Project and Dissertation Guidance 2023/24

MSc Business Analytics
MSc Logistics and Supply Chain Management

Management Science
Lancaster University Management School

Lancaster University
Management School

Contents

Key Dates 2023-24: Summer Term

Week commencing 20 May 2024: Projects begin
• Project agreement letters to be sent to students on client-based projects – these are to be returned as soon as possible • Students must complete an ethics questionnaire • Any students who haven't completed the University's 'Information Security' Training must complete this.

Masterclass schedule			
Date	**Time**	**Location**	**Masterclass**
Mon 13th May	10:00-11:00	LUMS LT 17 (WPA021)	Client-based projects (Anna-Lena Sachs)
	11:30-12:30	LUMS LT 17 (WPA021)	Using AI in the dissertation (Nonhlanhla Dube and Ivan Svetunkov)
Tuesday 14th May	11:00-13:00	LUMS LT 08	Projects and Dissertation support (Sunil Banga)
Weds 15th May	10:00-11:30	LUMS LT 08	Charts, Analysis and Delivery (Adam Hindle)
Thurs 16th May	12:00-13:00	LUMS LT 19 (WPAB002)	Learning Sets and Writing Retreats (Rob Shone and Quynh Do)
Tuesday 21st May	10:00-12:00	LUMS LT 17 (WPA021)	Data collection (Bob Frost, Library)
Thurs 30th May	10:00-13:00	Hannaford Lab	Programming (Ahmed Kheiri, Jamie Fairbrother, Luke Rhodes-Leader)

Friday 6th Sept	**Dissertation Deadline (12:00 noon)**

09 – 13 Sept	Revision week for resit exams
16 – 20 Sept	Resit Exam Week (will take the same format (online/in-person) as the original)
30th Sept 2024	**Resit Coursework Deadline (09:00)**
Late October	Board of Examiners
Early November	Dissertation and overall results released
Mid December 2024	Graduation

MSc Summer Term Project: Supervision

To support you throughout the project, (including the process of writing your dissertation) a supervisor will be appointed. Your supervisor will clarify the frequency, duration and group size of your meetings and whether these will be conducted in person or online.

Supervisor role

Your supervisor will advise you throughout the period of the project. They are primarily concerned with the process of the project:
- agreeing the project scope and objectives
- monitoring your academic progress and the development of your project
- co-ordinating communication with the client (client-based projects only)
- helping you to ensure that the final dissertation is completed to a level appropriate for a master's degree
- advising on the dissertation structure, writing styles, correct referencing and many other aspects of the process

This might include advice on:
- the coherence, conceptualisation and significance of your chosen project topic
- direction to bibliographic and empirical sources and methodology
- professional communication with clients (client-based projects only)
- handling of concepts, ideas
- development and validity of your argument
- general quality of the presentation, structure, layout of the dissertation

Project supervisors will:
- give advice on initial ideas, objectives, potential literature sources and methods, if possible
- give advice on the content and structure of the dissertation as it develops
- read a draft section of the dissertation and give feedback (further readings, if any, are at the discretion of the supervisor)
- offer advice on the adequacy of the work undertaken for a master's level award
- advise on the importance of acknowledgement of sources through appropriate referencing, thereby reducing the chance of plagiarism

Supervisors are **not** responsible for:
- in-depth checking of the dissertation. Supervisors are not expected to undertake editing or revisions. The dissertation is your own work for which you take full responsibility
- debugging the code of students carrying out modelling work as part of their project
- giving detailed comments on drafts. It is not appropriate for supervisors to read or comment on the precise content (although, as mentioned above, supervisors will read an early draft of one section of the dissertation)
- correction of poor English or typographical errors, though your attention may be drawn to them

The responsibility for the submitted dissertation **remains with you alone**. This includes accepting or rejecting advice, and producing the final text by the due date at the quality required.

Communication

The interaction between you and your supervisor largely depends on mutual convenience and preferences.

There will be scheduled tutorial meetings during the project period and you will be allocated to a 'learning set'. This is a small group of students working on similar projects or with the same academic supervisor (maximum of six) which offers opportunities for learning from one another as well as your supervisor. During your meetings, you will be able to discuss the project you are working on, and gain advice from your supervisor and your peers. Your supervisor will agree a timetable of tutorial meetings with your group. As a minimum, there will be three group tutorials held during the dissertation period.

