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Introduction

Students are expected to spend half of their time in the final year working on their projects. Put another way, the final-year project represents 12.5% of the whole four-year course and is a major feature of it. Project supervisors therefore have a demanding responsibility to ensure that the project experience is of high educational value for the students, and are expected to meet with their students every week during term. In return, the benefit to supervisors is that the best of the projects may be helpful to research activity. To achieve educational value, projects should, as far as possible, be multi-faceted and involve more than one engineering activity. Thus, a project mainly on design might well include some laboratory testing of relevant components or models. A project which is primarily experimental might well include associated theoretical or computational work, etc.

These notes are a guide to the organisation and administration associated with the fourth-year projects. Note that, throughout these notes, the term 'week' denotes the normal teaching week, starting Thursday, finishing Wednesday.

Group Administration

Within each subject group, general control of the project organisation is in the hands of a **Group Coordinator**. The **Group Centres** provide a channel for communication and source of information for both students and staff. All Groups have secretarial support for organisation of mini-conferences etc. In addition, there is an **Overall Coordinator of Fourth Year Projects**, who acts (amongst other things) as Project Examiner.

Selection / Allocation

The determination of a student's project occurs in the Michaelmas and Lent terms of his/her third year. Students acquire projects in one of two ways: "Type (a)", by choosing one from the list of those offered by staff in the Department, or "Type (b)", by proposing a project which is then judged to be suitable and for which a departmental supervisor can be found. The distinction between the two has little significance once the projects are under way. A link with industry is possible for either type of project, but the link is more likely to arise from staff contact in Type (a) projects and from student sponsorship in Type (b).

Formal responsibility for the supervision and assessment of each project should normally be taken by a University Teaching Officer of the Department. Members of staff should not supervise more than 4 projects without consulting

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the Overall Coordinator of Fourth-Year Projects. But a large number of project proposals is needed and all members of staff are expected to contribute to their group. Staff may offer more projects than the number he/she intends to supervise - which of them runs is decided during project allocation.

The Faculty Board has ruled that, when a member of staff is on sabbatical leave during a Lent term, he/she should normally be expected to offer projects for the following year, having arranged that a suitable colleague acts as a substitute for students to contact during that term. The Faculty Board has also ruled that, when a member of staff takes either the Michaelmas term or the Lent as a single term of leave during an academical year, he/she should aim to run projects during that year, with a colleague acting as a substitute during the term of leave.

Each project has only one member of staff nominated as 'Supervisor'. The Supervisor is responsible for arranging appropriate supervision for the whole year. If the supervisor intends to take sabbatical leave during the Michaelmas or Lent term, he or she is responsible for arranging appropriate supervision by another member of staff for the duration of the leave.

Type (a) projects

Staff prepare proposals for fourth year projects during the Christmas vacation, and enter them on the Departmental Computer System using COMET by the first Monday of Lent term. The normal user identifier and Raven password are used to access the COMET system, and step-by-step instructions are available. The following details are required for each project proposal:

- Project title
- The Engineering Area, and sub-categories, of the project (to determine where it is listed in the selection system)
- Name of the supervisor (or occasionally another member of staff to be contacted)
- e-mail address and/or room number of the supervisor (for students to make contact)
- · Any industrial organisation linked to the project
- Any issues of confidentiality that may arise (e.g. the need to sign a <u>non-disclosure agreement</u>, the need for confidential assessment)
- A brief description of the scope of the project (up to 200 words). Resist the temptation to hype: in the past, students have complained that their actual project experience bore little resemblance to the COMET description. Weblinks to further information may be provided.

<u>COMET</u> assigns to each project a reference code in order to facilitate sorting and listing. The code takes the form: X-ANO21-7, where 'X' is the Group, 'ANO21' the email of the Supervisor, and '7' is the 7th project offered by that Supervisor.

Most projects are likely to be for students working on their own, although pairs or groups may work on the same project, provided that each student may make a significant individual contribution, with a high proportion of their reports being their own work. If a project can be taken by more than one student, a sentence to this effect in the description would be appropriate.

Supervisors should consider whether their projects are likely to attract a lot of interest, in which case they should consider advertising venues and dates for meetings, when they can present their projects to large groups of students at one sitting. These arrangements should be detailed in the project description or a linked webpage.

The Supervisor should draw the Coordinator's attention to any project which is likely to make heavy demands on departmental resources and he/she is responsible for deciding whether a project can be run. If a staff member wishes to offer a project which is not on a list (because of it being, for example, a late proposal), the Group Coordinator must first be consulted.

