# Part IIB projects: first notice

This document:

- explains the procedure for signing up for a project which is offered by a member of staff. These are called type (a) projects;
- explains how you may propose your own project (NB If you wish to do this, you will need to begin acting now. These are called type (b) projects)
- lists the contact details for the Group Coordinators and Group Centre.

Forms required are the type (b) proposal form and the project agreement form.

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# Part IIB project Introduction

#### Summary

Roughly half of your final year will be spent working on a major individual project of your own choosing. The project will usually involve design, research and/or computer work at a high technological level on a topic of practical relevance. There are two types of fourth year project, either of which may involve collaboration with an industrial company:

- Type (a) are offered by staff and cover a wide range of areas relating to their research interests.
- **Type (b)** are projects that you propose yourself, which may then be approved by the Department. Any such project must be approved by the Coordinator of the appropriate Group, and a member of CUED staff must be willing to act as supervisor. Arrangements to undertake this type of project should begin during the Lent Term of Part IIA.

Your project is a very important part of the final year and is expected to take up roughly half your working time throughout the whole of that year. Given the amount of effort involved, it is essential that you find a project which will engage your interest. A good project will be one that stretches your ability in the skills which you have acquired on the Cambridge engineering course and will give you opportunity to show initiative in more than one area of engineering activity, such as experimentation, design, computing or analysis.

For detailed information see:

- Part IIB project selection procedure
- Part IIB project importance, overview and aims

#### Important landmarks in the project period

• Lent and Easter terms (Part IIA) - Details of type (a) projects will be posted on COMET. During the first part of the Easter Term, you will be asked to look through and discuss the projects of interest to you with the members of staff offering them. You will then enter a provisional selection of 3 projects in order of preference into the allocation procedure. Remember, early action is especially necessary if you wish to propose your own project (type (b) projects).

- Long vacation between Parts IIA and IIB for some industry-linked projects, there may be investigations at an industrial site. Background reading and preparation should be undertaken by all students: ask your supervisor for some suitable preparatory work so you can hit the ground running in October.
- Michaelmas term (Part IIB) you will be required to keep a log book or equivalent electronic record, which will be checked regularly by your supervisor. Its content may be taken into account in the assessment of your project. There will be credit available for progress and industry throughout the year.
- End of Michaelmas term (Part IIB) you will be required to give a 10-minute presentation to staff and other project students, explaining what the project is about and how much progress has been made. The presentation is assessed.
- Start of Lent term (Part IIB) the technical milestone report (TMR) is submitted. This is a formal report, on not more than 6 sides, produced to camera-ready standards. It gives details of the progress on the project to date, the results obtained and presents plans for the remainder of the work.
- **Middle to end of Easter term (Part IIB)** the final project report and a technical abstract are submitted. You will also be required to give a 10 minute presentation focused on the most significant aspects of the project work. Guidance notes on the form to be taken by the report and the presentations will be issued during the Michaelmas term.

# Group centres

Detailed guidance in your project work is primarily the responsibility of your supervisor. However, overall control within each group is in the hands of a Group Coordinator. Much of your day-to-day contact will be with the group centres, which provide a channel for communication and source of information for both students and staff. You should familiarise yourself with the details and routine practices of your group early in the year in order to maximise the support on offer and to avoid confusion over handing in times, etc.

#### Overall project coordinator: Dr A H Gee

Coordinator: Chief technician: Administrator:	Prof Peter Davidson Mr Roy Slater Mrs Kate Graham
Group centre:	Hopkinson lab, Room ISO-17 (Inglis building)
Noticeboard:	Between rooms 203 and 208, second floor, Baker building

### **Group A – Thermodynamics and fluid mechanics**

# Group B – Electrical engineering

Coordinator: Chief technician: Administrator:	Prof Stephan Hofmann Mr Kevin Barney Mrs Ann Martin
Group centre:	EIETL, second floor, Inglis Building
Noticeboard:	West end of the EIETL, to the left of the main aisle

### **Group C – Mechanics and materials**

Coordinator:	Dr John Durrell
Chief technician:	Mr S Savage
Administrator:	Mrs Hilde Fernandez

Group centre:	Mechanics of machines laboratory, ground floor, Baker building (entrance via central roadway)
Noticeboard:	North corner of lab (i.e. by roadway entrance)

### Group D – Civil, structural and environmental engineering

Coordinator: Chief technician: Administrator:	<u>Dr Ruchi Choudhary</u> <u>Mr Martin Touhey</u> <u>Ms Kasia Marciniak</u>
Group centre:	Structures lab, ground floor, Inglis building
Noticeboard:	Mezzanine floor, Inglis building

#### **Group F – Information engineering**

Coordinator: Chief technician: Administrator:	Prof Carl Rasmussen Mr Kevin Barney Mrs Louise Segar
Group centre:	EIETL, second floor, Inglis building
Noticeboard:	West end of the EIETL, to the left of the main aisle

# **Project selection procedure**

Your project can be either:

- (a) one that is suggested by a member of staff of the Department, or
- (b) one that you propose yourself and is then approved by the Department.

