Part II external staff briefing notes

This document summarises the key information on third (Part IIA) and fourth (Part IIB) year courses in the Engineering Tripos, for the benefit of teaching staff who are external to CUED. Full details are available from the sources listed at the end.

You might also find the Terminology Guide for Cambridge and/or Engineering-specific jargon, abbreviations and acronyms useful as you get used to the Department.

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Structure & balance of work in Part IIA

In Part IIA students begin to specialise in their chosen branch of engineering. There is flexibility in the degree of specialisation. Most students choose a branch of the profession in which to specialise, and will devote at least 60% of their time to it whilst maintaining a wider breadth of study by taking some topics outside of their engineering area, including management and foreign languages. Those who wish to keep a very broad focus may take General Engineering, choosing modules from the whole range of topics.

Part IIA carries all of the credit for the classed BA degree in Engineering. The following table supplements the Part IIA coursework and examination credit notice by including notes on timings, workload, mark schemes and penalties.

Activity	When	Notes on workload	Credit
10 modules	5 in Michaelmas, 5 in Lent (This cannot be altered) Examinations: 2-3 weeks at start of Easter	16 lectures per module. Examples papers (typically 1 per 4 lectures). 1.5 hour exam per module (typically 3 questions from 4).	10 x 60 marks
Module coursework (only your best 8 marks will be used for exam credit) (*see below)	In same term as relevant module	The coursework is generally a laboratory experiment or (for modules in group E) a report. Laboratories are typically 2-4 hours in lab: 6-8 hours overall. Essays are a similar time overall.	8 x 5 marks

		Bear in mind that although you submit 10 reports (8 module courseworks + 2 FTRs), they are only taken from 8 modules, so you do not need to submit coursework for 2 of the 10 modules in IIA (it is your choice as to which of the modules you are signed up for that you submit coursework for). There is no *additional* coursework on any 4th year modules (though may be included within the course for 25% or 100% of the credit). Each report is marked on the scale 0–5; the marking criteria are indicated on the generic feedback sheet, or module specific feedback sheet if provided. 1 mark may allocated for suitable preparation and participation during the lab. This should be specified in the lab handout. Penalty for lateness: 1 mark lost for each week or part week. No report, no marks. Failure to sign up for or attend a feedback session, where these are part of the lab arrangements: 1 mark penalty.	
2 Full Technical Reports (FTR)	End of term. At least one in Michaelmas; remainder in Lent.	FTRs are an Extension activity to a piece of coursework. The normal coursework activity must be completed and submitted in the normal way first, and then it can be expanded upon. Marks on the scale 0–10. The marking scheme is given on the coursesheet. Emphasis is placed on writing skills and presentation.	2 x 10 marks

		Penalty for lateness: 2 marks lost for each week or part week (term or vacation) that a report is late. No report, no marks.	
1 Extension Activity (ExA)	Michaelmas and/or Lent	Group project. Approx. 16 hours, with no more than 12 hours in the lab or field. Choice of ExA is often related to module selection and associated Eng. Area. Individual ExAs may break the mark total down into smaller units corresponding to different aspects of the chosen activity. Students who participate diligently in all stages of the exercise will gain the full 20 marks.	20 marks
2 projects (out of approx. 25)	Easter weeks 3-7 (after exams)	Approx. 80 hours per project, mostly running in parallel. At least one project will include an element of group work.	2 x 80 marks
Total: 840 marks: 600 exams and 240 coursework			

* NB *Since students are not obliged to undertake the coursework associated with a module, examination questions must not be based on coursework material (unless covered separately in lectures). Normally there is no choice of coursework on a module, but if there is a choice students may only submit one for assessment.*

Key staff roles and responsibilities in Part IIA

Module leader

Booklist and syllabus revision (preceding May/June), lecture breakdown, allocation of supervisors to students, quality assurance on supervisions.

Lab/ExA leader

Arranges all aspects of coursework – equipment, handouts, demonstrators, schedule, coursework/ essay/FTR marking, online mark entry.

All coursework marking should normally be done by university teaching staff – any other arrangement must be approved in advance by the Chair of the relevant Subject Group.

