

Master's Project Syllabus

Faculty BMS

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Introduction

Describing the Master's project and the relevant assessment criteria, the Master's Project Syllabus is intended as a guide for graduate students¹ and supervisors to facilitate the project's successful and timely completion.

This syllabus applies to the final project of the Business Administration (BA), European Studies (ES), Industrial Engineering & Management (IEM) and Public Administration (PA) master's programmes. Determined by the supervisors involved, the specific content of a Master's project may vary according to programme track.

The first section of this document addresses the prerequisites and objectives of the Master's project. The second section deals with the structure and organisation of the Master's project, highlighting such aspects as formal procedures, project types/phases, methodology (i.e. formulating a problem statement and drafting a research plan), types of Master's theses, supervision and the possibility of having the costs reimbursed. The third section addresses how the project is graded. The fourth section describes the viva voce and the awarding of the Master's diploma.

1. Objectives and prerequisites

The final assessment unit of the Faculty BMS. The Master's project comprises 25 ECs for the BA, ES, IEM and PA programmes.

Objectives:

In completing the Master's project, the student:

- independently applies theory to the relevant socio-academic field
- independently conducts research/generates a solution to a practical problem
- acquires more in-depth knowledge and applies it to his field of study (i.e. the Master's programme or track the student is completing)
- demonstrates the skills (including verbal and written communication skills) acquired in completing the Master's programme curriculum
- reflects on his own work
- finishes the assignment (i.e. conducts research/generates a design solution) within the time permitted

To this end, the student independently develops and implements a research-oriented and/or design-oriented project. He completes the project within the time permitted; justifies the models, theories, methodology and techniques used, as well as the research/design process as a whole; analyses the work completed; and makes both an oral and written report of his work.

Prerequisites:

According to the Student Charter: '*The student may begin work on the Master's project or a part of it if he has completed at least 20 ECs (for one-year programmes) or 80 ECs (for two-year programmes) of the Master's degree course assessment components.*'

¹ In this syllabus, words indicating one gender include both genders.

2. Structure and organization

2.1 Introduction

The Master's project is scheduled² for the second semester of the final academic year and, consequently, viewed as the final assessment component of the Master's programme. Project supervision is conducted individually and takes the form of supervisory meetings.

In addition to developing and implementing the Master's project and writing the Master's thesis, the student is expected to make a public presentation during which he presents and defends his research results. When a student completes all the degree course subjects and the Master's project, he is eligible to sit the end-of-course examination.

2.2 Registering for the Master's project

The student generally finds a project initiator on his own, but always enrol at the Blackboard site of your study to find the latest assignments. He then approaches the contact of the academic staff from the appropriate Master's programme (look at the Blackboard site under Staff information) or programme track to serve as project supervisor. Once a supervisor has been found, the student may begin work on the Master's project. Provided he satisfies the Master's project prerequisites. When as a student has found an assignment he needs to enter the information within the web application Mobility Online.

2.3 Types of projects

The Master's project may involve the development and implementation of a solution for a theoretical or design problem. Methodological knowledge and skills play a vital role in the Master's project, both in developing and conducting research- and/or design-oriented (empirical) research. Although Master's projects generally address a practical research/design problem and its background, they can also focus specifically on an academic research question.

There are two types of projects:

- 1) *External project*
Commissioned by a national or international company/organisation, this type of Master's project is completed off campus. The project addresses a practical research/design problem and its background. In addition to the university supervisors, external projects involve an external (i.e. company-based) supervisor. All of the supervisors share responsibility for the project's academic quality.
- 2) *Internal project*
Commissioned by the University of Twente, internal projects are completed on campus. The project involves academic research of an issue relevant to the Master's programme/track. It is also

² Scheduling is based on the nominal duration of study. Provided the prerequisites have been satisfied, students can start the Master's project at any time.

possible for the student to suggest a project of his own. For more information, please contact a potential supervisor.

Internal supervisors will assess the appropriateness of the proposed Master's project in terms of:

- academic relevance
- relevance to the student's Master's programme/track
- practical relevance
- academic level
- level and scope of the research/design component
- project scope and the potential to complete the project independently and within the time permitted

Each student completes his own Master's project. A project's scope, however, may be reason to have the project completed by two students. This requires the approval of the Board of Examiners.

The student finds a project initiator on his own.

2.4 Master's project phases

As the majority of Master's projects will be completed off campus, the overview below is geared to external projects.

The Master's project can be divided into four phases:

1. preparation
 - * identifying the practical problem and elaborating a plan of approach, and/or
 - * formulating the research/design problem statement and elaborating a plan of approach
2. implementation (i.e. executing the plan of approach)
3. completion (i.e. writing the Master's thesis)
4. viva voce

A detailed explanation of the phases is presented below.

2.4.1 Preparation

Once the student has found a project initiator and two internal supervisors, an initial meeting will be held with the internal supervisors.

During this meeting, the following topics will be discussed:

- the student's ideas regarding the project and the research/design topic
- the student's project schedule
- the supervisory meeting schedule
- the assessment method

After the first meeting, the student will gather the relevant (empirical) information, complete a literature search and formulate – by means of an iterative process and under the guidance of supervisors – a plan of approach³. Identifying an actual problem demands thorough research and careful thought. During this project phase, the aim is to identify and outline: a) the practical problem, i.e. effecting change to an existing situation and/or b) the research problem, i.e. analysing the existing situation. Although each type of problem requires a different approach, they can be combined if necessary.

³ Appendix 1 includes a template for the plan of approach.

During this phase, the supervisory meetings focus on identifying the key issue of a practical problem and/or on formulating objectives, the problem statement and the research/design questions. During these meetings, the student and the supervisors will work to:

- characterise the problem
- identify the core issue
- determine the best approach
- identify the causes of the problem
- determine what is required to generate a solution
 1. clearly formulated objectives: Will the knowledge generated solve the issue/practical problem?
 2. clearly formulated problem statement: Will the research/design model effectively incorporate the variables and/or interrelations involved? Is the research/design goal feasible?
 3. research/design questions: Do the answers to the research/design questions respond sufficiently to the problem statement?
 4. context and ability to research the problem statement

Addressing the issues identified above should give the student a better understanding of the research problem. In the plan of approach, the student lays down how he plans to implement the research/design project to address the practical problem.

The plan of approach generally includes an outline of:

- the practical situation
- the possible causes of the problem
- the methodology
- the research/design problem
 1. the research/design approach; explaining how the necessary information/data will be obtained
 2. the methods and techniques; explaining how the research/design information/data will be obtained, analysed and processed
- the project schedule (i.e. a timeline of the research/design project, taking into account the development of (alternative) solutions, implementation and evaluation in so far as applicable)

During the supervisory meetings, the plan of approach will be assessed using the following criteria:

- the quality of the proposed plan of approach (as indicated above)
- the feasibility of the project schedule

Finally, the student establishes personal learning objectives.

The Master's thesis must address the degree to which these learning objectives are achieved.

Although the supervisors are closely involved in the student's project preparations by means of supervisory meetings, the student is responsible for managing the process, including its form and content.

The supervisors sign the proposed research/design problem and/or the formulated research problem statement, and the plan of approach after approval. Once all of the relevant conditions have been satisfied, the student may begin implementing the plan of approach.

2.4.2 Implementation

The plan of approach guides the implementation and completion of the Master's project. The student operationalises the key research/design concepts and the manner in which these will be measured. Students are recommended to make note of all relevant information throughout the implementation phase. This includes:

- work/activities completed
- sources of information consulted

- problems/difficulties experienced
- decisions taken
- project schedule adjustments
- explanation/justification of decisions taken and project schedule adjustments
- thoughts with regard to the learning objectives

The student can refer to the recorded information during supervisory meetings and in writing the thesis.

During this phase, the regularly scheduled supervisory meetings will focus on:

- project progress
- thoughts with regard to the work/activities completed
- quality of the work/activities completed
- Master's project progress
- feasibility of completing the Master's project

2.4.3 Completion

After implementing the plan of approach, the student focuses on the information/data obtained and the conclusions that can be drawn from this evidence. Depending on the type of problem researched, alternatives may be formulated, discussed and possibly implemented, or a recommendation to do so may be put forward. Finally, the student writes the Master's thesis and submits it to the supervisors. The student schedules a supervisory meeting. The internal supervisors assess the thesis, taking into consideration any recommendations from the external supervisor.

Once the thesis has been approved, the student may register for the colloquium with the Educational Affairs Office.

2.4.4 Colloquium

The student may sit the colloquium (i.e. end-of-course examination) once he has successfully completed all the degree course subjects⁴, has obtained approval of the thesis. The student registers for the colloquium at the Educational Affairs Office, which ascertains whether all colloquium prerequisites have been satisfied.

During the colloquium, the student presents his Master's project and – by responding to questions posed by the supervisors or others in the audience – defends the project results. The colloquium lasts about one hour. Family and friends are welcome to attend.

2.5 Types of reports

The student reports on the Master's project by means of a thesis.

Thesis⁵ guidelines:

- *individual research*
 - 40 pages (16,000 words)
- *group (i.e. two students) research*
 - 60 pages (24,000 words)
 - maximum overlap – 20 pages (8,000 words)

⁴ It is the student's responsibility to complete all Master's subjects on time.

⁵ In this context, the term 'thesis' is understood to mean the substantive sections of this document, excluding the abstract, table of contents, appendices, etc.

2.6 Supervision

Internal supervision

Two internal supervisors, preferably from different subject groups, monitor the progress of the Master's project. The lead supervisor is a member of the group of the Master's programme the student is completing. Internal supervisors are members of the academic staff and are experts in the field addressed by the Master's project. The students of the double degree master ES, need to find one supervisor from Twente and one from Muenster.

The student discusses all aspects of the project with the supervisors and takes the lead in making agreements with regard to such issues as the division of supervisory tasks, frequency of meetings and meeting format.

If, after several intensive supervisory sessions, the supervisors feel the student has failed to sufficiently prepare and implement the project, whether in terms of substance or process, the supervisors may – after consulting with the external supervisor – discontinue providing assistance for the project. In some instances, the student will start the Master's project anew, if necessary, with new supervisors.

External supervision

When completing an external Master's project, it is essential that the student has a point of contact within the project initiator's organisation (i.e. an external supervisor). This supervisor must have sufficient knowledge and experience to supervise the project. Although the external supervisor is involved in the project's implementation, the internal supervisors monitor and grade the Master's project.

The external supervisor serves as:

- a 'sparring partner' with regard to project content
- a source of information with regard to project implementation
- an organisational gatekeeper in so far as relevant to project implementation
- a process supervisor during project implementation
- an adviser with regard to the assessment of the project results, the thesis and the student's performance

2.7 Cost reimbursement

The faculty will reimburse none of the project costs incurred by the student. The faculty assumes that all students have sufficient insurance. The University of Twente has concluded a collective free (international) travel insurance. For more information about this or to arrange coverage under this policy, please contact the Financial and Economic Affairs Office. Students can also apply online (www.utwente.nl/diensten/fez/verzekeringen/reisvers.shtml).

3. Grading

The internal supervisors base their assessment of the Master's project primarily on the thesis submitted. The student must earn at least a 6.0 for the thesis.

The final mark for the Master's project will be expressed as a number. This is an individual assessment. Only internal supervisors are authorised to grade the project. External supervisors will be able to make recommendations as to the mark to be awarded.

The final mark will be based on:

- content and form of the Master's thesis
- contribution to the practical, research design problem
- contribution to the relevant academic field
- the student's performance
- oral presentation of the project results

The thesis, contribution to the research/design problem and contribution to the relevant academic field weigh more heavily than the student's performance and the oral presentation. If the two internal supervisors cannot reach an agreement as to the mark to be awarded, the average of the mark will be taken, in which the lead supervisor's mark will weigh more heavily in the event of rounding off.

4. Awarding of the Master's diploma

After the student sits the colloquium, the supervisors grade the Master's project. A Master's diploma and a provisional list of marks (i.e. without the final mark for the Master's project) will also be presented. After the colloquium a supplement and the definitive list of marks (including the final mark for the Master's project) will be sent to the student at home.

5. International Master's project

Interested students should bear in mind that completing an international Master's project takes **more time** to complete than a project in the Netherlands.

We cannot stress enough that – in his role as project owner – the student is in charge of the project's implementation. The student must realise the importance of proper communication with his supervisors to guarantee the quality of the substantive process.

In addition to the guidelines for Master's projects completed in the Netherlands, the following apply to international projects:

- Preparations should begin at least four months prior to leaving the country. The student finds a project initiator either on his own or with the assistance of a faculty professor.
- As an international Master's project entails additional preparations, the student must complete the relevant Master's project preparation subject prior to leaving the country.
- The problem statement must be approved by both internal supervisors prior to leaving the country.
- A global research plan must be approved by the supervisor prior to leaving the country.
- The thesis for an international Master's project will include an abstract in English.

Even though the preparations for an international project require more time on the part of the lead supervisor, only a limited amount of additional time will be granted. For additional information about preparing for an international Master's project and living abroad, please refer to the information about studying abroad (*Studying abroad*) available on the special Blackboard site.

Appendix 1: Template for the Master's Project Research Plan

GENERAL INFORMATION [max. ½ A4]

Name/names:

Student number/numbers:

Telephone number/numbers:

Supervisory committee:

Internal supervisors:

Telephone number:

External supervisor:

Telephone number:

PROJECT INITIATOR

Project initiator and external supervisor contact information.

Project title [max. 15 words]

A Working title (in Dutch):

B Working title (in English):

MASTER'S PROJECT DESCRIPTION

1. practical problem and its background
2. possible causes of the problem
3. empirical framework
4. methodology
5. research/design problem
 - A. objective (and, if applicable, relationship to the practical problem)
 - B. problem statement
 - C. theoretical framework
 - E. question formulation
 - conceptual model

PLAN OF APPROACH [max. ½ A4]

- A What activities does the research involve?
- B What methodology will you use for the research/design project?
- C What data collection techniques are you planning to use?
- D If the introduction/implementation of a design/solution is a component of your project, what strategy will you use? Please explain.

ADDITIONAL INFORMATION

Please include information regarding the project initiator, the supervisor (lecturer), website offering relevant general information, etc.

PERSONAL LEARNING OBJECTIVES (*minimum of three*)

THOUGHTS WITH REGARD TO THE PERSONAL LEARNING OBJECTIVES

Please incorporate in the Master's thesis.

COMMENTS

Appendix 2: Master's Project Procedures

This appendix describes the formalities involved in registering project progress, assessing the draft thesis and sitting the viva voce.

1. Master's project procedures

The Master's project comprises 25 EC. The credits will be allocated once the thesis has been graded and the student has sat the viva voce (colloquium).

Once you have found a project topic (and project initiator), the graduation committee has been formed and the graduation committee has accepted the project proposal, the supervisors formally register the project by completing the 'Master's Project Form'. Using the information provided, the Educational Affairs Office determines whether the student has satisfied all the prerequisites. If so, it will send the student and the supervisors a statement of agreement to begin the project. At this point, the student is officially in phase 1 of the Master's project.

As manager of the Master's project, the student is responsible for drafting an appropriate project schedule and successfully completing the four project phases within the time permitted. When a student completes a project phase, the supervisors and student complete, date and sign the relevant section of the Master's Project Form. The student will keep the original copy of the form, submitting a copy of it to the supervisors after completing each project phase.

Phase 1: This phase is completed once the supervisors approve the problem statement and the plan of approach.
If, during Phase 1, the student or the supervisors observe any serious quality or progress impediments, which for whatever reason could jeopardise completion of the project, the student and/or supervisors may call on the Board of Examiners to assess the progress (or lack thereof), taking into consideration the interests of those involved (i.e. the student and the project initiator).

Phase 2: The student implements the plan of approach. This phase has two assessment milestones: 1) halfway through the implementation phase, i.e. project quality and progress; and 2) after completing the implementation of the plan of approach.
If, during Phase 2, the student or the supervisors observe any serious quality or progress impediments, which for whatever reason could jeopardise completion of the project, the student and/or supervisors may call on the Board of Examiners to assess the progress (or lack thereof), taking into consideration the interests of those involved (i.e. the student and the project initiator).

Phase 3: This phase is completed once the supervisors approve the draft thesis.

Phase 4: This phase is completed once the student sits the viva voce.

2. Procedure for completing and obtaining approval of the thesis

Once the lead supervisor has approved the draft thesis, the student may submit the thesis to the entire supervisory committee for provisional assessment. This must be done at least **10 working days** prior to the assessment meeting.

During the assessment meeting, the supervisory committee awards a provisional pass/fail mark for the thesis, indicating:

- the changes required to be awarded a pass mark; if the thesis has been awarded a fail mark

- the changes required to increase the thesis' quality; if the thesis has been awarded a pass mark

If the draft is approved, the student can begin preparing the definitive version of the Master's thesis. Ultimately ONE WEEK (which means 5 working days) before the colloquium you have to hand in paper copies of the final report to your internal supervisors. You also have to upload a digital version of your thesis at the UT-Library: <http://essay.utwente.nl/upload.html>

3. Colloquium

If the thesis receives a pass mark and all subjects of the relevant Master's programme/track have been successfully completed, the student may sit the colloquium. In consultation with the graduation committee and the Educational Affairs Office, the student schedules the date, time and location of the colloquium.

The colloquium may take place **starting 15 working days** after the assessment meeting.

The colloquium should last **no longer than one hour** and consists of the following sections:

- presentation of the project and project results (20 minutes)
- Q&A from the committee (20 minutes)
- Q&A from the rest of the audience (20 minutes)