

Guidelines on the realization of the “Geoscientific Project“

for the master programs

“Geosciences“, “Applied Geosciences“, and “Marine Geosciences“

Faculty of Geosciences, University of Bremen

Examination Board of the Master Programs

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These guidelines are meant to support the participants, tutors and project partners of the geoscientific project to be realized in the 3rd semester of the Bremen master programs “Geosciences“, “Applied Geosciences“, and “Marine Geosciences“.

Aims of the “Geoscientific Project“

The Geoscientific Project is set out to develop and train practical skills of both professional and general character. It enables the students to realize own conceptions, to acquire additional fields of competence and to establish contacts, which may improve their chances on the job market. The project fosters personal initiative and “learning by doing“, but equally represents a supervised, output-oriented practical project, which is to be documented by a written report and explained by a colloquium talk.

The project may be devised and realized in a fully self-contained approach or be integrated as contribution to an ongoing research or commercial project. The responsibility to initiate one’s project and find a suitable advisor is entirely on the side of the students. Both individual and team projects are possible; in case of field projects, the latter often have logistic and operational advantages. For team projects, a well-defined task-sharing should be established from the beginning. Contribution and performance of every team partner must be demonstrated and evaluated separately at the end.

The geoscientific project should not anticipate the mostly lab-oriented and analytical master thesis project. Not the scientific progress is in the foreground, but a conclusive idea, practical value, wise planning, a telling and interesting documentation of results and - last not least - the broadening of the own horizon.

Try to think and act as an entrepreneur and let yourself guide by your acquired geoscientific knowledge and interest!

Scope of project types

When choosing a project concept, the scope of possible orientations is very broad. Every proposed project idea is individually examined and will be approved, if it fulfills the stated intentions, appears realistic and adequate with regard to its scale and complexity. Possible projects are for example

- a “field or mapping project” at land or sea without major laboratory components using field methods of geology, geophysics or mineralogy, also as contribution to a commercial or research project
- a “media project” like an extensive popular science article, an internet production, a video movie, a radio emission, an exhibit or a scholar teaching unit on a geoscientific topic
- a “technical project” for development, improvement and testing of practical geoscientific gear or instrumentation
- an “external project” at a company, organization or authority, which is geoscientifically demanding and has presentable aims, operations and results
- an “international project” comprising geoscientific activities abroad and cooperations with foreign partners

Time frame

The temporal frame of each project exercise should not greatly exceed or fall below 10-12 weeks (400-450 hours / 15 CP) for reasons of comparability and recognition. The practical part of the project can be realized in one stretch or in stages before or during the 3rd semester.

The project period typically commences with a 1-2 weeks’ phase of planning, preparation and literature research, followed by 4-5 weeks of field or practical project work (shipboard work mostly limited to 2-4 weeks) and 4-5 weeks of data processing and documentation in a written project report. The project is finalized by an oral presentation in one of the quarterly report colloquia in the presence of all fellow students and some project tutors and evaluated by a jury.

Supervision and application

The supervision, acceptance and evaluation of each project are at the responsibility of a thematically competent lecturer of the department. For large or interdisciplinary projects, further advisors may be called in. The examination board or its chairperson can accept external advisors as referees, if these have been engaged with the project and are qualified examiners.

A project exercise is registered by submitting a special form (download from website) at the Examination Office (Ms. Eke) as soon as a topic and tutor have been identified and agreement on the proceedings has been reached. Theme, location and schedule of the project are specified and acknowledged by the tutor. The head coordinator (Prof. Dr. Tilo von Dobeneck) conducts yearly information meetings, advises participants individually and acknowledges all submitted project concepts.

Report colloquia are scheduled repeatedly in every year, typically in December, in February, in May, and in September. Up-to-date information on dates and registrations for project presentation are exchanged via Stud.IP. An early personal registration in this platform is obligatory and will persist there until full completion of the project. The participation in audience of all colloquia of the own study cohort is expected.

Support

The department's research groups grant technical support to the projects within the limits of availability and feasibility. Travel costs are generally at the expense of the students unless they can be covered by available research funds or by the cooperation partners. Because of high costs, ship time can only be granted in conjunction with scientific or commercial operations; this requires early arrangements some 4-8 months in advance. For all other project types we recommend to get in contact with tutors and project partners during the 2nd semester.

External projects at companies, authorities or organizations can be arranged as advanced professional practical training. Before signing a contract, students must ensure that they will have insight into the entire project chain and that they may freely report on their own obtained results.

Project report

Aims, proceedings and results of each project are documented in a project report, which must be submitted to the tutor if possible before the colloquium presentation. The character and suitable length of the report depends on the project type and should be negotiated with the tutor in case of doubt. The report should give a clear and compact account of realization steps and their results. It should basically encompass the following elements:

1. Title: Project denomination, author, period, tutor (1 page)
2. Table of contents (1 page)
3. Project character, theme, aims, integration (ca. 1-2 pages)
4. Results of the literature research (ca. 1-2 pages)
5. Instruments and methods, organization (ca. 2-3 pages)
6. Chronological project narrative (ca. 2 pages)
7. Results (ca. 8-10 pages, short explanations based on maps and graphics)
8. Summary and outlook (ca. 1 page)
9. Critical self-evaluation of the project (ca. 1-2 pages)
10. References (ca. 1-2 pages)
11. Appendix (original documents, tables, figures, media etc.)

The report or individual contribution to a team report should not greatly exceed 20 pages (DIN A4, 11pt or 12 pt font, 1.5 spaced, not counting the appendix).

Final presentation

Within one of the final colloquia, which are obligatory for all participants, the project and the related findings and experiences are presented in an intelligible and appealing form. A timeframe of 20 minutes is available for each talk with discussion.

Evaluation

The project grade is composed in equal shares by the tutor's grade for the report and the averaged grades of a jury (consisting of all tutors present at the colloquium) for the presentation. The project concept, realization and analysis will be evaluated as well as the quality of the written text, graphics and presentation.