The process by which students express preferences and are allocated to projects is as follows:

a. During the Michaelmas term, details of any industrially linked projects, or others of particular importance to the supervisor, may be advertised to students through the computer system. Students are informed of this

- when they log on, and also by a notice in the foyer. Any project settled in this way is treated as a Type (b) project (see next section).
- b. At the start of the Michaelmas term, the Teaching Office issues (via Directors of Studies) the document Part Notice to all third-year students. This document directs students to the COMET pages detailing projects on offer for the next academic year, explains the procedure of project and supervisor allocation and gives a brief outline of the nature of fourth-year projects. It also contains the Part IIB Project Planning Form which must be completed by each student and their future supervisor.
- c. During the first few weeks of the Lent term, students seek more information about projects from descriptions on <u>COMET</u> and from supervisors, whom the students are advised to contact directly. It is therefore important that staff should be available (preferably in person and at least by email) during the selection period. For projects expected to attract a lot of interest, supervisors should consider scheduling presentations to large groups of students, advertised in advance via the project descriptions on <u>COMET</u>, to avoid having to respond to a large number of emails and arrange a large number of meetings.
- d. Members of staff have the option to pre-allocate projects if they have seen enough students to make a reasoned choice. The pre-allocation window runs from the Monday of Lent Term week 3 to the Friday of Lent Term week 4. Staff wishing to pre-allocate projects should speak to their Group Administrator.
- e. By Friday of the fifth week of the Lent term, students are required to submit up to three choices via <u>COMET</u>. Directors of Studies will be notified by COMET of any students who do not make a selection.
- f. Staff can access summary information of student choices via COMET from the Monday of the fifth week of term.
- g. Coordinators arrange staff meetings with their Groups, or otherwise negotiate to ensure the fairest possible assignment of students to projects. Again, it is important that staff are available at this time.
- h. Coordinators inform the <u>Teaching Office</u> by Friday of the seventh week of term what allocations have been made. The Teaching Office posts a <u>First Allocation</u> list on the Web. Coordinators also advise the <u>Teaching Office</u> of any supervisors with projects still available. This list will also be posted on the Web.
- i. The Teaching Office, in conjunction with Group Coordinators and Directors of Studies, help and chase up any students without a project at this stage.
- j. By Friday of the seventh week of the Easter term, students should have arranged to see their supervisors to complete and sign a **Project Planning Form**, and deliver their form to the Group Centre.

Supervisors should note that, for the purpose of Regulations governing modules offered for examination, there is no University requirement for a student's Engineering Area to be the same as the Engineering Area of the project. Supervisors are expected to advise students on modular courses which might prove beneficial to the project work.

Type (b) projects

Students who wish to propose a Type (b) project must complete and submit a Type (b) Project Proposal Form to the Coordinator of the Professional group which covers the field of the project preferably before the end of the Michaelmas term and no later than Tuesday of the first week of the Lent term. The Coordinator decides whether the project can be run, one condition being that there is a member of staff willing to act as supervisor. It is vital that a member of staff taking on such supervision should be prepared to act as fully as he/she would for his/her own Type (a) proposals. Even though the project may have arisen through a student's close contact with industry, educational control must rest with the Department and the supervisor's role is crucial. Unless the Coordinator sees that a student's proposal is impractical, he/she should suggest possible supervisors for the student to approach. A staff member agreeing to act as project supervisor must then inform the Coordinator and discuss any implications with him/her. The Group Coordinator also informs the student, who is required to enter a title and short description of the project on to the computer. As for Type (a), supervisor and student arrange to complete and sign a Project Planning Form, for the student to hand in to the Group Centre by Friday of the seventh week of the Easter term. Staff should therefore make every effort to be available to meet with students before this date.

It is helpful if a student proposing a Type (b) project knows whether it is acceptable or not in time to make a regular submission of type (a) choices if necessary (i.e. before Friday of the fifth week of term). It is also helpful to staff to know their Type (b) commitments at the time of the type (a) allocations.

The above paragraph gives the *latest* possible times at which Type (b) projects can be arranged. It is preferable for both the students and staff involved if Type (b) projects are arranged during the Michaelmas term.

