MA425 Project in Operations Research & Analytics

Notes for Project Clients

Quick Summary

What an MA425 project is: A substantial, consultancy-style summer project undertaken by a student on LSE's MSc Operations Research & Analytics. The project addresses an agreed organisational question or task.

What it is not: It is not an internship, although some student-found projects may form the first part of an internship or future role. The project itself is governed by agreed Terms of Reference and LSE's academic requirements.

Project development and timing: Projects are normally identified and developed between September and January, reviewed and released to students from February, and allocated between March and May. Students work full-time on their projects from mid-June until the end of August. Core analysis should normally be substantially complete by mid-August, allowing time to finalise the report and other outputs.

Allocation: Students apply with a CV and short project application. LSE may screen applications before clients review candidates, interview where appropriate, and decide whether to make an offer. A client is not obliged to select a student if no applicant appears suitable. The student who originates an approved student-found project has first choice of taking it forward.

Main outputs: A project report with a 25-page limit, excluding the bibliography, appendices and other permitted exclusions. Clients will normally also receive a final presentation and any agreed supporting code, models, tools or materials developed during the project.

Client role: Nominate a client project manager who provides access to relevant data, people, systems and resources; gives regular guidance and feedback; reviews the draft report for factual accuracy and confidentiality; and alerts the LSE supervisor promptly if concerns arise.

Working arrangements: Projects may be conducted on-site, remotely or through a mixture of the two. Projects and clients may be based outside the United Kingdom where suitable supervision, communication, data access and practical arrangements can be established.

Agreement, confidentiality and costs: The client, student and LSE enter into formal agreements covering the project scope, responsibilities, confidentiality and intellectual property. There is no participation fee, but clients reimburse agreed reasonable project-related expenses incurred by the student.

Welcome to MA425

MA425 is a consultancy project course. It is the final element of the MSc Operations Research & Analytics at the London School of Economics and Political Science (LSE). Each year, students undertake consultancy-style projects for organisations across the public, private and voluntary sectors, delivering substantial analytical work designed to support real organisational decisions.

Projects provide students with an opportunity to apply the skills developed during their degree to a substantial practical problem, while organisations benefit from an independent analytical perspective and dedicated project resource.

Projects vary widely in topic and methodology. Some focus on forecasting, optimisation, simulation, data science, machine learning or artificial intelligence. Others explore data quality, measurement frameworks, decision support, process evaluation and improvement, human factors, or “soft OR”. Successful projects begin with an important organisational question rather than a particular analytical technique. The general timeline is described later in this note; timelines for the current year will be shared with our client list and published on the MA425 website.

Who Are the Students?

MA425 typically runs with 30-40 students. The cohort is highly international and interdisciplinary, bringing diverse perspectives, technical expertise and prior professional experience. Mathematical ability is a prerequisite, but students do not all hold mathematics degrees. Their backgrounds often include coding, programming, finance and engineering.

Students on the MSc Operations Research & Analytics programme complete core courses in optimisation, stochastic modelling and simulation, and machine learning. They choose further options from mathematics and statistics, including advanced topics in analytics and AI, as well as finance and management. They also develop consultancy, communication and project management skills as part of their studies.

Further information about the MSc Operations Research & Analytics degree and its syllabus is available through the LSE website.

Ways to Participate

Organisation-Proposed Projects

Most MA425 projects are proposed directly by organisations.

In this model, the organisation identifies a potential project and works with the MA425 team to develop a proposal. When approved, the project is allocated to a student (see below). Organisations may propose several projects.

Projects may be conducted on-site, remotely, or through a mixture of the two. The most appropriate arrangement will depend on the organisation and the nature of the project and should be discussed during project development and set-up.

Student-Found Projects

Some MA425 projects originate through students' own professional networks, previous employment, voluntary work, or independent approaches to potential clients. Some students also carry out projects as the first part of an internship or full-time role with an organisation they will be joining after they complete the MSc.

Student-found projects are welcomed and can provide excellent opportunities for both students and organisations. Such projects undergo the same proposal review and approval process as organisation-proposed ones, but the allocation is different in that the student who originated it has first choice of taking it forward.

