



EEE471: Final Year Group Project Guidelines

1. M.Eng. Group Projects

1.1 Project schedule in brief

Students should spend most afternoons during the first and second semesters engaged on their group project. In addition, you are encouraged to engage with your project work from the start of the spring term (19th January 2015 to 9th February), when no EEE lectures will be scheduled, to allow the group to get back up to speed with their project work after the Christmas break. Students' practical work must be finished by week 18 (week 6 of semester 2) and they should aim to have the final technical report/project thesis written up, at least in draft form, prior to the Easter vacation (20th March 2015). This will allow their supervisor time to read it over the Easter vacation and provide feedback before submission of the final version. There are a number of assessments throughout the course of the project as described in section 2.

1.2 Expectations from the Project Supervisor and Second Marker

At meetings, Supervisors should inspect, sign and date student log books.

Each 4th year M.Eng. group project will have 2 members of academic staff as supervisors.

Project supervisors should meet regularly with their students, and at least every week during the initial weeks of the project. This should normally be achieved through the supervisor's attendance at Project meetings. Supervisors may elect to attend alternately, although at the very beginning it is recommended that both attend.

It is the student group's responsibility to schedule regular project meetings, and to inform the members of staff of the schedule. Your project will be managed by regular group meetings. Each meeting needs a chairperson (to manage the meeting) and a secretary (to take minutes) and these roles should be rotated through the group members. The purpose of the meetings is to review progress since the last meeting, identify any areas of difficulty and suggest possible solutions and allocate tasks to the group. The group must work effectively— if one person's task is a little harder than expected it may be necessary to allocate more effort to its solution. Working together on problems is essential for success.

Your group meetings will be observed by your supervisors. They will be trying to get a feel for how well the group is functioning and how effectively each of its members contribute to achievement of the objectives. A genius who does not interact positively with the other group members is a liability to the overall project goals – working together is a must. Your supervisor will offer guidance if he feels that the meetings are not achieving their purpose or if he feels that technically you are making poor decisions that are leading you along a fruitless path.

1.3. Risk Assessment

For the safety of themselves and others, students are required to carry out a risk assessment of their project before they start any practical work. This should be completed with the help of their supervisor by the end of week 2.

1.4. Company visits

The project supervisor may arrange for a meeting between the students and collaborating company where necessary. In some cases this will be in the form of a visit to the company premises, in others it will be a meeting in the Department. The initial student-company meeting may take place sometime between weeks 1-4, depending on the availability of the group project students, supervisor and company representative. During this period, students should, with input from their supervisor, develop the project based on the initial project brief. This will invariably lead to a number of uncertainties in direction and raise various technical questions. Students should document these and circulate them, via their supervisor, to the company in advance of the initial meeting such that they form the basis for the first formal technical meeting.

2. Project Assessments

Assessments will take place throughout the year and will have both group and individual marks. Table 1 shows the various assessments, the split of group/individual marks and when the assessments will take place. Figure 1 shows the distribution of marks allocated throughout the year and illustrates the need for continuous effort at all times.

Assessment	Format	Group (G)/individual (I) marks
Week 6	Group report and supervisor evaluation	10(G)
Week 12	Group report, group presentation and supervisor evaluation	15(G)/ 10(I)
Week 18	Supervisor evaluation	5(I)
Poster	Group poster	5(G)
Colloquium	Group presentation	5(I)/5(G)
Final report	Report and supervisor evaluation	30 (G) / 15(I)