There will also be a mid-term review of progress (e.g. mid to late July). This will be done either just with your learning set or joint with other learning sets working in similar subject areas. Your supervisor will confirm details of this, and it is likely to require a short presentation from each student on their progress to date and plans for next steps. This has provided prior groups of students with a focal point to reflect on their projects and may also provide an opportunity for you to receive feedback from subject specialists other than your supervisor. **You will also be required to submit a 2-page dissertation outline mid-way through the project (end of June/early July) for discussion and feedback from your supervisor.**

Tutorials can be supplemented by Teams meetings and/or email exchanges with your supervisor as appropriate.

It is essential that you keep in regular communication with your supervisor and inform them and the teaching office team if you experience any difficulties, such as academic or personal issues that may affect your ability to undertake the project successfully. Please bear in mind and plan for the fact that during the summer, supervisors may be unavailable at times due to holidays or attendance at academic conferences.

To ensure consistent progress, you are advised to provide your supervisor with a short written update once per week (e.g. on a Friday afternoon). This update should provide a brief summary of progress/achievements in the week, objectives for the following week, and any obstacles that need to be addressed. Supervisors will be asked to respond as appropriate if there are any issues which need to be discussed. Some supervisors may provide a template for this purpose and one will be provided on Moodle. You are expected to spend adequate time on this each work, e.g. 1 hour.

Working in Learning Sets

It is up to you to decide how to support each other in your learning sets. However, you are encouraged to meet at least weekly with the other members of your learning set to discuss your progress – this will enable peer learning. You may also consider working with some or all the members of your set in 'writing retreat mode', again at least weekly. There will be a master class on how to work effectively in this way, and some supervisors may also want to join you on a writing retreat in order to demonstrate this approach.

Master Classes and further support available

The department provides a number of master classes, (as listed on page 3) most of which will be recorded. Please make sure you attend all those that are relevant to your allocated project, and also look out for other opportunities available via the LUMS Learning Development Unit and the wider university.

Attendance

You are advised to stay in Lancaster throughout the project period (unless relocating to client location). Supervision and peer learning (learning sets) work better when students are physically present. In addition, any students on a Tier 4 visa who do leave the UK will have their visa cancelled and would then need to apply to return in December for Graduation as a standard visitor. We are required by law to inform the Home Office to report any students who complete their studies outside of the UK. For more information on this, please contact the Visa Office.

Please communicate any absence with your academic supervisor (and client where relevant). For students on a Tier 4 visa, if you have an illness or family emergency and need to leave Lancaster (for up to 10 days maximum), you must complete an absence request form for authorisation.

Academic integrity

Each dissertation will be marked by the supervisor and second-marked; the agreed mark will be published, and feedback will be released on Moodle following confirmation at the final examination boards. An oral examination (viva voce) will be held should the assessors require clarification on any part of the dissertation, or where there is suspicion that any part of the work is not the student's own work (in which case the student may be asked to prove that this is their own work). If there is substantial evidence of false authorship through AI, whether in part or whole, this could lead to escalation to SAC (Standing Academic Committee). Any such SAC cases may lead to a delay in graduating.

MSCI553: Industry Dissertation (60 credits)

Learning Outcomes

Intended learning outcomes
Students who pass this module should be able to:
A1. Undertake independent research, demonstrating critical understanding of current research, theory and practice.
A2. Frame and scope business problems and scope projects.
A3. Effectively use theoretical knowledge or analytical methods to obtain reliable and credible solutions or critical analyses.
A4. Contextualise research findings in a practical setting and identify its limitations.

General: Subject specific
Students who pass this module should be able to:
G1. Demonstrate skills of critical thinking and analysis including the capability to identify assumptions, and evaluate statements in terms of evidence.
G2. Demonstrate effective problem forming, solving, and decision-making using appropriate quantitative/qualitative skills.
G3. Demonstrate ability to write company reports and communicate technical expertise in lay business Terms.
G4. Show development in operating in a professional manner, demonstrating effective planning, preparation skills and within formal and informal modes of communication.