UK and International Projects

MA425 projects are not limited to organisations based in the United Kingdom. Clients and projects may be based elsewhere, provided that suitable communication, supervision, data access and other practical arrangements can be established.

How Projects Are Allocated

Approved organisation-proposed projects are normally released to students in a small number of waves. Students review the project specifications and apply for projects that interest them, providing a CV and a short project application. The MA425 team may screen applications before sending suitable applications and CVs to the client.

The client reviews the applications, may interview candidates, and decides whether and to whom to make an offer. The client may take account of the student's interests, experience, and relevant technical or professional skills. There is no obligation to select a student if the client does not consider any applicant suitable.

A student who receives an offer has a short period in which to accept or decline it. If they decline, the client may make an offer to another student. If accepted, the allocation is confirmed and the client, student and MA425 team move on to project set-up, including the project agreement and the Scope & Data Review Meeting.

A student-found project is first offered to the student who originated it. If they choose not to pursue the project, the project is offered to other students in the usual way, if the client is amenable to this.

Why Organisations Participate

Organisations participate in MA425 for many reasons.

Some use MA425 to investigate questions that are important to the organisation but for which internal resources are limited. Others wish to explore new analytical approaches, assess the feasibility of future initiatives, or gain an independent perspective on a complex problem.

Projects can deliver practical outputs, including:

- evidence to support decision-making;
- exploratory analyses and feasibility studies;
- prototype tools or models;

- measurement and monitoring frameworks;
- process-improvement recommendations;
- decision-support resources; and
- foundations for future analytical work.

Many organisations also value the opportunity for staff to manage and support a student consultancy project, developing their own project-management and analytical-engagement skills.

What Makes a Good MA425 Project?

The strongest MA425 projects are built around a clear organisational need and a realistic scope. When considering a project idea, it is helpful to think about the following questions.

What decision or process does the work support?

The project should address a genuine organisational question, challenge or opportunity. A project is usually easier to define and manage when there is a clear understanding of how its findings or outputs may be used.

What would a useful outcome look like?

A successful project should deliver value to the organisation, even if the final outcome differs from the original expectation. Useful outcomes may include software, recommendations, models, performance measures, analytical tools, evaluation frameworks, or evidence that helps inform future decisions.

Organisations sometimes use projects to explore new approaches, assess feasibility, test assumptions or investigate whether a particular analytical technique is appropriate for their problem. In some cases, a valuable outcome may be evidence that a proposed approach is not currently feasible because of data limitations, operational constraints or other practical considerations. Understanding these limitations can be just as useful to an organisation as identifying a promising solution.

LSE assesses students on the quality of their work, analysis, judgement, and project execution rather than whether the project reaches a particular conclusion or recommends a specific course of action. Clients should therefore feel comfortable proposing exploratory projects where the outcome is genuinely uncertain.

What information is likely to be available?

Students typically require access to relevant information, data and organisational context.

Perfect data is not required. However, projects are generally more successful when data availability and quality have been considered at an early stage. The project proposal form asks clients to indicate what data is ready, what may need preparation or approval, and any known limitations. Data unavailability is a common project complication, so clients should be especially cautious about relying on information that has not yet been located, prepared or approved for use.

Who will support the student?

Every project should have an identified organisational contact who can act as the 'client project manager'. This individual plays an important role in helping the student understand the organisation, obtain information, and engage with relevant stakeholders (see more below).

LSE also appoints a 'supervisor' who becomes familiar with the project, student and client. The supervisor mentors the student and acts as first marker for the student's assessed submissions. The client, student and supervisor may agree how best to interact during the project, and the supervisor is the client's first point of contact if difficulties arise.

Can the scope or approach change?

The MA425 team seeks to establish an appropriate scope and a realistic understanding of available data before project work begins. The proposal-development process and Scope & Data Review Meeting are intended to identify potential difficulties as early as possible.

However, projects sometimes evolve as students learn more about organisational requirements, stakeholder needs, data quality and technical constraints. This is a normal part of consultancy work and does not necessarily indicate a problem with the project.

The strongest proposals identify a useful problem and a desirable outcome rather than prescribing a single analytical method. A project should remain worthwhile even if the initial scope or preferred approach requires reasonable adjustment.