There is no onus on you to think up a type (b) project, and you should find plenty to interest you amongst the type (a) projects. Type (b) projects are most likely to arise when sponsored students wish to work in areas suggested by their companies.

### Type (a) projects

A list of type (a) projects will be available on the departmental computer system (via COMET) from Tuesday 17 April 2018. If you are not proposing a type (b) project, you are expected to **choose three from the type (a) projects offered, stating an order of preference**. The deadline for submitting choices is midnight on Friday of week 4, but you are strongly advised to find out more about the projects whose titles you find of interest well before this date.

Four points to note:

- 1. It is not necessary for you to work on a project which is related to your own engineering area. However, <u>accreditation</u> by some of the professional engineering institutions may depend upon your project having a technical content lying within the interests of the institution. See your Director of Studies for advice.
- 2. With some supervisors, more projects are listed than can be taken up. Those which remain finally on offer depend on which projects attract student interest.
- 3. Some projects are subject to confidentiality restrictions: these are indicated clearly on COMET. If you are considering applying for such a project, you should make sure that you are fully aware of the nature of the confidentiality issues by discussing them with the supervisor. Where no confidentiality issues are flagged, you may safely assume that you will be able to write freely about all aspects of your project work, discuss what you have done with potential future employers, and present your work in public.
- 4. Some projects have two supervisors listed, and in such cases it is the first of the two who should be contacted.

When you find a project which is likely to be one of your preferences, **you should make every effort to contact the supervisor and discuss it with them**, especially if you want it to be your first preference. Note that, in due course, the supervisor may have to choose between you and other students who wish to undertake that project. There may be a need for you to persuade them that you are the best choice.

Students in the past have found that supervisors are reluctant to choose them for a project if a face-to-face meeting has not been arranged prior to the allocation process. It is therefore very important to meet prospective supervisors and discuss possible projects before selecting those projects as your choices.

Preferences are to be entered onto COMET between Monday of week 2 and Friday of week 4. During this period, each online project description will be accompanied by a facility for submitting it as a preference. Enter whether it is to be first, second or third choice and then click on submit. Remember that the allocation of projects is not done automatically by computer, but by the staff in consultation.

Members of staff also have the option to pre-allocate projects if they have seen enough students to make a reasoned choice. Pre-allocation may happen as early as anyone wants, but not after Tuesday 15 May 2018 and requires a <u>signed agreement form</u> to be delivered to the relevant <u>Group Secretary</u> by 2pm on Friday of week 4.

After submitting preferences, it is still possible to amend them up until midnight on Friday of week 4 simply by submitting new ones (the old will be overwritten). A "<u>first allocation</u>" list of students to whom projects are assigned will be posted online on Friday of week 6. If you have been unlucky and it has not been possible to assign you one of your preferences, you should contact the coordinator of the group that is of most interest to you as soon as possible. They will assist you in finding an alternative project.

NB. It is your responsibility to register for a project before the end of the Easter term.

# Type (b) projects

If you wish to do a type (b) project, you are strongly advised to submit the <u>proposal form</u> as early as possible, preferably before the end of the Lent term, to allow time for suitable supervision to be arranged. If your proposal is not accepted by a member of staff, acting this early will also leave you with plenty of time to choose a type (a) project instead. Be aware that projects with significant confidentiality issues are unlikely to attract a willing supervisor.

To propose a type (b) project, you must contact the coordinator of the group which covers the field of the project, discuss your ideas with them and submit your proposal form by Tuesday 24 April 2018 at the latest. The coordinator will decide whether the project is a suitable one and determine whether there is a member of staff willing to act as supervisor. All projects must have a departmental supervisor. The coordinator will contact you as soon as possible.

If a suitable supervisor **is not available** within the department, you cannot do the type (b) project proposed. You should now choose a type (a) project instead (see above).

If a suitable supervisor **is available** within the department, the coordinator will tell you his/her name. You should contact the supervisor and complete the <u>project agreement form</u> together.

If the project is approved or seems likely to be approved, it is your responsibility to enter a record of the proposed project during the period beginning Monday of week 2 and Friday of week 4. This should be done by logging on to COMET and following instructions on the screen for submitting type (b) projects. The screen will ask for: project title, industrial sponsor (if any), supervisor's name, the group it will be associated with and a brief (100 word) amplification of the title.

#### Actions for all students

By Friday of week 4 **all** students must have submitted preferences. You must keep to this deadline in order not to be disadvantaged in the initial allocation. As the final allocation is settled by discussion among staff and not by computer, you are advised to contact the supervisors of your selected projects before the Friday of week 4, so that you can both be clear about all aspects of the project.

Once your type (a) or type (b) project has been determined, you are responsible for arranging to see the supervisor so that the <u>project agreement form</u> is completed by **both** of you. **You** should then hand in the form to the Teaching Office by Friday of week 6. Please contact <u>Mary Wilby</u> if you have a problem in doing this. Please make sure that you include the project reference number - for example, A-GTP-1, or A-GTP-type(b) etc - on your form.