Principal assessor

Responsible for assembling exam paper/crib during Christmas vacation using suggested questions from lecturers on the module. Exam marking may be shared with another assessor, but principal assessor is responsible for

supplying marks to the Examiners. Modules in each subject group delegate one assessor to be a IIA Examiner for that year.

Supervisions

Students should receive four supervisions for each single IIA module: three supervisions on examples papers plus one revision supervision (which will usually be in Lent for Michaelmas modules). Additional supervisions will not normally be authorised. When submitting reports on CamCORS at the end of each term, supervisors should claim only for the supervisions given or due to be given in that term. Payment for a fourth supervision should be claimed at the end of the term in which the supervision was given.

Third year Module Leaders are responsible for finding and appointing supervisors for their module. Use the web-based Supervisor Marketplace to advertise for supervisors, and to look for potential supervisors offering their services. Potential supervisors should be approached early on. Supervisors may be drawn from teaching staff, research students and post-docs. Supervisors must attend a Supervisor Training course before they start to supervise. Supervisions are paid for by Colleges, and supervisors must submit reports and claim payment through CamCORS.

Ideally, students should be supervised in pairs. If you are unable to find enough high quality supervisors, you should increase the group size rather than enlist less capable supervisors. It is essential that all students taking a module receive comparable supervision (same number of supervisions, equivalent group sizes). Singleton supervisions should not be given without the prior consent of the Director of Studies; Colleges may refuse payment for such supervisions.

For some E-modules, the problem of finding enough high-quality supervisors has proved insuperable and special arrangements have been put in place with the agreement of the Subject Group Chair and the Teaching Office. For these modules only, examples classes are held in lieu of the normal small-group supervisions. These appear on the lecture timetable. There is no charge to Colleges for these classes, but individual feedback to students is necessarily limited.

Module Leaders should provide supervisors with completed handouts, examples sheets and cribs in good time. They should hold at least one informal discussion to exchange best practice in how to supervise topics that are commonly found difficult.

The COMET system (Cambridge Online Management of Engineering Teaching) provides a provisional list of the students expected to be taking your module. Some changes will occur at the start of the term in which the module runs, with final listings being available from Thursday of week 2 of each term.

Supervisor allocations should be circulated to students and supervisors (e.g. put up in a lecture, followed by email) as soon as possible. It is important to get going with supervisions quickly: fitting three supervisions into the term means they should start ideally in Week 3. Supervisions should not be bunched at the end of term as this places undue pressure on students. If it emerges that there are problems with supervisors (in particular, unable to supervise to an acceptable standard) it is up to the module leader to remedy the situation swiftly.

Course structure and workload in Part IIB

The fourth year of the course (Part IIB) carries all of the credit for the MEng degree in Engineering. This is unclassed though there are Distinction and Merit categories. **NB There are no supervisions for fourth year modules.**

Module choice is restricted as follows:

- students who wish to qualify in one or more Engineering Area must choose their modules accordingly;

- most courses are timetabled in sets of 2-3 modules;
- students with a First in IIA may include one graduate module (if offered and from a prescribed subset);
- some courses have limits on numbers and may run a ballot;
- students may take a maximum of 3 modules from Management/Languages.

Activity	When	Notes on workload	

8 modules
 	
(*including* coursework, if any)
	8 across Michaelmas & Lent (usually 4:4 or 5:3)
	
	Examinations, 2-3 weeks at start of Easter
		Total workload per module up to 80 hours (*including* lectures, examples papers, revision & exam).
		
		Three types of module & assessment:
		
		- 100% exam
		    (16 lectures, including 2 Examples classes)
		- 75% exam, 25% coursework
		    (12 lectures, including 1-2 Examples classes)
		- 100% coursework
		    (using as many of the 16 lectures as required)
		
		Examples papers (typically 1 per 4 lectures)
		
		1.5 hour exam per module (typically 3 questions from 4)	

1 individual project	All year	Assessed elements: Presentation (end of Michaelmas), Technical Milestone Report (start of Lent), Final Report (Easter week 5), Final Presentation (Easter week 6-7), Progress & Industry (each term) One hour per week of singleton supervision paid for by colleges.	

Key staff roles and responsibilities in Part IIB

Module leader

Booklist and syllabus revision (preceding May and August), lecture breakdown, holding ballot (if module over-subscribed).