Assessment

The two parts of the assessment are as follows and address the learning outcome/s specified:

Project Performance (20%): This is an assessment of performance on the project with respect to four equally weighted criteria below.
- Initiative: the degree to which the student progresses the project in between meetings with supervisor. (G4)
- Technical ability: the degree to which the student shows independent mastery of technical issues (qualitative/quantitative) during the project. (A4)
- Project focus: the degree to which the student demonstrates engagement with the business problem, the external client organisation and takes responsibility for delivering a solution. (A2, G4)
- Communication and Professionalism: the effectiveness of the formal and informal way the student interacts with the external client organisation and the supervisor. Reliability in meeting deadlines, being fully prepared for meetings, etc. (G4)

The Project Performance is marked by your supervisor with input from the external client organisation, and is second-marked by the Dissertation Modules Convenor to ensure the guidelines have been adhered to.

Dissertation (80%): based on the external client-based project; this should include an executive summary, and clear guidelines to the client on which parts of the dissertation are most important to read. **10,000-12,000 Words typically – absolute maximum 15,000.**

For client-projects where groups of students are working on the same problem, the group may write one section/chapter jointly – which would be the most relevant to the clients' needs (normally the recommendations).

The dissertation will be marked according to the following criteria and will be second marked:

- Research questions/scope: Demonstrate critical understanding of current research, theory and practice from the extant literature; Demonstrate ability to identify an appropriate research scope as relevant to the client problem, where appropriate by posing research questions, hypotheses and/or conjectures. (A1, A2, G1, G2)

- Research answers: Demonstrate the ability to undertake independent research to answer questions, e.g. prove conjectures and/or acquire evidence to support or reject hypotheses, and where appropriate the selection of suitable research models, methods and/or approaches. Provide reliable and credible analyses. (A3, G1, G2)

- Written communication skills: Demonstrate effective written communication skills (including of technical material and/or theoretical constructs where relevant), using a variety of visualisation approaches such as graphs and tables, an executive summary, contents page, and clear recommendations for the client. The dissertation should be suitable for both an academic audience and the client, with the client easily able to pick out key sections. (G3)

- Practical implications: Present practice-oriented interpretation of the analytical solution, clearly reasoned recommendations, implementation risks, and/or reflection. (A4)

Please ensure that the dissertation is understandable by a general academic audience well-versed in Management Science topics.

Additional Remarks

Precise Topic: For some projects the specification will be clear from the start, but for others it may still be vague in parts. In such cases, your academic supervisor will liaise with the client to ensure that the specification is clear and agreed as soon as possible after the start of the project. This will spell out the specifics of the project, including any deliverables.

Project Expenses: If there are any costs incurred, these will need to be agreed with, and reimbursed directly by the client.

Writing for the client: Although the dissertation will be technical in nature, guidance should be provided in the introduction on which parts are the most important and relevant for the client to read – particularly in terms of recommendations. Any part for the client should normally be non-technical in content and style.

The dissertation module (MSCI553) must be passed for an MSc to be awarded. It is not possible to condone even a marginal fail for this module.

MSCI554: Research Dissertation (60 credits)

Learning Outcomes

Intended learning outcomes

Students who pass this module should be able to:

A1. Undertake independent research, demonstrating critical understanding of current research, theory and practice.

A2. Frame and scope business problems and scope research projects

A3. Effectively use theoretical knowledge or analytical methods to obtain reliable and credible solutions or critical analyses.

A4. Contextualise research findings in a practical setting and identify its limitations.

General: Subject specific

Students who pass this module should be able to:

G1. Demonstrate skills of critical thinking and analysis, including the capability to identify assumptions and evaluate statements in terms of evidence.

G2. Demonstrate the ability to model problems effectively, and provide advice for decision makers, using appropriate analytical skills.

G3. Write a substantive research dissertation in the field of Business Analytics/Logistics and Supply Chain Management.

G4. Show development in operating in a professional manner, demonstrating effective planning, preparation skills and within formal and informal modes of communication.

