2021-2022 | University of Nottinghai UK I CHINA I MALAP |
| 1. Associate the following statements about staff with Theory X and Theory Y in McGregor's framework and Theory Z in Ouchi's framework by clicking on the most appropriate boxes. | |
| A Staff see work as a challenge | |
| B Staff have little motivation C Staff dislike their work D Managers should trust their staff E Staff are disciplined and hard- F Staff are knowledgeable about their G Staff need frequent rewards H Staff need to be supported by the | |
| (4 marks) | |
| 2. Is the following statement true or false: | |
| Experienced female managers show no differences in leadership abilities from experienced male managers. These women, in fact, are likely to closely resemble their male counterpart competitiveness. | ts in drive, skills, temperament and |
| O True O False | |

In this module, there will be two ExamSys exams

- This exam will together make up 100% of your final mark
 - Exam 1: In-term ExamSys exam, 1.00h duration, 40% weight (date to be released). This exam covers the material presented in lectures 1 6
 - Exam 2: ExamSys exam, 2.00h duration, 60% weight (Spring assessment period, TBA). This exam covers the material presented in lectures 7 14. NOTE THAT CONTRACT LAW IS NOT COVERED IN THIS EXAM
- Information about the exams is provided on moodle
- Contract Law will be assessed separately in an on-line test
- Practice tests do not count towards your mark

..... More information on moodle



University of Nottingham

We hope you enjoy the course!