Third year students at CSP/NUS

Face-to-face meetings between students and prospective supervisors are the preferred procedure for achieving appropriate project allocations. This is obviously not possible for students based at CSP or NUS for their third year. Supervisors are therefore requested to make a particular effort to engage in email dialogue with these students should they express an interest in the advertised projects. It may also be helpful to arrange a telephone conversation (at the Department's expense!) to establish the personal contact normally engendered by a meeting.

Overall Programme

Long vacation

With the exception of students taking their third year at CSP or NUS, student and supervisor should have met by the end of the third-year Easter term in order to complete the <u>Project Planning Form</u> (see above). At this time, they should discuss the aims of the project in detail and draw up a programme of work, which includes the Long Vacation.

When the project has links with industry, it may be that on-site work has been organised for the vacation. Supervisors must judge how best that work may complement what is to be done during the subsequent terms. The work in the Department might, for example, take the form of a critical and more academic evaluation of the problem addressed in the project. The on-site work is not to be regarded as a substitute for a full programme of tasks to be undertaken in the Department under the educational control of the supervisor.

To match the on-site work undertaken by students who have projects linked to industry, other students should be given guidance on reading (and other preparatory work if such is possible) for the Long Vacation. The aim should be to get each student fully prepared for serious project work right from the start of the Michaelmas term.

Early in the Michaelmas term, supervisors are asked by the Teaching Office to confirm names of the project students and project titles. The confirmed or amended list for each supervisor must be returned to the Teaching Office by Wednesday of week 3, so the information can be passed to Directors of Studies.

Working hours, log books, workshop time, money

Throughout the Michaelmas and Lent terms, students are expected to devote fifteen to twenty hours per week to their projects. All students will be expected to provide their own laboratory notebook, in which they should keep a log of their project work. For some types of project, for example software projects, the log book may be replaced by electronic documentation. Keeping a log book or electronic record is essential good practice, but it is up to individual supervisors to agree with their students what form of log will be kept. Whichever method of recording progress and planning is used, it is recommended that supervisors monitor it regularly. In particular, the record should form a basis for discussion at the half-termly Progress and Industry meetings (see below), at which comments and constructive criticism may be given. It is expected that students will need considerable guidance in keeping project records since they have had relatively little experience of this earlier in the four-year course. Log books (or electronic equivalent) must be submitted by students with their Final Reports, and will go to the Assessor to consider in marking the project.

Any supervisor with concerns about a student's progress should use CamCORS to report the problem immediately to the student's Director of Studies and Tutor, *not waiting until the end of term report* (when supervision payment is claimed). The Group Coordinator and Teaching Office should also be notified promptly of problems with projects.

For safety and security reasons, project students may only work in laboratories during normal working hours, i.e. there must be assistant staff in the vicinity. Rules about access to the DPO and the library are normally the same as for all undergraduates (i.e. 08.00 - 22.00, including Saturday and Sunday). A supervisor may give permission for a project student to work outside normal hours at a computer terminal which is not in the DPO, but should provide a signed note to this effect, and notify <u>CUED security</u> if appropriate. The student must be ready to show the note to any security patrol.

Each project may be allocated up to five days' worth of workshop time, to include both the main and divisional

workshops, at the discretion of the appropriate Head of Division. Funding for fourth-year projects comes from the teaching money allocated to Divisions. If specific funding is required for a project, this must be negotiated with the Head of Division before the project is offered. Different Divisions may have different strategies for using their teaching funds to best effect. Some may spend more on laboratory experiments, others favour trips, lecture demonstrations or projects. There is therefore no single recommended level of funding per project.

Supervision and the working environment

Supervisors should meet with their students at least once a week. Additionally, every effort should be made to integrate students into research groups. This may include: putting the project student in touch with a PhD student or post-doc who can provide day-to-day support; inviting project students to research seminars; if space permits, offering project students some space in a shared office or laboratory; and encouraging project students to discuss their work with other project students.

Progress and industry

Progress and industry marks are allocated on the basis of four half-termly meetings in Michaelmas and Lent. The idea is to emphasise time management and discourage the deferral of project work until the last minute. The half-termly assessment will typically be made during an appropriate weekly meeting, although can equally be conducted separately if preferred. Written feedback must be e-mailed to the student within 48 hours (make sure you keep a copy). Guidelines are on the associated mark form. As there is a strict deadline by which progress and industry meetings must have taken place, students with good cause for postponing (e.g. due to illness) must submit an allowance request to the Teaching Office. Supervisors should *not* make ad hoc mark adjustments in such cases.

