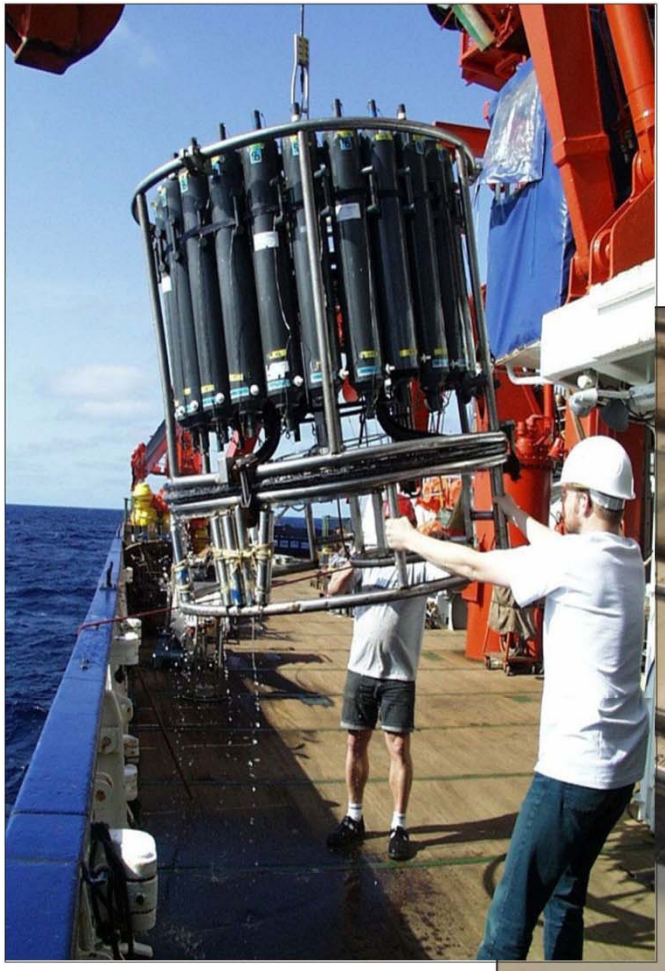
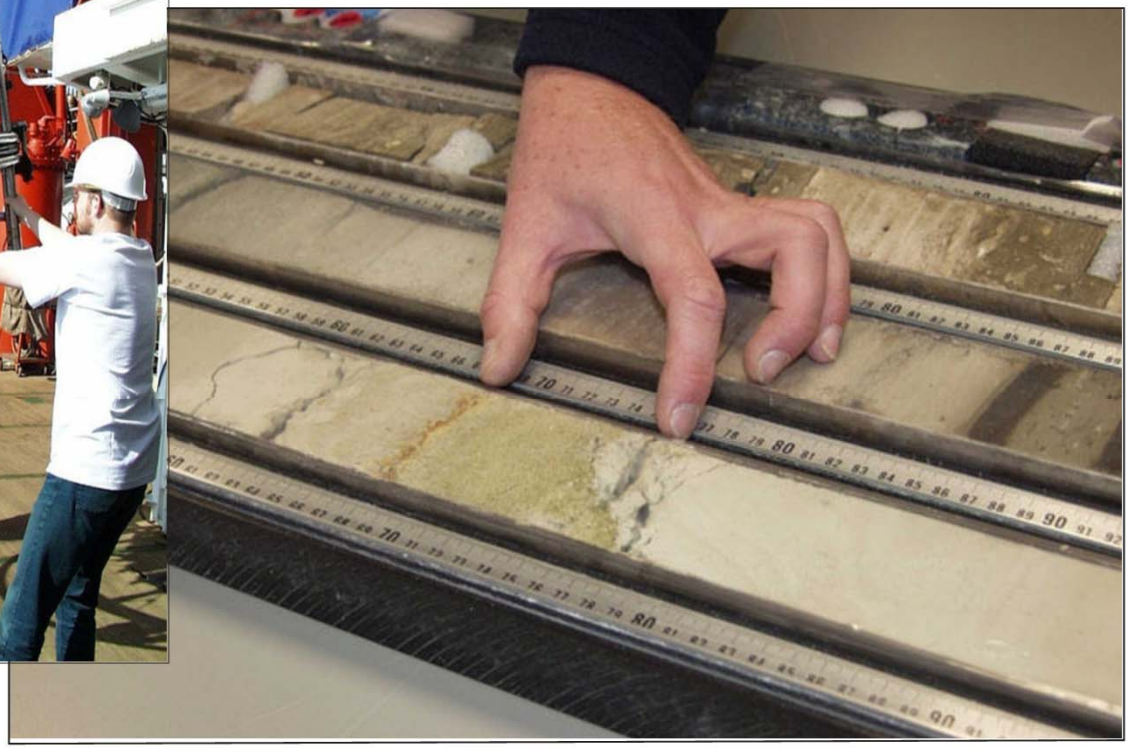
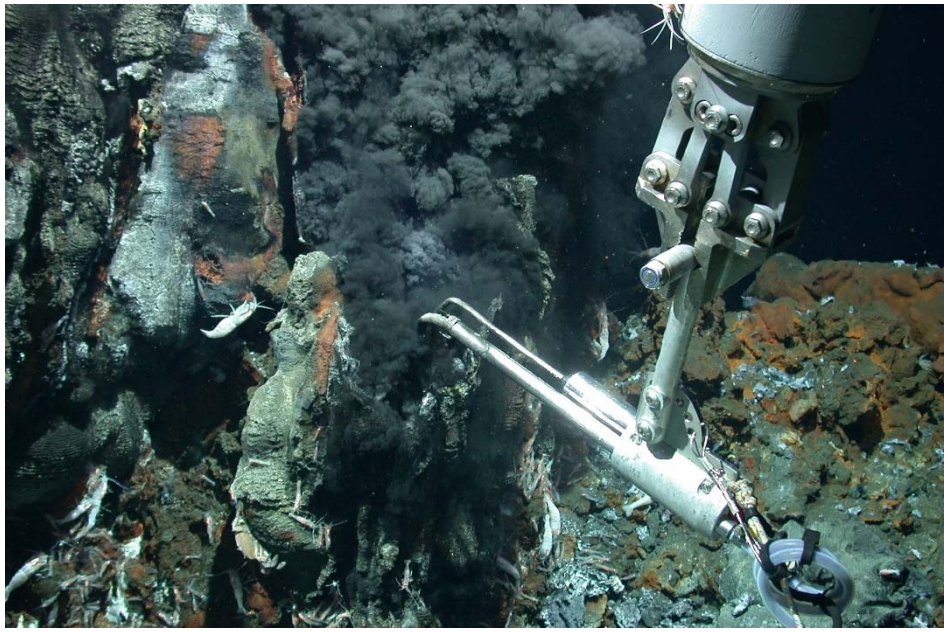
# Marine Geosciences in Bremen





www.geo.uni-bremen.de



postgraduate program

# Master of Science

# Marine Geosciences

## Introduction

January – 19, 2015,

University of Bremen

## In brief

Degree: Master of Science (M.Sc.) Marine Geosciences

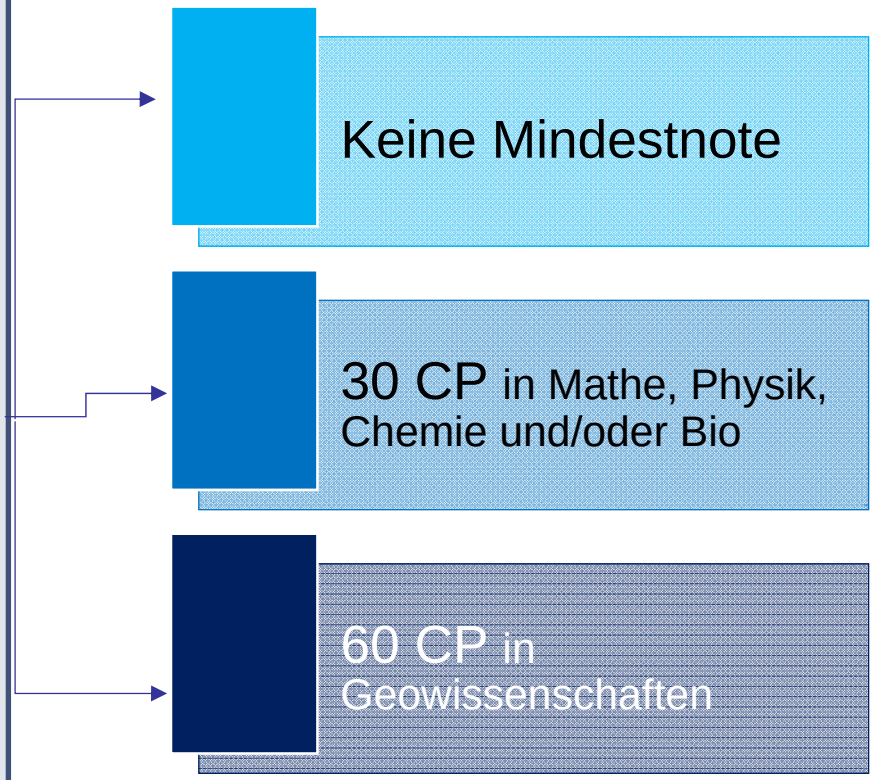
Duration: 2 years

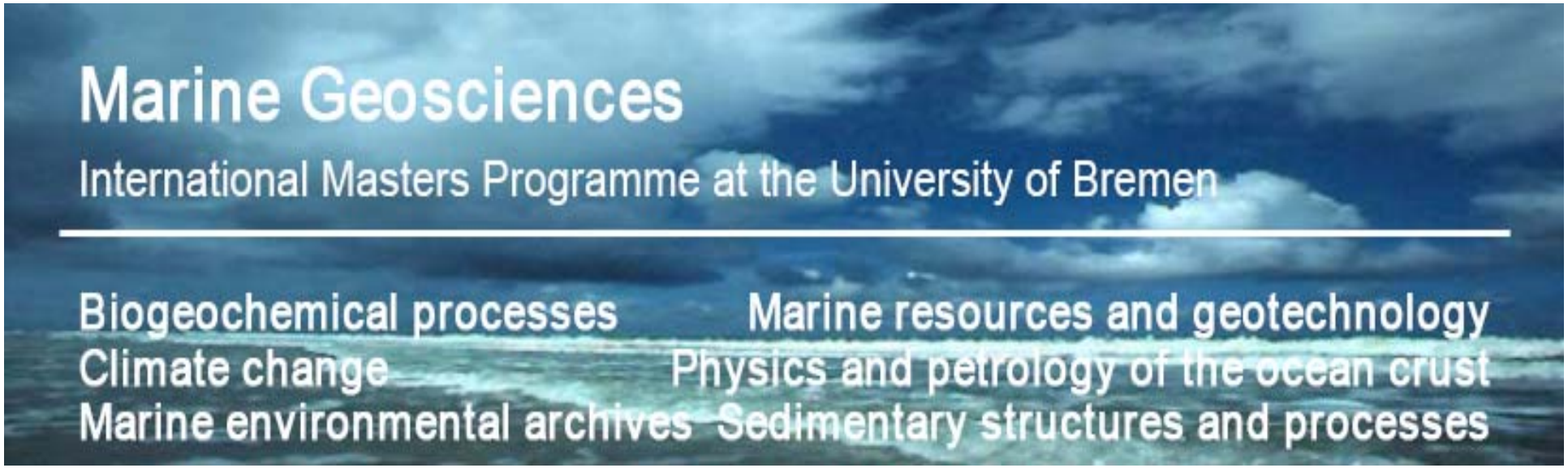
Admission requirements:
B.Sc. in a geoscientific field
English proficiency C1

Teaching language: English

Application deadline: April 30

Programme start: October






## Programme structure

| | | | | |
|---|---|---|---|---|
| Core Subject A | Core Subject B | Core Subject C | Conf. | 1rst year |
| Core S. A | Core S. B | Core S. C | Marine Field and Lab Practice | |
| Geoscientific Project | | Research Seminar | | 2nd year |
| Master Thesis | | | | |

# Study plan of the first year

**M.Sc. Marine Geosciences - Study plan**

**1st year (60 CP)**

**Winter semester**

| Core Subject A (9 CP) selected module of C1 - C6 | Core Subject B (9 CP) selected module of C1 - C6 | Core Subject C (9 CP) selected module of C1 - C6 | Master Conference (3 CP) |
|---|---|---|---|
| C1 Climate Change I: Fundamentals<br>C2 Marine Environmental Archives: Methods<br>C3 Biogeochemical Processes: Concepts<br>C4 Marine Resources and Geotechnology I<br>C5 Sedimentary Structures and Processes: Shelves and Passive Margins<br>C6 Formation and Evolution of the Ocean Crust | | | Current geoscientific topics |

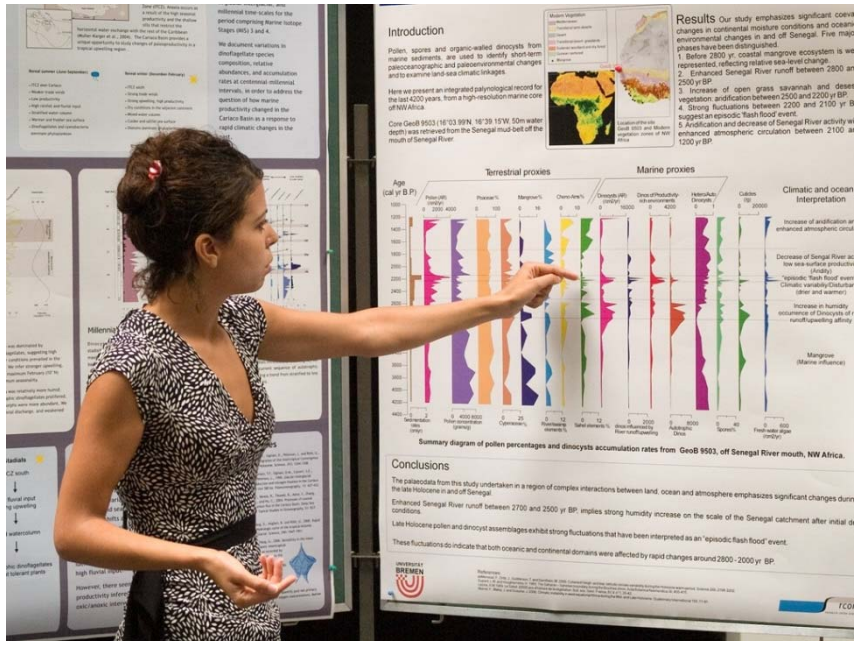
**Summer semester**

| Core Subject A (6 CP) consecutive module of C7 - C12 | Core Subject B (6 CP) consecutive module of C7 - C12 | Core Subject C (6 CP) consecutive module of C7 - C12 | Marine Field and Lab Practice (12 CP) |
|---|---|---|---|
| C7 Climate Change II: Models and Data<br>C8 Marine Environmental Archives: Project<br>C9 Biogeochemical Processes: Projects<br>C10 Marine Resources and Geotechnology II<br>C11 Sedimentary Structures and Processes: Active Margins<br>C12 Convergent Margin and Intra-Plate Processes | | | Marine, coastal and marine-terrestrial field and/or laboratory exercises |

# Marine Geosciences: first year mandatory modules

## Master conference:

The aim of the module is the organization of a geosciences conference over two days. The students decide on the scientific focus of the conference and prepare the scientific program regarding themes and sessions.
Talks will be presented by the students as well as by in-house and external speakers. The students are responsible for the development of the program, time scheduling, speaker invitation and the assignment of activities.



# Marine Geosciences: first year mandatory modules

## Marine field and lab practice:

- A broad and open spectrum of field- and offshore marine courses
- Advanced training in the field and in offshore marine settings
- Learn how to analyse and interpret marine environmental archives and paleoceanographic and paleoclimatic records.
- Courses comprise combined lectures and excursions as well as integrated field campaigns and educational cruises.

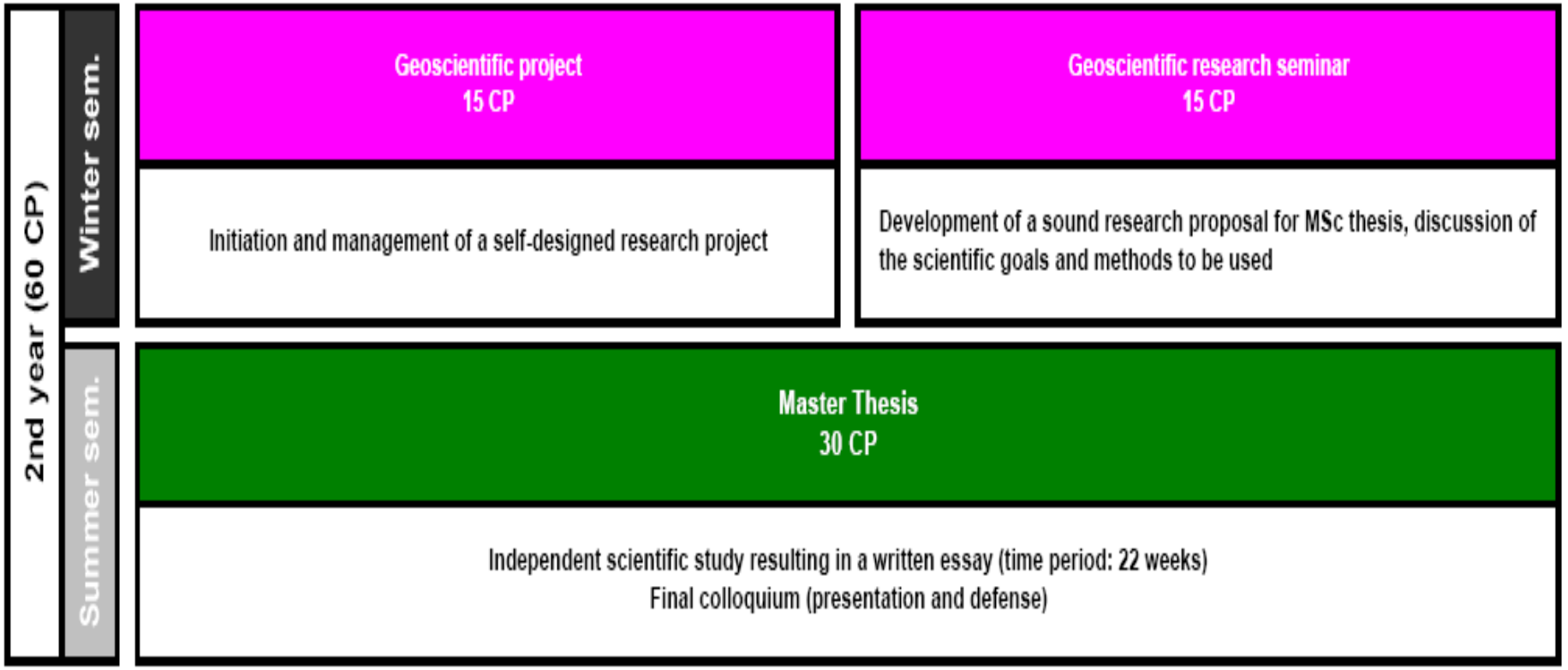
# Marine Geosciences: compulsory elective modules in the first year

## