



Outline of the Dissertation regulations

May 17, 2023

Your *Dissertation Module* will take the form of an individual project in some aspect of Scientific Computing or Scientific Data Analysis. For this project you will be assigned a supervisor with whom you will have regular meetings. Please keep logs (minutes) of every single meeting including action items. Please stick exactly to all formats required.

1 Literature review and project plan

The first deliverable is *formative*, that is, you will receive feedback but no mark from your supervisor (the quality of the document does not contribute to the overall mark of the module). This deliverable will be due on **19 May 2023**, i.e. 4 weeks after the start of Term 3, and has to be submitted to your supervisor (typically by email). We ask for this to ensure that work is progressing in a timely manner; your supervisor will give you feedback on your progress as well as suggestions for improvement.

Your report should be **no more than 8 pages** and should discuss the following items:

- What is scientific background, i.e. the context of the project?
- Which are the anticipated outcomes of the project? You are strongly advised to break down the outcomes into basic, intermediate and advanced goals, and that you clarify how risky/difficult they are.
- What is your research question?
- What is your project time plan? Please include a Gantt chart.
- How will you demonstrate success? That is, what kind of tests will you conduct to show that your project is correct, robust, and performing as intended? (You can compare with assessment criteria for your summative submission, see below).

2 Project report (Dissertation)

The second deliverable is *summative*, that is, it will be marked by your supervisor and by another examiner. The project report should conform to the general structure (with the four main elements) outlined below. However, **we do not provide a strict template**. You should read a few proper papers in the field of your dissertation (these could be the latest papers suggested by your supervisor) and distill how to structure a report from these papers within this field. In any case, you should agree with your supervisor on what is the appropriate template to follow in your dissertation report. What you submit should look and

feel like a real journal or conference paper in the corresponding scientific area – even though it obviously follows lower standards than a real scientific paper.

The project report should consist of these four main elements:

1. A title and preamble, containing the names of the student and supervisor, the degree programme (together with the words “MSc Dissertation”) and the academic year.
2. The abstract. This should be in form commensurate with a suitably relevant conference or journal and will typically be around half a page in length.
3. The main body. This will consist of a set of sections as specified in the template. We have provided suggestions for the length limits of each sections, but remember that, overall, the report must be **no more than 20 pages** long, **excluding bibliography (i.e. references)**. We ask for a font size **no smaller than 11pt** with **at least 2cm of margin** on all sides.
4. The references. These should be either in Harvard format (author, date) or in Vancouver format (numeric, with citations in numeric square brackets). The number of references will obviously depend upon the nature of the project, but we would normally expect a minimum of 10 academic references. Where possible, you should avoid using references to web sites, and if this is necessary, should ensure that they are correctly cited.

It is particularly important that you note the length requirement, as only the first 20 pages will be taken into consideration when marking the project report.

2.1 Submission

The project report is due on **1 September 2023 at 2:00pm** and is to be submitted on Learn Ultra. The submission should consist of the following items:

1. The **project report in pdf format**; its content should be **no more than 20 pages** in length, excluding references and an optional Appendix (it is expected that most projects will have no Appendix at all).
2. Your **project code**. This can be submitted in one of the following two different ways:
 - (a) **First way:** Upload on Learn Ultra a **zipped file** containing **all your code (and possibly datasets)**.
 - (b) **Second way:** Submit a single .txt file which contains only the link to a *Zenodo* archive of your code and your data. If you manage your code in a GitHub repository, please follow the instructions for creating citeable code (<https://guides.github.com/activities/citable-code>).

2.1.1 Submission extensions

Students can submit requests for an extension using the corresponding submission form which can be found here: <https://durhamuniversity.sharepoint.com/teams/ComputerScienceUndergraduateCommunity/SitePages/Coursework-Deadline-Extensions.aspx>

If the project report is submitted later than 5 weeks prior to the final Board of Examiners (e.g. due to a long extension which has been requested and granted), the mark of the Miscada project will normally not be considered at the final Board of Examiners. Instead, it will be normally dealt with either with Chair’s action or in the following Board of Examiners meeting.

2.2 Ethical considerations

Every student must discuss any possible ethical considerations of their project with the supervisor, for example issues related to human participants, access to data, non-disclosure agreements, etc. If there are ethical considerations which need to be addressed, the student must submit the **Ethical Assessment Form** online, using the following link: <https://durhamuniversity.sharepoint.com/teams/researchoffice/ethics/Pages/COMP.aspx>

In some cases (e.g. when gathering sensitive data from human participants), the student might also need to create additional documents for the parties involved (e.g. consent form, privacy notice, participant leaflet).