Michaelmas term presentation

During week 7 of the Michaelmas term, each student is required to give an **oral presentation** lasting ten minutes on his/her project. For this purpose, the Group Coordinator divides the Group's projects into sets of up to ten, roughly in the same general field. The students and supervisors of each set meet for an afternoon miniconference. The timetable and session chairs are arranged by the Group Coordinator, together with an Assessor for each project (usually one of the other supervisors attending the mini-conference at which the project is presented). Following each presentation, a five minute discussion is led by the Chairman.

The main purpose of this presentation is to ensure that:

- The aims of the project are clear and well thought out.
- The background and significance are well understood by the student.
- There is a satisfactory plan for the conduct of the work.
- Progress is being made.
- The student is developing presentation skills.

Supervisors are encouraged to help plan the presentations and to provide constructive criticism (after the event) on all aspects of it, including skill at oral communication. All lecture rooms and many seminar rooms are fitted with permanent LCD data projectors, with associated computers for Powerpoint or PDF presentations etc. Students are encouraged to bring slides/data on USB drives or memory sticks, to avoid any problems with laptops due to incompatibilities of various kinds.

Each student's presentation is marked by the Supervisor and Assessor. **Feedback** from this presentation plays an important role in the way the student develops the project in the next two terms. For this purpose, the mark form for the Michaelmas Presentation is a carbon-copy form which is completed and returned to the Group Coordinator at the end of the presentation period. Both supervisor's and assessor's comments are then passed on to each student. The marks awarded are not disclosed to the student. Group Coordinators inform colleges (via CamCORS) of any student failing to achieve a mark of Pass standard.

Technical milestone report

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Over the Christmas vacation, students write a **Technical Milestone Report** (TMR) for submission at the start of the Lent term. This should be 6 sides of A4 paper containing a concise description of the work to date and a careful plan for the work to come. Detailed description of the required content and criteria for assessment is given in the *Part IIB projects: second notice*. Supervisors are expected to criticise *generally* a first draft. It should, however, be recognised that the technical milestone report is an examination submission and detailed corrections are inappropriate. As for the presentations, feedback to students is given via the mark form (without mark disclosure), providing important guidance for the Final Report in the Easter term. Group Administrators inform colleges immediately (via CAMCORS) if a TMR is more than one week late (or is not submitted at all). After marking, Group Coordinators inform colleges (via CamCORS) of any student failing to achieve a mark of Pass standard. Supervisors provide timely feedback to students on technical writing, either in a regular supervision or (at the latest) at the Lent mid-term progress review meeting.

Lent term

It is expected that, during the Lent term, students are well under way with their projects and on course to bring them to conclusion, apart from writing up, by the end of term. Supervisors must, nevertheless, monitor progress carefully and ensure that students know whether progress is or is not satisfactory (see also college aspect of supervision below). In this context the log should be useful. If at any time a student is not making satisfactory progress and the supervisor believes that there is a risk of failure in the MEng, the supervisor should warn the student in writing and immediately inform the student's <u>Director of Studies</u> and Tutor via CamCORS, and the Group Coordinator and <u>Teaching Office</u> should also be notified.

Final report

Preparation of the **Final Project Report** is undertaken during the Easter Vacation and first half of the Easter term, the hand-in date being Wednesday of week 5. The report (excluding the title page and Technical Abstract) should not exceed 12,000 words or 50 A4 sides in total, can be single or double sided, but must be typed in 12 point at one and a half line spacing. Margins are to be approximately 25 mm all round. Guidelines for writing the report and details of format are issued to students at the beginning of the Michaelmas term in the <u>Part IIB projects:</u> <u>second notice</u>.

Supervisors are expected to help supervisees plan their reports and criticise *generally* a first draft. It should, however, be recognised that the final report is an examination submission and *detailed* corrections are inappropriate. Supervisors should emphasise time management and encourage students to produce a first draft report *before* turning their attention to module examinations. The supervisor may then read the draft during the examination period, providing feedback to the student immediate the examinations are finished.

Two copies of the Final Report and one extra copy of the Technical Abstract are to be handed in to the Group Centre, together with the project record in whatever form it has been kept. Reports are date stamped and sent on to Supervisor and Assessor (appointed by the Coordinator). The Assessor also receives the project record, and is expected to take it into account in marking the work. Students may not make their second copies using the print room facilities (to avoid overcrowding) and supervisors should not make arrangements on behalf of their supervisees. Students must either take two final print-outs from word processors or use copying facilities outside the Department. (See also Section 4 of the <u>Second Notice</u>.)

