



CS5500 MSc Dissertation 2024/25

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Teaching team

Dr. Sarath Dantu

Dr. Kezhi Wang

Dr. Maziar Ghorbani

Your supervisor
(also your tutor)

Lectures and workshops

Week	Lecture Topic	Date	Lecturer
18	Introduction to master's dissertation	28 Jan 2025	Dr. Sarath Dantu

19	Demonstration of RefWorks reference manager	04 Feb 2025	Dr. Sarath Dantu
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Week	Workshop Topic	Date	Lecturer
45	Academic Writing	Jun 2025	Dr. Elaine Pang

Outline

What is MSc Dissertation

The process

 Selecting supervisor

 Task 1

 Ethical approval

 Dissertation

Submission

Assessment

Starts in Semester 3 after your exams in Jun

Major piece of research work summarised as a 12,000 word dissertation

580hrs of research work/writing/thinking

20hrs of supervision

Due by **30 Sep 2025, 11:00**

Types of study

1. A [research-focused study](#), which aims to draw on practical data to assess critically a specified area or topic. The empirical data may come from a study undertaken by the student with an appropriate organisation (agreed by the department) or a meta-analysis of data already available in published relevant literature.
2. A [practical software development study](#) which aims to explore an area or ideas, or demonstrate a concept through appropriate software development, testing and critical analysis.
3. A [literature-focused study](#), which aims to integrate and critically discuss a significant body of literature within a specified topic area. This type of study tends to provide some statement of recommendation arising from a critical review and synthesis of relevant literature.

Learning Outcomes

- LO1** To critically evaluate relevant research and scholarship within the field of study.
- LO2** To choose and apply appropriate techniques and enquiry, given the research problem (or question) addressed.
- LO3** To propose, present, and critically evaluate a solution to the research problem addressed (or an answer to the research question).
- LO4** To clearly communicate the above achievements to the reader.
- LO5** Demonstrate engagement with the University's ethics process and, where required, gain formal ethical approval from the University and evidence this in the dissertation report.

Important dates

Week	Date	Description
17	Mon 20th Jan	MSc supervisor OneDrive spreadsheet released to students
23	Fri 7 th Mar	Deadline to record agreements between student and supervisor. (Student to email computerscience-tpo@brunel.ac.uk with supervisor in 'CC)
26	Fri 21 st Mar	Final list of agreed/assigned supervisors
35	Fri 30 th May	End of exam session
38	Fri 20 th Jun	Deadline: Task 1, submission of task 1 report
40	Fri 4 th Jul	Deadline: BREO submission
52	Tue 30 th Sep	Deadline: Task 2, submission of the dissertation report

Selecting supervisor and the topic

Database of supervisors/projects released on [20 Jan 2025](#)

Be very proactive, contact people, arrange appointment, discuss research topics

Choose a topic that interests you

Aligns with your future goals

Challenge yourself

Email Karen Tossell (computerscience-tpo@brunel.ac.uk) by [07 Mar 2025](#)

If you do not select a supervisor, we will select one for you, by [21 Mar 2025](#)

Task 1

Summer exams end on 30 May 2025

Dissertation starts write after your exams

Structured report (Background, Aims & Objectives, Approach, Plan) to help you realise what your project is about and what/how you need to do achieve your goals

Task 1 report is due by **20 Jun, 11:00** (WiseFlow)

At the next meeting discuss the report (formative feedback) with your supervisor

Ethical approval

Ethical approval for no data/secondary data/low risk applications on MS forms

Medium and high risk applications to be submitted on breo.brunel.ac.uk

Data source:

Empirical work/secondary data (open source)/meta-data/surveys

During Task 1 assess the data source, prepare your ethical approval application

Submit it by **04 Jul, 11:00**, approval takes time

Lack of ethical approval —> you will fail LO5 —> fail CS5500

Dissertation (your responsibility)

Start early (you can use CS5804: RPM assignment as a springboard)

Arrange and attend regular meetings (notes!!!) with your supervisor

Agree on a schedule to get feedback on your dissertation drafts

Backup your data to OneDrive

Use reference management software (RefWorks/Zotero/Mendeley [lecture 2])

Assessment - submission

File	Description	File type	Optional/Mandatory
Main Dissertation ("StudentID.pdf")	Your report should be contained in one document, including all the figures and tables, as a pdf document	pdf	Mandatory
Ethical approval letter	Either as part of main document or additional file	pdf	Mandatory
Additional files: Software/ code compressed zip folder	If you have developed a software or analysis pipeline using any of the popular programming languages (R/python) using jupyter-lab or Rmarkdown notebooks, submit the code and the sample data files (subsample the data so that the datasize does not <u>exceed 5GB</u>) as appendix files.	Zip folder	Optional

Any code developed during your dissertation should be included as text (not as images) in the Appendix.