Furthermore, the student must always adhere to the University's Intellectual Property Policy, which can be found here: <https://www.dur.ac.uk/research.innovation/local/governance/policy/ip/>

2.3 Assessment criteria for the Dissertation

A major objective of the project is to allow you to exercise the skills, knowledge, practices, and critical thinking skills acquired in the taught modules. Therefore top priority must be given to establishing the academic context of the project, and showing how your work relates to other work in the chosen field. The individual nature of projects means that each one will need to be assessed using different criteria. Masters projects are not research projects. There is no obligation (as it is in a PhD) to produce original outcomes. In addition, the product element of a project does not need to produce “successful” results when exploring some idea; assessment is based upon the processes that you have followed, not the outcomes. A project that competently demonstrates that an idea is not feasible (and the reasons why) is every bit as valuable a contribution to knowledge as one that does: in this case, a “negative result” is still a result! Assessment of project work involves the supervisor, another member of staff, and the External Examiner. Any differences that may arise between marks awarded by the various examiners will be investigated and resolved with care, and all marks will need to be approved by the MSc Board of Examiners.

2.4 How the Dissertation mark is computed

The mark for the Dissertation module has two main parts:

- The mark for the written **Project Report** counts towards **90%** of the Dissertation mark.
- The remaining **10%** of the Dissertation mark is given by the **Supervisor** mark.

2.4.1 Details about the mark for the written Project Report

The written Project Report will be marked using the following allocation of marks.

1. Abstract, Introduction, and Conclusion (20%):
 - The abstract has to provide a clear summary of the key points from your paper, be capable of being used as a “stand-alone” description of the project report.
 - The introduction has to clearly present the rationale for undertaking this particular study and the question(s) that it is seeking to answer. It should also discuss the aims and achievements of the project.
 - The conclusion should discuss the outcomes and link them to the initial question, together with any recommendations for further work.
2. Related Work (20%). This section should demonstrate:
 - Knowledge of the relevant literature and research findings, demonstrating their influence upon the approach taken.

- A clear strategy for finding that information.
 - Critical analysis of the literature, ideally also comparing different approaches to each other in the literature.
3. Solution and Results (50%): Note that this is not necessarily a section of your project report. As described above, the sections have to be appropriately designed in a way that makes sense to your individual topic and in a way that makes sense in the particular field of your dissertation. In this part (which might consist of various different sections, depending on your field). we are looking for evidence of:
- Adequacy of the adopted/proposed “solution” (architecture/design).
 - Problem-solving ability.
 - Explanation of a rationale for specific design/strategy choices.
 - Clarity and adequacy of the description of the presented results.
 - Clarity of the distinction between literature and own results/contribution.
 - Description of the algorithms used (if applicable).
 - Discussion of implementation issues encountered (if applicable).
 - Description of the tools used (technical and/or theoretical tools).
 - Specification and design (if applicable).
 - Verification and Validation (if applicable).
 - Description of the evaluation method adopted (if applicable).
 - Discussion of, and outcomes from, your testing strategy (if applicable).
 - The evaluation strategy adopted and its suitability for your task.
 - Assessment of any limitations upon conclusions.
 - Identification of any threats to validity of the outcomes (if applicable).
4. Writing Skills (10%):
- Clarity of presentation of ideas.
 - Quality of writing (readability, grammar).
 - Conformance to a format suitable for a research paper in the field of the project.

Appropriate implementation details, such as parts of source code or circuit diagrams, should normally be included as a **clearly marked Appendix**, together with indications of sample runs. Project reports must be backed up with experimentation, implementation, theoretical or conceptual analysis, new illustrative examples, and so on.

2.4.2 Details about the Supervisor mark

This is the mark that your supervisor gives, based on their interaction they had with you throughout the project. More specifically, the Supervisor mark will be given according to the following criteria:

- Identification of the important project management considerations.
- Ability to justify project management approaches adopted and analysis of their successfulness.
- Application of planning and conformance to plan.
- Application of leadership / direction throughout the project.
- Demonstration of problem solving ability.

IMPORTANT: Please note that the scheduled meetings with the supervisor (as described in the Dissertation module page on Learn Ultra) are **mandatory**, and that these meetings can feed into the Supervisor mark.

The Dissertation mark (i.e. the overall mark of the module) is given one of the following grades when awarded marks in the indicated ranges:

- 70-100: D (Distinction)
- 60-69: M (Merit)
- 50-59: P (Pass)
- 0-49: F (Fail)

A detailed description of each of the above mark ranges can be found in the separate table for the MSc assessment criteria for the Dissertation.

The project timeline is as follows:

Before the end of Term 2:

- From the middle of week 17 and until the **end of week 18 (including the weekend)**, i.e. from Wednesday 22 February until **Monday 6 March 2023 9:00am**, you will be able to submit your project preferences in the online submission system here:
- <https://cssystems.awh.durham.ac.uk/password/projects/student/>
- In the above submission system, you will be able to submit **up to 6 different projects** and **up to 1 project per supervisor**.
- This restriction (i.e. one project per supervisor) **does not apply** to the **industry co-supervised projects**.
- The dissertation period starts once the allocation of projects and students to supervisors, **at the end of Term 2**. The allocation will be done by talking into account the student preferences and any agreements between academics and students (potentially also including a company as a partner) about specific project topics.
- It is expected that several project students will be allocated to the same supervisor and to the same "project theme". The scope of these project themes will be broad enough to cover the specific topics of all students who are allocated to the theme. As such, it is expected that many of the project meetings (see below) will be group meetings between the supervisor and the students of a specific theme. During these group meetings, the students will be able to benefit from their interaction with the supervisor and with the other students.
- **IMPORTANT:** The MISCADA projects are **NOT collaborative**. Although two or more students can work within the same "theme", the exact topic of the project will be different. More specifically, each student is required to work alone on his/her own individual project topic (as agreed with the supervisor), and to eventually submit their own work in September. Nevertheless, the students can mutually benefit from the interaction with the other students who are working on similar specific topic within the same theme.