Pressure on Departmental word-processing facilities is significant at this time. Up to the Saturday of week 2 of the Easter term, fourth-year students are likely to be preoccupied with module examinations. There is then approximately one week when the DPO system is lightly loaded before the start of third-year projects, which take priority. It is helpful if supervisors encourage students to use college or their own computing facilities.

Easter term presentation

Students are required to give an **oral presentation** of their papers at a final mini-conference to be held during week 6 or the start of week 7. Group Coordinators are again responsible for arranging the timetable of the mini-conferences of their Groups and should, as far as possible, divide their Groups into the same sets as for the Michaelmas term mini-conferences, with the same Assessor for each project. Since Part IB examinations start on Monday of week 6, rooms where mini-conferences can be held are in short supply, and some Groups may opt for a

college venue.

Health and Safety

Supervisors have a legal responsibility for ensuring that project work is carried out with the utmost attention to safety. The supervisor's responsibility does not absolve the student and others involved in the work, such as laboratory technicians, from their own duty of care.

Before any work is commenced (i.e. normally at the beginning of the Michaelmas term) the supervisor and the student must meet to discuss safety issues and assess all identified risks. They then complete a **Risk Assessment Form**, which must be sent to the Safety Office. This **must be done for** *all* **projects**, even if it is judged that there is no risk, in which case write "none" under hazards identified and give brief reasons below. Note that even working at a standard computer terminal involves a risk of Repetitive Strain Injury, which should be assessed.

Further details of the issues to be considered are given in <u>Risk Assessment in Fourth-Year Projects</u>, a memorandum from the Safety Office, together with a copy of the risk assessment form. All students are required to attend a talk by the Safety Officer on Wednesday of Week 0.

Risk Assessment Forms must be received by the Safety Office by the end of Week 1, Michaelmas Term (i.e. by 4pm on the Wednesday). A penalty will be deducted from the student's project total for every week, or part week, the assessment is late. Students are also asked to include in their Final Project Report an appendix (maximum one page) reflecting, retrospectively, on the risk assessment and commenting on its accuracy.

Where students are undertaking project work at an industrial site outside the Department, the University still carries a responsibility for health and safety. When external work is being planned, supervisors must consult the <u>Industrial Placement Coordinator</u>, about this issue (see also *Problem Areas*, below).

College Aspect of Supervision

The Department regards the setting up, organisation and assessment of a fourth-year project as a primary departmental teaching duty, and it therefore carries the same teaching credit as half the supervision of a PhD student. However, although there is no college supervision for the modular courses of the fourth year, colleges expect there to be monitoring of a student's progress with the project. Weekly project supervision is therefore charged to the colleges accordingly via CamCORS. The Senior Tutors' Committee have approved that the hours of supervision claimed for fourth year projects may be up to eight singleton hours per student for each of the Michaelmas and Lent terms and four singleton hours for the Easter term. An aspect of the supervision which both the colleges and the Department regard as important is the termly report from the supervisor to the college. This must be submitted, whether or not any payment is being claimed. Hours charged should reflect time spent in direct supervision of the student.

In some instances, it may be appropriate for a supervisor to delegate part of the project teaching to a research student or research assistant, e.g. for training a project student in a particular laboratory technique. The project supervisor should then determine whether the teaching can reasonably be classified as fulfilling part of the 'college' supervision. The total charge to the college must always remain within the overall limits of singleton hours per term. Any proposed charging of research student/assistant time to departmental funds must be authorised by the Deputy Head of Department (Teaching) **before the charge is incurred.**

Approximately at the division of the Michaelmas term, the Teaching Office informs Directors of Studies who the project supervisors are for their students. Supervisors will themselves need to inform colleges if a claim for payment is to be made by a research student/assistant who has helped – this may be done via Camcords.

Finally, the absence of college supervision means that project supervisors are likely to know first of any serious problems arising with a student's work. Please communicate these immediately to the college via CamCORS, and notify the Group Coordinator and the Teaching Office.

Problem Areas

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Issues of confidentiality may arise in project work, particularly when there are industrial links. It is the duty of the supervisor to make clear to any individual or organisation involved in a project that:

- the educational value of project work must not be put at risk, and
- the examination process must not be prejudiced.

