Objective

In addition to the Graduation Research, all Earth Sciences MSc students have to perform a second individual project. This second project can be in the form of a Guided Research or an Internship. A Guided Research project can be performed externally at another academic or non-academic institution. A Guided Research is similar to a Graduation Research (MSc project) but, in comparison to the Graduation Research, the expectations regarding the autonomy and independence of the student in a Guided Research project are lower. This applies particularly to developing the research objectives and methodology. Furthermore, an oral presentation of the results is not obligatory and not part of the assessment.

Research projects carried out in the context of summer schools, seminars, or other courses do not count as Guided Research project. Table 1 provides a comparison between MSc Research, Guided Research and Internship.

<table>
<thead>
<tr>
<th></th>
<th>MSc Research GEO4-1520</th>
<th>Guided Research GEO4-1521</th>
<th>Internship GEO4-1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory</td>
<td>Yes, for all programmes and profiles</td>
<td>Performing at least one (all programmes) compulsory for M-profile and EC-profile</td>
<td></td>
</tr>
<tr>
<td>Possible number of ECTS credits</td>
<td>30, 37.5, 45</td>
<td>7.5, 15, 22.5, 30</td>
<td>15 – 30</td>
</tr>
<tr>
<td>Type of host institution</td>
<td>Academic (exceptional non-academic)</td>
<td>Academic (exceptional non-academic)</td>
<td>Non-academic</td>
</tr>
<tr>
<td>Possibility to be performed at external institution</td>
<td>Yes</td>
<td>Yes</td>
<td>Exclusively at external institution</td>
</tr>
<tr>
<td>Compulsory report, individually written in English</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>Compulsory</td>
<td>Possible (not part of evaluation)</td>
<td>Possible (not part of evaluation)</td>
</tr>
</tbody>
</table>
**Pre-requisites**

To start with an Internship or a Guided Research a student has to obtain at least 30 ECTS credits of theoretical MSc courses (GEO4-...) from the relevant programme. An Internship can be performed before or after the Graduation Research.

**Procedure and content**

The topic of the Guided Research must fit within, or has strong links with, one of the Earth Sciences programmes. The methodology can be based on literature studies but can also include practical activities such as: fieldwork, lab-work or computer-based simulation/modelling. In any case, a permanent member of the scientific staff of the department of Earth Sciences or Physical Geography is responsible for the supervision and research assessment. Postdocs and PhD-students may be involved in the daily supervision and can act as second supervisors. It is possible that the Guided Research project is performed at another academic or non-academic institution. In this case, a staff member at the host institution will be in charge of the daily supervision who is typically then also the second supervisor. If the project does not involve a second supervisor, a second reviewer has to be assigned to the project. Typically, the second reviewer is only involved in the assessment of the report. However, the second reviewer takes over the responsibilities of the first supervisor if necessary.

As part of the project prepares an individual report written in English. This report is a stand-alone document and it is inadmissible that it text overlaps with any other report/thesis, including those produced by the student himself/herself.

The credit load of a Guided Research can vary between 7.5 and 30 ECTS credits in steps of 7.5 ECTS credits.

**Before starting a Guided Research project**, the project has to be agreed by the first supervisor and approved by the Teaching Institute Earth Sciences. An MSc thesis project agreement form needs to be filled out, signed and send to the Teaching Institute via the online webform at

https://fd21.formdesk.com/universiteitutrecht-geo/earthsciencesguidedresearch

The agreement form contains the following information:

- **Personal data of the MSc student**
- **Title of the project**
  The title should reflect the topic of the study, which must be related to the Earth Sciences master programme.
- **Name of the first supervisor/reviewer**.
- **Name of the second supervisor or reviewer**
  See information about the webform below for the requirements with respect to the supervisors.
- **ECTS credits**
  The study load of project can be 7.5, 15, 22.5, or 30 ECTS credits
- **Project description**
  The project description briefly describes the aims of the project and the approach taken / methods applied to achieve these aims.
- **Project schedule**
  The project schedule includes dates of meetings with the supervisor(s) and should indicate when the supervisor is not accessible for longer time periods. Furthermore, milestones to evaluate the progress of the project, for example, accomplishment of the required data set.
The agreement form must be signed by both the MSc student and the first supervisor.

