

Introduction to Engineering Part IIA

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Course outline

- Part II: You determine the particular flavour of your course
- You choose 10 modules from a broad selection, across 9 Engineering Areas. Make selection on COMET by 11:59 pm Wednesday 13th.
- You largely make your own arrangements for coursework and projects.
- You have to manage your timetable actively.

Engineering Areas

- There are very few constraints on your module selection for general Engineering.
- You might want to select module combinations that allow you to qualify for one or more Engineering Areas.
- Your CUED transcript will show all the areas you qualify for

Expectations and standards

Part II students are expected to have:

- developed some **academic maturity**,
- learnt good independent **study skills** and
- be able to **self-organise**.

How does Part II compare in difficulty with Part I?

The work is **more difficult** but you'll find it more interesting.

You can focus on **subjects you like!**

Higher standards expected because you are getting better!

Still the same % in each class (30% First, 50% II.1)

How do modules work?

16 lectures,
3 examples papers,
3 supervisions + 1 revision supervision
Coursework (lab, or other exercise) + often Full Technical Report.

You have to:

Book yourself in to do a lab (on-line, or paper signup)

Aim to do some labs early in the term

Write up the lab, hand-in for marking, attend sign-up session
(often a scheduled feedback session for a big group of students)

Supervisions

3 examples papers, 3 supervisions, plus one revision supervision

Supervisors should contact students to arrange supervisions: often arrangements are made using Moodle, or may be paper-based.

You must be organised and pro-active: your group may be with people you don't know, so effort is involved to agree on times.

Some supervisors are excellent. If your supervisor is *completely* hopeless, contact the module leader or your DoS *immediately*

Some management modules offer no supervisions, but instead timetabled classes for the whole group.

Coursework

You must submit **8 pieces of module coursework** (5-6 h each)

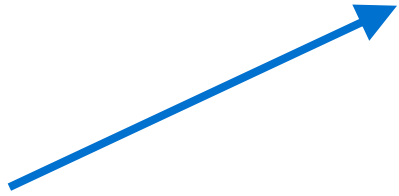
You must do two **Full Technical Reports**, including at least one in Michaelmas (10-15 h each)

Deadline for Full Technical Reports is now out of term,
Wed week 9, 4pm

You must do one Extension Activity (ExA), for standard credit (20 marks). (up to 20 h)

You must do 2 projects in Easter Term (after exams):
choose at the end of this term (~80 hours per project).

Labs, ExAs & Projects

- All are in-person
- Arrangements for lab/coursework for each module will be posted on Moodle
- ExAs - choose one now 
- Projects – choose 2 later in term

Activity & link to summary sheet	Access	Timing	Sign-up sheet location	Staff in charge
Surveying*	Open to all and recommended for: 4. Civil Engineering	End of Lent term (wk8) [& end of Michaelmas term, if needed] [NB Runs from 2pm on last day of lectures (Wednesday) until Friday afternoon]	Online [Ⓔ]	Dr. D Liang [Ⓔ]
Flow visualisation	Open to all and recommended for: 1. Mechanical Engineering 2. Energy, Sustainability & the Environment 3. Aerospace & Aerothermal Engineering	End of Michaelmas term (wks 8/9) (including Thursday and Friday after last day of lectures) Lent term(2ks 1/2)	sign up details to follow	Dr. N Atkins [Ⓔ]
Hybrid Energy	Open to all and recommended for: 1. Mechanical Engineering 2. Energy, Sustainability & the Environment 3. Aerospace & Aerothermal Engineering 8. Instrumentation & Control	Michaelmas term	Online [Ⓔ]	Dr. A. M. Botes [Ⓔ]
Failure analysis	Open to all and recommended for: 1. Mechanical Engineering	Lent term	Online [Ⓔ]	Dr. A. E. Markaki [Ⓔ]
Design & performance of a portable motor-generator set	Open to all and recommended for: 1. Mechanical Engineering 2. Energy, Sustainability & the Environment 3. Aerospace & Aerothermal Engineering 8. Instrumentation & Control	Lent term	Online [Ⓔ]	Dr. D. J. Cole [Ⓔ]
Technical feasibility studies/3D printer control	Open to all and recommended for: 1. Mechanical Engineering 5. Electrical & Electronic Engineering 6. Information & Computer Engineering 7. Electrical & Information Sciences 8. Instrumentation & Control	Michaelmas & Lent terms	Online [Ⓔ]	Dr. S. Goetz [Ⓔ]
Fundamentals of Biotechnology	Open to all and recommended for: 9. Bioengineering	Lent term	Online [Ⓔ]	Dr. S. Bakshi [Ⓔ]
Engineering resources for schools: (NOT EXPECTED TO RUN 2021-22)	Open to all	Christmas vacation & Lent term		Dr. H. Shercliff [Ⓔ]
Language course	Open to all	Michaelmas & Lent terms	Contact staff in charge for assessment.	Mr. David Tual [Ⓔ]

Examinations Part IIA

10 modules; examinations **start of Easter term.**

Exams will be taken in CUED this year...

Mainly 90min single module exams; a few double module 3h exams.

Historic rank order is used to create guideline proportions for numbers in nominal classes

Allows the average level for each module to take account of the mean historic performance of the entry cohort

Closing the feedback loop

- Workload (~80 h per module)
 - We encourage out of term submission for coursework, *improved information on syllabus*.
 - Please report on the online surveys how long activities take you. Add comments!
- Please fill in course surveys (NSS & CUEDs)
 - Consider joining the SSJC, or become college rep.

Plagiarism and Academic Misconduct

- In 2019 the University revised its guidance on Plagiarism and Academic Misconduct (<https://www.plagiarism.admin.cam.ac.uk>)
- The University defines academic misconduct as “any action which gains, attempts to gain, or assists others in gaining or attempting to gain unfair academic advantage. It includes plagiarism, collusion, contract cheating, and fabrication of data as well as the possession of unauthorised materials during an examination”[1]
- Suspected cases of Plagiarism and Academic Misconduct will be handled by the Director of Undergraduate Education in conjunction with the relevant Chair of Examiners. This may result in the case being referred to the University’s Office of Student Conduct, Complaints and Appeals for consideration under the disciplinary regulations.
- It is not worth jeopardising your degree by cheating with coursework! (consider what reference a DoS can provide once a case of plagiarism has been detected)

[1] <https://www.plagiarism.admin.cam.ac.uk/what-academic-misconduct>

- Finding materials
- Using online library resources
- Copyright
- Referencing Support
- Plagiarism Avoidance