Coursework leader (if any)

Arranges all aspects of coursework – equipment, handouts, demonstrators, lab schedule, marking. **All coursework marking should normally be done by university teaching staff – any other arrangement must be approved in advance by the Chair of the relevant Subject Group.**

Group administrator (for modules with coursework)

Takes in and returns coursework, handles anonymous student Coursework Candidate Numbers, reports via

CamCORS if coursework late or below pass standard.

Principal assessor

Responsible for assembling exam paper/crib (if applicable) during Christmas vacation using suggested questions from lecturers on the module. Exam and/or coursework marking may be shared with another assessor, but principal assessor is responsible for supplying marks to the Examiners. Modules in each subject group delegate one assessor to be a IIB Examiner for that year.

Students enrolled on modules and how to contact them

Students make their final selection of modules in each of Michaelmas and Lent by **midnight on the Wednesday of week 1**. Student details for each module are on-line via COMET . These choices become binding exam entries shortly afterwards in each term.

For each student, COMET lists the other modules taken, Engineering Area, previous Tripos performance, college and email address. Before the deadline COMET stores preliminary choices (made the previous June), giving an approximate indication of numbers (e.g. to assist with laboratory preparation, copying initial lecture handouts etc).

Lecture timetable and room locations

The Teaching Office sets the lecture timetable by mid-September (for Michaelmas) or mid-December (for Lent). All timetable queries should be addressed to the Teaching Coordinator.

The timetable shows the lecture room allocated. It is advisable to find the room well in advance, particularly to familiarise yourself with the AV arrangements. Rooms are located as follows:

LT0, LR4: ground floor Baker building

LR5, LT6: first floor Baker building

LR10, 11, 12: ground floor Baker South Wing

LT1, 2: ground floor Inglis building

LR3, 3A, 3B: up central stairs Inglis building

Lecture handouts, examples papers

The CUED print room is at the far end of the Design and Project Office (DPO) on the Baker building first floor. They can produce sets of lecture handouts from either paper copy or e-mailed files, given the number and format of copies required and the job number to charge. For E modules (management), this is **7080**. They usually require a few days to produce copies, which you can then collect for distribution in lectures. Email: print-room@eng.cam.ac.uk.

Web and hard copy access to lecture notes and other material

Lecture handouts and examples papers are usually provided in paper form, but increasing use is being made of electronic resources. Spare copies of handouts, examples papers and cribs (if issued) may be made available via the Subject Centre for the relevant Subject Group (see Guide to IIA or IIB as appropriate).

Lecturers are strongly encouraged to provide all course material on Moodle. This may include not only filled-in handouts but any supplementary material.

Coursework marking, collection & feedback

The Teaching Office offers a central 'post-box' service for students to hand in coursework and collect it after marking, for E and I group modules. **The default hand-in time in Engineering is by 4pm on the date of the deadline – please adhere to this timing (any other arrangement must be explicitly stated in the coursework instructions).**

Deadlines for Part IIA coursework submission must fall within full term (either 15 term days inclusive after the work is set, or Friday of week 1 at the start of the following term if fewer than 15 term days remain). Part IIB deadlines may fall out of term, but in this case provision must be made for students to submit their work electronically by the deadline, with hard copy to follow at the start of the following term. Please avoid setting deadlines on the Monday immediately before the start of term, as students are not obliged to be in Cambridge until the Tuesday.

For Part IIB, students complete coversheets using their Coursework Candidate Number rather than their name, with the mapping to student names being retained by the Teaching Office. Coversheets can be downloaded from the web, and hard copy is available outside the Teaching Office. Module leaders who make their own arrangements for taking in IIB coursework (e.g. electronic submission via Moodle) must follow the standard processes as follows. All work should be date-stamped to enable late submission penalties to be applied consistently. Colleges should be notified via CamCORS of any student submitting coursework more than one week late (i.e. a zero-hours-taught report, as no payment is involved). The penalty for late submission of coursework is **20% of the maximum achievable marks** per week or part week late. *Module leaders may not give discretionary extensions to deadlines.* Students who miss a deadline due to illness or other grave cause may apply for an extension and removal of penalties using the Coursework Allowances procedure.

Individual feedback comments on coursework should always be provided. Students value this, and it is particularly important in IIB where they receive limited feedback on other activities to help them to monitor their progress. The coversheet makes it easy for markers to provide helpful feedback. Markers may also submit comments on CamCORS (again with zero hours taught), or write comments on the report itself, giving as much detail as possible. Note that in Part IIB, *marks are not disclosed to students*; the work is graded A* to D with an A grade corresponding to 'meets all standard expectations'.

Coursework should be returned according to the following schedules:

IIA: within 15 term-time days (inclusive) of the hand-in deadline

IIB: (i) for work submitted before the end of week 5, return by end of Full Term;

(ii) for work submitted in weeks 6-10, return by end of week 2 in the following term;

(iii) for work submitted at the start of the following term, return by end of week 4 (Lent), or week 3 (Easter).

NB. staff are asked to let students know if they fall behind with marking in order to manage students' expectations.

Third year coursework marks should be entered via COMET. Fourth year marks should be sent to the relevant Chairman of Examiners (as indicated on the marksheet that will be circulated to you by the Teaching Office).

See: coursework feedback sheets

Academic misconduct

The University has issued new guidance on handling suspected cases of academic misconduct. This states that

all cases of suspected academic misconduct must be referred to the Chair of Examiners. However, the Examinations Committee has agreed that to promote a consistent approach across all Parts the Chairs of Examiners will delegate consideration of such cases to the Director of Undergraduate Education, on the understanding that the relevant Chair will be kept informed and will approve all actions taken.

Therefore, if you suspect a student of academic misconduct please contact the [Director of Undergradaute Education](#) in the first instance, as it is important that cases are handled in a consistent manner and in line with University regulations.

The [University's Plagiarism and Academic Misconduct website](#) contains a lot of information for staff about providing guidance for students, investigating concerns about academic misconduct, and University disciplinary policies.

Further information on Part II courses

Full details of the course structure, instructions for setting and marking coursework etc are issued to module leaders by the Teaching Office. All are available online (together with other Engineering Teaching information, links to COMET etc).

For Part IIA courses:

- [Part IIA Module/lab leaders' notes](#)
- [Part IIA guide](#) (students)
- [Guide for new supervisors](#)

For Part IIB courses at:

- [Part IIB module leaders' notes](#)
- [Part IIB guide](#) (students)

Final points

It is particularly helpful for externally taught courses if the aims and objectives of a course are clearly set out at the start, identifying any pre-requisite knowledge or expectations. Find out what they do know already – for example, what maths they have covered, to avoid unnecessary duplication. Avoid (or explain) jargon, buzzwords or acronyms, which may not be familiar to students from an engineering background.

New courses require a sample exam paper (and answers), so that students can see the style and nature of the questions posed.

Please do keep the Teaching Office informed: of any difficulties, or any proposed changes to lecture timing, lecturer, staff responsibilities, third year supervisors and so on. The [Teaching Office](#) is your first point of contact for most queries.

Undergraduate Teaching Office contact details

The Undergraduate Teaching Office organises and oversees the provision of undergraduate courses, projects and teaching activities. The Office is located on the office floor of the Baker building.

General administrative enquiries about undergraduate teaching matters can be made [here.](#)

Individual contact details of Undergraduate Teaching Office staff are as follows:

Prof. John Durrell, Deputy head of Department & Director of Undergraduate Education, tel: (3)32883

Lotta Kallioinen Administrative Officer, tel: (3)32619

Looking after Faculty Board plus the Teaching and Examination Committees along with the examinations and much of the teaching allocation administration, including TODB, teaching allocations and timetabling.

Mary Wilby, Senior Administrator (Teaching Office), tel: (3)32704

Teaching Office Manager. Looks after the day to day running of the Teaching Office, supports the Director of Undergraduate Education.

Agnieszka Gulczynska, Administrator (Teaching Office), tel: (3)32625

Examples papers Coordinator, Teaching Office enquiries, Part IIB Exam Secretary.

Nathalie Cox: Administrator, tel: (3)32807

Supports examinations, TODB, the Faculty Board and room bookings, Part IIA Exam Secretary.

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