During the Easter Break and in Term 3:

- Students can start working on their project immediately after the project allocation is announced at the end of Term 2, and during the Easter break.
- It is the **responsibility of the student to contact their allocated supervisor** and **arrange a first (kick-off) meeting with them as soon as the project allocation is announced**. During this first meeting (either at the end of Term 2 or early in the Easter Break), the students will discuss the project topic and the deliverables, such that the student can start working during the Easter Break.
- Starting from the **beginning of Term 3** (i.e. in week 21), the students are expected to work on their project for 6-9 weeks in a row on the **core dissertation phase** (the research phase).
- During this core dissertation phase:

- **The students must engage with their project and meet with their supervisor weekly.**
- **Participation** in these meetings is **mandatory**.
- It is the **responsibility of the student to arrange weekly meetings with their supervisors during the core dissertation phase.**
- Students are expected to be in Durham in Term 3.
- Students must attend the pre-scheduled project meetings with their supervisor, and they have to **make notes / take minutes** from these meetings.
 - These notes have to be uploaded by the students on the following dedicated website (which is very easy to use):
cssystems.awh.durham.ac.uk/password/projectreporting/index.php
 - These notes do not have to be very detailed or very formal, they just need to briefly describe/outline the content of the meeting. Alternatively, if the webpage is not working for some reason, the students will have to send their notes/minutes to their supervisor by email.
- After the end of the core dissertation phase, typically in **July / August**, the students have another few weeks for the write-up of their work in the form of a project report, until they submit their project report in the beginning of September.
- During this write-up phase (in July/August), the students have to give to the supervisor a preliminary draft of their project report to get feedback from them. This preliminary draft does not need to be a complete project report, it can just be some chapter(s). After that, there will be a **mandatory meeting** in which the feedback of the supervisor will be discussed. It is the student's responsibility give this draft to the supervisor early enough, to allow sufficient time to them for reading the draft (e.g. one week), and to arrange with the supervisor the exact time of the meeting. The recommended time for this meeting is at the end of July or at most the first week of August.

Specific milestones:

- In the **middle or end of May**, the student has to perform a preliminary **demonstration of all the results** so far to the supervisor. This process is formative (i.e. no mark will be given) but the supervisor will give feedback (either oral or written, as appropriate) to the student about the progress made so far.
- Every student must discuss any possible ethical considerations of their project with the supervisor, for example issues related to human participants, access to data, non-disclosure agreements, etc. For some (but not necessarily all) projects, an **Ethical Assessment Form** has to be submitted **by 31 May 2023**. You can find an exact description of the submission process for these Ethical Assessment Forms below.
- By the end of the **4th week** after the Easter Break, i.e. **by 19 May 2023**, the student needs to submit a **Literature review and Project plan**, which should be in total **no more than 8 pages**. This deliverable is formative (i.e. no mark will be given) but the supervisor will send feedback to the student

about the progress made so far. For a more detailed description see the **Dissertation regulations** document (**attached**).

- By **1 September 2023 at 2pm** the student needs to submit the **Project Report (Dissertation)**, which should be **at most 20 pages** (excluding bibliography). For a detailed description see the **Dissertation regulations** document (**attached**).

For industry co-supervised projects:

- The project supervision meetings can be either virtual or in person.
- Students can either work at the partner's institution (if appropriate) or in Durham with remote supervision. Industry partners are not expected to cover for student travel and support. It is thus not required that students physically join the industry partner.
- The academic supervisor has to be kept in the loop about the project progress (meeting minutes).

Key notes:

- The core dissertation time is from 24 April - 23 June 2023.
- Typically, students work for 6-9 weeks on the core dissertation and use the remaining time for write-ups and presentations.
- Final submission for report is 1 September 2023 at 2:00pm.
- The student is responsible to organize your time and to agree with your supervisor team on well-suited periods when you work on which part (create a project plan/Gantt chart).
- See the Ultra module page and the level handbook for all submission deadlines.

Finally, on the **Dissertation module page on Ultra** you can find **two indicative templates** for the final report, one in Latex and one in Word. Note that these are **not strict templates** and they can be seen just as indicative templates. For a guide on how to choose a particular template for your dissertation please read carefully the **Dissertation regulations** and also consult with your supervisor.

Important: Please be very careful about **plagiarism and collusion**, as these incidents are taken very seriously in the university and marks will be lost when plagiarism or collusion occurs in the dissertation. Therefore please give proper reference to the sources you use material from. For more information please read further here:

https://libguides.durham.ac.uk/research_skills/managing_info/plagiarism

<https://www.dur.ac.uk/learningandteaching.handbook/6/2/4/>