The assessment of the TMR and Final Project Report may involve detailed reading by two staff members besides the project supervisor (see the Assessment section below) and, as is normal examination practice, the report must be made available to the Board of Examiners for Part IIB. When a project is initially offered or proposed, the supervisor must judge whether information of a sensitive nature is likely to arise and, if it does, whether it can be reported in such a way as not to affect appreciation of a student's contribution. It should also be made clear to interested external parties that the oral presentations are an important educational part of the project, with work being presented to more staff than are directly involved in the examining and to other students.

Only when absolutely necessary, oral presentations may be delivered *in camera* and assessors may be asked to sign confidentiality agreements before reading reports. However, it is only fair and proper that all interested parties agree to such arrangements from the outset. Therefore, when advertising type (a) projects on COMET, supervisors are asked to tick a box indicating whether the project has any associated confidentiality issues. Before ticking the box, they should check that the Group Coordinator is content with the proposed arrangements, and identify a second assessor who would be willing to sign any non-disclosure agreement. They should also include in the project description an indication of the nature of the confidentiality issues, so students can make an informed choice. Where the box is not ticked, students may safely assume that they will be able to write freely about all aspects of their project work, discuss what they have done with potential future employers, and present their work in public.

These same considerations apply to type (b) projects proposed by students, so supervisors should not accept such proposals if they are unhappy with the confidentiality implications. For both types of project, there is the further possibility of the student and supervisor generating some joint intellectual property that they wish to protect but cannot do so in advance of the assessment deadlines. This is the only circumstance that may reasonably result in a project being assessed confidentially without prior agreement of all interested parties at the outset. If the assigned assessor is not willing to sign the non-disclosure agreement, then the Group Coordinator should endeavour to find a substitute assessor who is.

Guidance on *insurance, liability and cover* is given generally in a Notice published by the Financial Board Office (*Reporter*, 1995-96, p.853). Paragraph 3.6 of that Notice refers to students seconded to outside organisations, such as may occur if a project has industrial links, and supervisors should note particularly the following quotations from that paragraph:

- Although the University cannot be held responsible for events occurring while students or staff are away on secondment, sufficient attention to these issues should be paid to satisfy its 'duty of care' towards its staff and students. In particular, it should be established that the employers' liability insurance of the employing organisation covers the secondee.
- Provided that the individuals are acting within their authority and their University role, the University's public liability policy will cover their actions while away on work experience or secondment.

In the present context, the term 'employing organisation' of the second sentence includes any firm at which a project student is working, even though the student is not on the payroll of that firm.

The University has presently under consideration the problem of establishing not only that there is insurance cover but also that the employing organisation has appropriate health and safety procedures in place. Until the latter is resolved, supervisors are advised to assume that no special action on their part is needed in the case of a student with regular sponsorship, undertaking project work with the sponsoring firm at a time when the student would otherwise be working with the firm, **unless the supervisor has reason for anxiety over health and safety**. In all other cases, the <u>Industrial Placements Coordinator</u> should be consulted for the latest on the University position.

Given that they have commitments to modules, it is not expected that students will be able to spend much time at an industrial site during any term. *Travel expenses* will not normally be paid by the Department and, where

possible, funds for this purpose should be sought from industrial firms concerned. NB If travel is essential and industrial reimbursement not available, the cost is to be borne by the Division, and supervisors should negotiate with their Head of Division. Funds for fourth-year projects **are not** available from the Teaching Office.

Assessment

Projects are graded into classes: guidance marks for the separate components may be used in the process of reaching this final grade, but the marks will not be available to examiners or students. The allowed grades are I/II.1/II.2 /III or below: these are the only categories relevant to the classing decisions by examiners. An additional category "Prizeworthy" can be used to flag projects of outstanding quality. The total guidance marks available for project work are 360, allocated as follows:

Michaelmas Term Presentation
Progress and Industry (Michaelmas)
Technical Milestone Report
Progress and Industry (Lent)
Technical Abstract and Final Project Report
Easter Term Presentation

The log book is not assessed as a separate item, but students are told that it may be taken into account when a grade is allocated for the final report. The first marker for presentations and reports is the Supervisor, who also awards the marks for Progress and Industry. An Assessor for each project is appointed by the Group Coordinator for the Michaelmas term presentation. The same Assessor normally acts as second marker for all aspects of the project assessment, and receives the log book for consideration alongside the final report.

The two markers for each element of the project assessment should mark **independently** using the forms issued by the Group Coordinator. The level of credit to be associated with each aspect of the presentations and the reports is indicated on the mark form, but supervisors and assessors should also be aware of the content of the <u>Second Notice About Fourth-Year Projects</u>, issued to students in the Michaelmas term, giving guidance on what is credit-worthy in reports and presentations.

After marking the final report, each marker considers their collection of guidance marks and makes a single, final grade recommendation of I, II.1, II.2 or III. At this stage the Assessor is given access to the Progress and Industry marks from the Supervisor.

It is the responsibility of the Group Coordinator to arrive at a moderated grade for each student. When the two markers make the same grade recommendation, the Group Coordinator simply records this consensus grade. When the two markers disagree, the Group Coordinator may moderate upwards when there are reasonable grounds to do so (e.g. supervisor explains how the report does not do justice to the project, or the Group Coordinator's own professional judgement). Should the Group Coordinator judge that the lower recommendation might be correct, he or she should encourage the supervisor and assessor to discuss their opinions with the aim of reaching a consensus. As a last resort, the Group Coordinator may enlist a third marker to score independently the written elements of the assessment (technical milestone report, final report and technical abstract). The third marker is informed of the marks awarded for the other elements of the assessment (presentations, progress and industry). He or she then makes a recommendation and the Group Coordinator records the majority grade where any two markers agree, or the median grade in the event of three different recommendations.

When mark sheets are returned to the Group Coordinators, they should be accompanied by one copy of the Final Report. It is the responsibility of each Group Coordinator to see that these Final Reports are deposited in the designated lecture room for inspection by the External Examiners (usually LR10) by Wednesday of week 7 of the Easter term. This work will be returned to the student; the second copy submitted by each student is for supervisors to keep. **NB There is no central archive of project reports** (i.e. the Teaching Office does not keep copies).

Technical Abstracts

The technical abstracts included at the start of the Final Reports will be archived in the CUED Library. To facilitate this, each student will hand in an extra copy of their abstract when they submit the two copies of their Final Report. These will be sent by Group Centres to the Teaching Office by the end of Week 6 of the Easter Term.

Illness, Penalties, etc

The Department's policy on *Rearranging coursework & allowances: general rules* is available on the Teaching Webpages.

Reports

A student unable to submit a project report (either Milestone or Final) by the due date, on account of illness, is instructed to notify their Supervisor as soon as possible. An appropriate extension to the submission date should be agreed with the Supervisor and the Director of Undergraduate Education, following the standard Allowance for Illness procedure (see below). Final Reports can only be accepted up to two weeks after the deadline. If necessary, the Fourth Year Projects Coordinator, in conjunction with the Supervisor, should try to obtain any notes, drafts, etc. that are available for assessment. Allowances may only be awarded for either report if a substantial partial submission of work is available. Failure to submit project reports for assessment will be treated in the same way as a missed examination: zero marks awarded and referred to the University Applications Committee. It is important to persist with submission of a TMR, however late, since this provides vital evidence for the Applications Committee in the event that a Final Report is not forthcoming.

All applications for Allowance for Illness (including extensions) must use the standard form (available on the Web), completed and signed by the student, and submitted by the student's Tutor to the Director of Undergraduate Education. Group Coordinators inform colleges via CamCORS of any student whose work is below pass standard. In combination with Allowance for Illness claims, Tutors are then responsible for submitting a 'warning letter' to the Examiners if appropriate.

The penalty for a late submission when there is no good reason is 5 marks per day out of a total guidance mark of 40 (TMR) or 200 (final report). However, after consulting the Group Coordinator, the supervisor may set a final date, **after which the report will not be accepted**, subject to the final date being not less than two days after the due date. The penalty for exceeding the limit on length is up to 20 marks, depending on the extent of the infringement.

Presentations, progress and industry assessments

If a student misses their presentation through illness or other grave cause, every attempt should be made by the Supervisor to enable them to present their work at another mini-conference, or to arrange a one-off presentation. Similarly, half-termly Progress and Industry assessment meetings should be rescheduled. Allowance for Illness forms should be submitted to request any extension or marks allowance. If presentations/assessment meetings cannot be rescheduled, the Supervisor, Group Coordinator and Fourth Year Project Coordinator will meet to decide on a fair allowance, based on performance in the rest of the project. Without an Allowance for Illness form, 'no marks for no presentation/meeting'.

Source URL (modified on 29-01-20): https://teaching19-20.eng.cam.ac.uk/content/part-iib-projects-notes-supervisors-0