Assessment

The two parts of the assessment are as follows and address the learning outcome/s specified:

Project Performance (20%): This is an assessment of performance on the project with respect to four equally weighted criteria:

- Initiative: the degree to which the student progresses the project in between meetings with supervisor. (G4)
- Technical ability: the degree to which the student shows independent mastery of technical issues during the project. (A4)
- Research focus: the degree to which the student demonstrates engagement with the research area and takes ownership of the project. (A2, G4)
- Communication and Professionalism: the effectiveness of the formal and informal way the student interacts with the supervisor. Reliability in meeting deadlines, being fully prepared for meetings, etc. (G4)

The Project Performance is marked by your supervisor, and second-marked by the Dissertation Modules Convenor to ensure the guidelines have been adhered to.

Dissertation (80%): An in-depth academic dissertation on a topical area of their degree programme linked to real world business problems. An abstract should be included. **10,000-12,000 words typically, 15,000 words absolute maximum.**

The dissertation will be marked (and second-marked) according to the following criteria:

- Demonstrate critical understanding of current research, theory and practice from the extant literature; Demonstrate ability to identify an appropriate research scope, where appropriate, by posing research questions, hypotheses and/or conjectures. (A1, A2, G1, G2)

- Research answers: Demonstrate the ability to undertake independent research to answer questions (e.g., prove conjectures and/or acquire evidence to support or reject hypotheses), and where appropriate, to select suitable research models, methods and/or approaches. Provide reliable and credible analyses. (A3, G1, G2)

- Written communication skills: Demonstrate effective written communication skills (including of technical material and/or theoretical constructs where relevant), using a variety of visualisation approaches such as graphs and tables, an appropriate abstract, contents page and conclusions. (G3)

- Practical implications: Present practice-oriented interpretation of the analytical solution, and/or managerial implications of the research findings/answers. (A4)

Please ensure that the dissertation is understandable by a general academic audience well-versed in Management Science topics.

Additional Remark

The supervisor will have already specified the research topic in the project presentation. The supervisor may also have a specific solution approach in mind already, before the start of the project. Students may be allowed to choose a slightly different topic and/or approach, but only with the agreement of the supervisor.

The dissertation module (MSCI554) <u>must be passed</u> for an MSc to be awarded. It is not possible to condone even a marginal fail for this module.

MSCI553/554 Dissertation Layout

It is recommended you use primarily 12-point printing at 1.5 spacing. Working papers, computer printouts, etc., which are referred to in the text should be submitted separately, in readable form, to supervisors, so that the examiners may see them if they wish. They should not normally be included in the dissertation. The word count does not include any of the parts at the beginning (title, executive summary or abstract, contents page) or at the end (references, appendices). It does also not include diagrams, tables, graphs etc.

There should be a cover page for the whole project which should include the following:
- Module number (MSCI553/554) followed by Project/Dissertation title (this title will appear on your transcript)
- Student name
- Student ID
- Programme
- Supervisor name
- Date
- This statement "This dissertation is submitted to the Department of Management Science and the Board of Examiners of Lancaster University in partial fulfilment of the requirements for the degree of Master of Science in (*insert programme*). I hereby attest that this dissertation is entirely my own work and that all sources of information have been fully referenced."

If your work is confidential, please put "Confidential" on the cover page.

Project Summary
A one-page project summary is recommended for any student who would like to be considered for a prize. Please use the template provided on Moodle. Please use the LUMS logo and where possible, please include graphics/company logos if applicable.

Submission requirements

Electronic copy to Moodle only

- Dissertation – Word is preferred but if this is not possible, please convert to a PDF and ensure none of the text is converted to an image.

- A title page for your dissertation (this title will appear on your transcript) – if your work is confidential, please state this on the title page. *If you do not, your work will go into the dissertation library for future students to borrow.*

- Please also include any models, appendices or other information your supervisor has asked you to submit.

- Please use short filenames such as "Surname_Dissertation"

The deadline is **Friday 6th September 2024 – 12:00 noon**. Any late submissions will be subject to the usual late penalties, i.e. -10% for up to three days late and 0% awarded after this.

The dissertation module (MSCI553/554) must be passed for an MSc to be awarded. It is not possible to condone even a marginal fail for this module.