Before the end of the Easter term, you and your supervisor should meet (possibly at the same time as that arranged for completing the project agreement form) in order to draw up an initial plan for the project work and to discuss long vacation work (industrial or preliminary).

# Key dates & deadlines

Actions relating to projects running during the current academic year (2017-18) are shown here in bold text.

Actions relating to preparation of projects for the next academic year (2018-19) are shown in plain text.

### Michaelmas term 2017

Tuesday, wk 0	3 October	Start of full term. Teaching Office issues 'Second Notice about Part IIB Projects' to all IIB students. Teaching Office issues a 'Summary for Project Supervisors' to all Part IIB project supervisors, and the Michaelmas 'progress & industry' mark forms (there are 2 per student – 1 Michaelmas, 1 Lent).
Wednesday, wk 0	4 October	Compulsory health and safety lecture - all Part IIB students must attend.
Wednesday, wk 1	11 October	Risk assessment forms to the Safety Office by 4pm. A penalty will be deducted per week, or part week, the assessment is late.
Friday, wk 5	3 November	Deadline for first progress & industry meeting with supervisor. Written feedback to student within 48 hours.
Thursday, wk 7	16 November	Start of mini-conferences where students give oral presentations. Supervisor and assessor mark independently. Mark forms to group coordinator.

Wednesday, wk 8	29 November	By this date, feedback should be given to students on their performance at mini-conference.
Friday, wk 9	1 December	Deadline for second progress & industry meeting with supervisor. Written feedback to student within 48 hours. Michaelmas progress and industry mark forms to be returned to group coordinators.

#### Lent term 2018

Thursday, wk 1	18 January	Submission of technical milestone report to group centres (by 4pm). Each student submits two copies of the 6-page milestone report. The supervisor and assessor mark independently and deliver the reports and mark forms back to coordinators by the division of the Lent term.
Monday, wk 1	22 January	Teaching Office issues 'First Notice about Part IIB Projects' to Part IIA students.
Thursday, wk 5	15 February	Deadline for submission of technical milestone report mark forms to coordinators.
Friday, wk 5	16 February	Deadline for third progress & industry meeting with supervisor. Written feedback to student within 48 hours.
Monday, wk 6	26 February	Coordinators to have sent technical milestone report feedback forms to students.
Friday, wk 9	16 March	Deadline for fourth progress & industry meeting with supervisor. Written feedback to student within 48 hours. Lent progress and industry mark forms to be returned to group coordinators.
Friday, wk 9	16 March	Coordinators to request type (a) project proposals from their groups.
Friday, wk 9	16 March	Students wishing to initiate a type (b) project should work on proposal. Ideally, proposal forms should be submitted to relevant group coordinators before the end of term.

Easter term 2018

Monday	16 April	Type (a) proposals to be entered by staff on COMET.
Tuesday	17 April	Teaching Office/COMET emails students that project descriptions are available for viewing.
Tuesday, wk 0	24 April	Last possible date for type (b) projects to be proposed to coordinators. Viability to be determined as soon as possible thereafter.
Monday, wk 2	7 May	Students may start entering project choices on COMET.

Tuesday, wk 3	15 May	Deadline for pre-allocation. Members of staff have the option to pre-allocate projects if they have seen enough students to make a reasoned choice. Pre-allocation may happen as early as anyone wants but <b>not after</b> Tuesday of week 3.
Friday, wk 4	18 May	By 2pm a signed project agreement form must be received by the Group Secretary for any student who has a project pre-allocated to him/her.
Friday, wk 4	18 May	By midnight, all type (a) preferences and type (b) proposals to be entered on COMET.
Monday, wk 4	21 May	Lists of projects in each group with names of students choosing each and the order of preference available via COMET. Where a student's preferences span more than one group, name is included on lists of all coordinators involved.
Wednesday, wk 5	30 May	Last day for handing in final reports to group centres (by 4pm). Each student submits two copies plus an extra copy of their technical abstract, plus their log book or electronic equivalent (to go to the assessor). Supervisor and assessor mark independently. Each group passes a complete set of technical abstracts to Teaching Office for archiving.
Thursday, wk 6	31 May	Start of mini-conference period. Presentations marked by supervisors and assessors independently. Grades to group coordinator.
Friday, wk 6	1 June	First allocation of Part IIB project/student assignments posted on or by this date. Any student without a project to contact coordinator of group they wish to be in.
Wednesday, wk 6	6 June	Last day for return to group coordinator of final report mark forms, final reports and logbooks/electronic equivalents. Group Coordinators moderate final grades if necessary.
Wednesday, wk 6	6 June	Teaching Office and coordinators to have rounded up students failing to get a project at first selection and discuss alternatives.
Friday, wk 7	8 June	Project agreement forms (signed by both student and supervisor) to be submitted to Teaching Office by this date at the very latest. Supervisors and supervisees to hold planning meetings.
Wednesday, wk 7	13 June	Coordinators to supply a complete set of milestone reports, final reports, log books and relevant forms to LR10 for submission to external examiners
Thursday, wk 8	14 June	Last day for submission of project mark books to Chairman of Examiners by Group Coordinators.

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