The Client Project Manager Role

Each project should have a designated client project manager. The client project manager acts as the main point of contact between the organisation and the student throughout the project. Typical responsibilities include:

- helping the student understand the organisational context;
- agreeing objectives, priorities and expected outputs;
- introducing relevant stakeholders and subject-matter experts;
- facilitating access to information, data, systems and other resources;
- identifying confidentiality, information-security, or access requirements;
- participating in regular progress discussions;
- answering questions and providing guidance;
- reviewing draft outputs where appropriate;
- raising any concerns promptly with the student and LSE supervisor; and
- attending the final presentation and any other key project meetings.

The expected time commitment is normally modest, but regular engagement is important. Experience shows that projects are most successful when students have access to timely guidance and feedback throughout the project period.

Clients do not determine students' academic marks. However, their factual comments on the work and the professionalism with which it has been carried out may provide useful context for the markers.

Project Outputs

The principal output is a project report submitted to LSE for assessment. It has a 25-page limit, excluding the bibliography, appendices and other permitted exclusions. Clients will normally also receive a final presentation and supporting code, models, tools or other materials developed during the project. The precise outputs, formats and arrangements for transferring them should be agreed during project set-up and reviewed as the work develops.

The client project manager is normally invited to review a draft of the report to identify factual inaccuracies, check that it addresses the organisation's requirements, and ensure that confidential information is handled appropriately. Clients are also invited to comment on the work and the professionalism with which it has been carried out, but academic assessment remains the responsibility of LSE.

The MA425 Timeline

While dates vary slightly from year to year, the MA425 process broadly follows the cycle below.

September to January	Project identification and development
February to March	Proposals reviewed and released to students in waves
March to May	Student applications and project allocation
May	Project set-up and Scope & Data Review Meeting
Mid-June to August	Student project work, typically around 10 weeks, full time
Mid to late August	Completion of analysis, final reports and presentations

Students normally begin substantive project work after their examinations in mid-June and work full-time on the project until the end of August. In practice, the main analysis should be substantially complete before the end of the project to allow time to finalise the report, presentation and supporting materials.

The May Scope & Data Review Meeting provides an opportunity for the student, client and supervisor to review project objectives, confirm support and working arrangements, and discuss data availability before substantial project work begins.

Again, timelines for the current year will be shared with our client list and published on the MA425 website.

Data, Confidentiality and Legal Matters

All parties sign formal agreements covering matters including scope, responsibilities, confidentiality and intellectual property (IP). Some clients supplement this with their standard non-disclosure agreement.

Many MA425 projects involve confidential information or commercially sensitive data, and the MA425 team has experience working with organisations across a wide range of sectors where this is a priority, including finance and defence. Clients should review draft project reports for sensitive information before submission, so that it can be removed or anonymised where necessary. Project reports are never published by LSE. Extracts from past reports are occasionally used for teaching purposes but clients may request that a report is not used in this way, and that its circulation after submission is restricted within the MA425 team.

Additional measures are possible but should first be discussed with the MA425 team. Client names and project topics can also be kept confidential on request.

Delays in data access, legal agreements, system access, ethical approval, security clearance or onboarding can significantly affect the time available for analytical work. Requirements should therefore be identified and arranged before the project begins.

If significant restrictions apply to data, sites or systems, clients should discuss these with the MA425 team during proposal development.

Costs and Expenses

There is no fee for participating in MA425. Clients are expected to reimburse reasonable out-of-pocket expenses incurred by the student specifically for the project, such as agreed travel outside central London.

Next Steps

Organisations interested in participating in MA425 are encouraged to:

- review the information available on the MA425 website;
- discuss potential project ideas with the MA425 team;
- complete a separate project proposal form for each proposed project;
- work with the MA425 team to refine the scope, data assumptions and expectations where necessary; and
- review student applications and, where appropriate, interview candidates and make an offer.

We welcome proposals from organisations of all sizes and sectors, including organisations based outside the United Kingdom. We are happy to discuss project ideas at an early stage.

Contact

Please contact MA425Project@lse.ac.uk with any questions or to discuss potential projects and other opportunities to engage with MA425.