Due by 30 Sep 2025, 11:00 (WiseFlow)

Assessment - LO1 (Background)

Learning Outcomes

LO1: Critically evaluates relevant research and scholarship within the field of study

Marking Criteria

F (Fail): Fails to provide any relevant literature review.

D band (narrow fail): Insufficient evidence of relevant literature review for the field of study.

C band: Provides minimal but sufficient background to understand the field of study, demonstrating the ability to critically evaluate the essential contributions in the field.

B band: Literature review is thorough providing a critical analysis of the research area and is used to derive clear objectives relevant to the problem.

A band: Critical overview of the research area is presented, explaining the gaps and the need for current research aims and objectives demonstrating excellent grasp of the subject

Assessment - LO2 (Methods)

Learning Outcomes

LO2: Chooses and applies appropriate techniques and enquiry, given the research problem (or question) addressed

Marking Criteria

F (Fail): Fails to identify relevant techniques/methods suited for the problem.

D band (narrow fail): Fails to apply relevant techniques/methods for the chosen problem.

C band: Applies appropriate research methods, providing a basic description of the methods.

B band: In addition to the previous criteria, a logical research plan is proposed with very good discussion of each method and their suitability for the research questions.

A band: In addition to the previous criteria, the choices of methods is critically discussed and their relevance to the objectives/research questions is critically justified with pros and cons of each method established.

Assessment - LO3 (Results and Discussion)

Learning Outcomes

LO3: Proposes, presents, and critically evaluates a solution to the research problem addressed

Marking Criteria

F (Fail): Fails to present and explain any relevant results.

D band (narrow fail): Results relevant to the problem are present but the presentation is very weak.

C band: Critically presents results/solutions relevant to the proposed objectives with a basic description of the proposed solutions/results.

B band: In addition to the previous criteria, there is a logical presentation of the findings with good use of visual representations (graphs/tables) for quantitative research and cogent arguments for quantitative research.

A band: In addition to the previous criteria, the proposed solutions/results are critically evaluated, drawing on relevant literature where required, explaining the success/failure of findings in addressing the research objectives and their significance for the proposed research problem.

Assessment - marking criteria

Learning Outcomes

LO4: Clearly communicates the above achievements to the reader

Marking Criteria

F (Fail): The dissertation has major language and formatting issues with very poor structure and presentation.

D band (narrow fail): The dissertation is very difficult to comprehend with lot of language issues.

C band: While the idea of the project is understandable, the structure and presentation of the dissertation could be improved. Referencing is appropriate, with minor language issues.

B band: Dissertation is written clearly, all sections are easy to understand, consistent referencing style, demonstrating the ability to develop and communicate a master's level project.

A band: In addition to the above criteria, the dissertation is exceptionally well written, communicating complex ideas clearly and concisely to expert and non-expert audience with excellent use of visual representations, creating a logical flow through the sections, with thorough and consistent referencing with only very few grammatical/typographical issues.

A bad example (LO4)

Frodo and his friend went with that tiny person to Mordor

Dragon was guarding the treasure under the mountain

Dwarves wanted to kill the dragon because they did not want Elves getting the gold

The ring was destroyed

Elves and people on horses fought the witch king

There were more than 5 rings

A better example (LO4)

The One Ring was rediscovered...

It had the power to destroy all the races so it must be destroyed

Can only be destroyed in the volcano where it was made i.e., Mordor

Fellowship aided by Ale was formed to destroy the ring

Elves and people on horses fought the witch king

Frodo and his friend went with that tiny person to Mordor

Ring was destroyed (objective accomplished)

Assessment - marking criteria

Learning Outcomes

Marking Criteria

LO5: Demonstrate engagement with the University's ethics process and, where required, gain formal ethical approval from the University and evidence this in the dissertation report

Fail: No engagement with the ethics process.

Pass: Engages with the ethics process; obtains either an ethical approval letter (included in the dissertation or attached as an additional file) or a clear statement is present in the dissertation explaining that the project does not need ethical approval.

Summary

Start early, be proactive in your work (supervisor/topic/research/dissertation)

You can use CS5804 assignment to develop your topic

Ethical approval application by **04 Jul, 11:00**, approval takes time (LO5)

Start writing in June (use Task 1....)

Submit before **30 Sep 2025, 11:00** (10:30am latest, one draft to WiseFlow)