Table 1

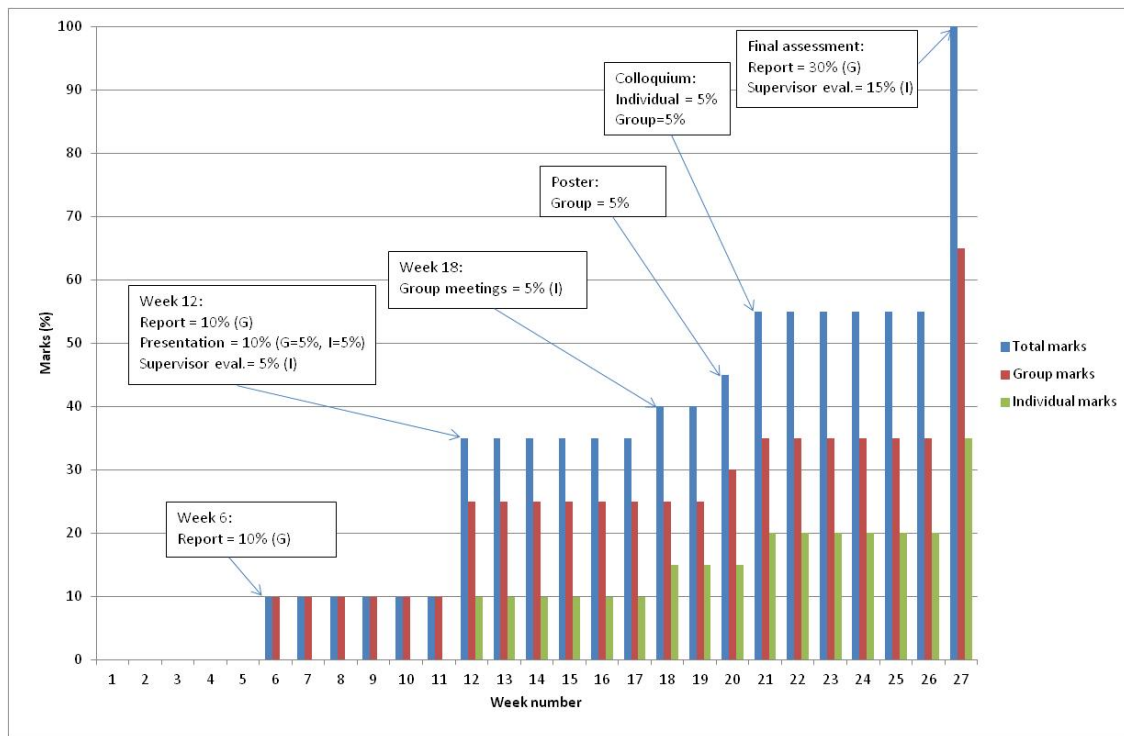


Figure 1: Mark distribution

As it can be seen there are two assessment milestones at week 12 and for the final report.

2.1. Week 6 (Report 1)

The group is required to compile, in conjunction with their supervisor, an initial plan of their project comprising of the following elements:

- definition and understanding of the project aims and objectives
- work programme as formulated by the students
- project plan
- risk register

The initial plan is intended to ensure that the students have a clear interpretation of their project aims and objectives, tentative time scales and realistic deliverables.

The group should generate a risk register that details the possible risks to achieving the group aims for the project. The register should also include routes to reduce/mitigate the risks.

Each student should append their individual Risk Assessment forms to Report 1 and submit the complete document **by the end of week 6**.

It is the group's responsibility to prepare sufficient copies of Report 1, submitting 2 copies for the project supervisors to the EEE general office (see timetable for time and date).

A single mark for the report will be given by the supervisors and distributed to individuals (see section 2.7).

2.2. Week 12 (Report 2, presentation and supervisor evaluation)

Report 2

The group is required to compile, in conjunction with their supervisors, an interim progress report of their project to be submitted at the end of week 12. The report should comprise the following elements:

- review of project aims and objectives, specifications and risk register
- an up-date project work programme
- progress of project
- Quality of report presentation

The report should contain details of progress to-date, difficulties experienced, any revision of the Initial Plan time-scales and include any essential diagrams. These, and the overall quality of report presentation, will be assessed as a group mark and distributed to individuals (see section 2.7).

Report 2 is due at the end of week 12. It is an interim report and should not be more than 10 pages.

It is the group's responsibility to prepare sufficient copies of Report 2, submitting 1 copy for each of the project supervisors to the EEE general office.

Presentation

The group will be expected to prepare a 15 minute presentation of progress to the whole MEng cohort in week 12/13. This "presentation" should be a mix of PowerPoint slides and practical demonstrations (suggest a 10 and 5 minute split respectively) and all members of the group must be involved. The presentation will be assessed by a panel of staff and PhD students.

Supervisor evaluation

Supervisors will assess individual performance based on group working, effectiveness and log books.

2.3. Week 18 Group Working Assessment

Around week 17/18 (weeks 5/6 of semester 2), it is the group's responsibility to arrange to meet both their supervisors to discuss project achievements and make preparation for submission of the final project report/thesis. Both supervisors will make an assessment of individual student's oral communication skills throughout the course of the project, along with group working, and performance as chairman/secretary in project meetings.

2.4. IET Presentation event

Towards the end of semester 2 (see separate timetable for date), 1 member from each group will be invited to make an oral, PowerPoint, presentation of their group project work to the IET Sheffield Branch, Young Engineers Papers Evening. The presentation will be an evening event held somewhere in Sheffield, but more than likely in Mappin Hall.

2.5 Poster presentation

Towards the end of the semester 2 (see separate timetable for date), the group will prepare a poster on the work carried out on the project. The whole MEng cohort will present their posters to members of staff and PhD students for evaluation.

2.6. Departmental Colloquia

The colloquia will take place in one of the main lecture theatres or Mappin Hall on one 'Presentation event day' upon which attendance is compulsory for the whole day (see separate timetable for date)

Each group will prepare a presentation consisting of a 15 minute PowerPoint slide presentation plus 5 minute practical demonstration followed by a 10 minute question and answer session, of their project work at a Departmental Colloquia session. Each group member is required to make an equal contribution to the presentation.

An assessment of each student's individual oral presentation in terms of technical content and presentation style will be carried out. The staff marking the presentation will be a panel, probably comprising the Head of Department, the MEng Coordinator and other supervising members of staff. While Project supervisor(s) and second markers will be invited to attend the Departmental Colloquia, they will not contribute to the marking, unless they are panel members.

2.7. Final Project Assessment and Thesis Report

Final report

Each student's practical work must be finished by week 18 (week 6 of semester 2) and the group should aim to have the final technical report/project thesis written up, at least in draft form, prior to the Easter vacation. The last date for submission of the final completed thesis is (see separate timetable for date). This is a hard deadline – projects submitted after this will not be accepted.

It is the group's responsibility to prepare at least 3 copies of the Final Project Thesis, 2 of the copies must be submitted unbound to the Departmental office for the examiners, the other copy(s) will be retained by the group for their own records. The unbound copies submitted to the Department will be bound by the Department and distributed to project supervisors with the Final Assessment Form.

Each project student supervisor is asked to make an independent assessment in the first instance, of the group final report/thesis, using the Final Assessment Form marking scheme. The breakdown of the mark scheme is as follows:

- Introduction and literature review (20%)
- Methodology, theory, results and interpretation (20%)
- Discussion with respect to aims and objectives, conclusions and recommendations (20%)
- Achievement with respect to aims and objectives (20%)
- References (10%)
- Overall presentation (10%)

The report is intended to be a concise, coherent group output and a single mark will be awarded for the report and individual marks will be distributed (see section 2.7). Reports should be 25-30 pages, not including appendices.

Supervisor evaluation

Supervisors will assess individual performance based on practical skills, self reliance and log books.

2.8. Distribution of individual marks for group assessments (Peer Review)

The aim of the projects are to allow students to work together to achieve an overall goal, however students will contribute to these outputs to different levels. As such this is reflected in the marking scheme using student moderated marking. Group members will carry out fortnightly Peer Review assessments of the individual performance of group members, based on group working and effectiveness. This assessment will be confidential, but students will receive individual feedback on their performance. Students will also have to supply a textual justification on the marks they are awarding. It is important that you engage positively with the Peer Review system and adhere to the deadlines set.

For each of the group assessments (i.e. report 1, report 2 and final report) peer assessments will be used to distribute the group marks to individuals within the group. For example, if everyone in the group contributes equally then all students will be given the same mark. The distribution of marks will be compared against supervisor evaluations to ensure that students are engaging with the evaluation in a meaningful way and are not being dishonest or biased.

3. Plagiarism

Final Project Thesis Report

Additional to the paper copies of their Final Thesis Report, students are requested to submit an electronic copy, the details of which will be discussed closer to the submission deadline. This electronic copy will be used to automatically check for plagiarism.

4. Web Based Resources.

Electronic copies of this handbook, the project timetable dates and project/supervisor listings can be found at:

<http://hercules.shef.ac.uk/eee/teach/resources/eee471/eee471.html>