Furthermore, the following information needs to be provided on the webform:

- **Personal data of the MSc student**
- **MSc programme**
- **Title of the project**
- **Name and affiliation of the first supervisor/reviewer.**
- **Name and affiliation of the second supervisor or reviewer**
- **Number of ECTS credits**
- **Start and end date of the project**
  The time planning must be consistent with the number of ECTS credits; 1 week (40 working hours) corresponds to 1.43 credits. The length of the project has to be planned in a way that public holidays are excluded in the calculation of the total number of working hours.

**Personal data of the MSc student**

- **Title of the project**
  The title should reflect the topic of the study, which must be related to the Earth Sciences master programme.
- **Name of the first supervisor,**
  The first supervisor is a permanent staff member of the department of Earth Sciences or Physical Geography.
- **Name of a second reviewer**
  The second supervisor is another staff member of the department of Earth Sciences or Physical Geography or the daily supervisor at the host institution.
- **Host institution and contact person** if applicable.
- **Number of ECTS credits**
  The study load of project can be 7.5, 15, 22.5, or 30 ECTS credits

**Project description**

The project description briefly describes the aims of the project and the approach taken / methods applied to achieve these aims.

**Time planning of the project**

Start and finish date are indicated in the time planning.

The time planning has to be consistent with the number of ECTS credits; 1 week with 40 working hours corresponds to 1.43 ECTS credits. The length of the project has to be planned in a way that public holidays are excluded in the calculation of the total number of working hours.

On the webform, it should also be indicated whether the research project involves fieldwork. If the project involves fieldwork, a signed Declaration regarding safety and behavior during excursions and fieldwork must be uploaded. The form and the related safety regulations and guidelines can be obtained/downloaded from the Master Earth Sciences Guided Research Blackboard community (https://uu.blackboard.com/). Note that assessing the risks of the planned MSc fieldwork and discussing these risks with the student is the task of the supervisor and part of the safety procedure. Because of insurance purposes and to get a quick overview of the students abroad in emergency situations, it is required and obliged to register your stay abroad in the framework of your studies in Osiris.

The above information is used by the Teaching Institute for registration and monitoring purposes as part of the quality assurance of the Earth Sciences master programmes.
During the Guided Research project, it is expected that the student does all in his/her power to fulfill the commitments agreed on in the MSc agreement and to ensure the progress of the project as planned. A delay in finalizing the MSc project of more than four weeks after the intended end date has to be reported and justified by the student to the Teaching Institute. A request of postponing the date of completion has to be supported by the supervisor and has to include an updated time planning. Delayed completion of the Guided Research project without approval by the supervisor can lead to its rejection.

At the end of the Guided Research project, the first supervisor/examiner grades the MSc thesis project. After sufficient feedback and discussion, the first supervisor/examiner grades the Guided research project. The final assessment is discussed and approved by the second reviewer/examiner. The assessment and grading of the Guided research project will be based on the Guided research Rubric Earth Sciences. The Rubric includes instructions how the grade of the Guided research project is determined and can be found on the Master Earth Sciences Guided research Blackboard community.

If the Guided research project is graded with a sufficient grade, the student sends the final version of the thesis in Word or pdf format to i.beekman.uu@analysis.urkund.com for plagiarism check by the Teaching Institute using URKUND/Ouriginal. Note that the supervisor and student will not receive a report of the plagiarism check, unless plagiarism has been detected.

The rubric must be signed by both reviewers/examiners and the supervisor forwards the signed document to the Student administration via studadm.geo@uu.nl for processing in OSIRIS.

A final mark of 8.5 or higher will only be approved if it is supported by a third reviewer. This third reviewer a) should be an expert in the field of the internship / guided research; b) should not have been involved in any way in the project and/or writing stage; c) may be a university lecturer or professional from outside Utrecht University; d) is expected to provide a short written statement. In this statement the 3rd reviewer declares that the written argumentation in the evaluation form justifies the exceptional high mark of ≥ 8.5, and illustrates that the thesis belongs to the top 15% of the Earth Sciences MSc theses at Utrecht University. It is the task of the main supervisor to request for this statement and to add this to the standard thesis assessment form.

Version: August 2022
Project agreement
Guided Research (GEO4-1521)

Name:
Student number:
e-mail:
telephone (optional):

1st supervisor:

2nd supervisor /reviewer:

If applicable: Host institution and contact person

ECTS Credits:

Title:

Project description
Aims:

Approach/methods:

Schedule

<table>
<thead>
<tr>
<th>Date / Period</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>First version of report submitted</td>
</tr>
<tr>
<td></td>
<td>Final version of report submitted</td>
</tr>
</tbody>
</table>

Signatures

Student 1st Supervisor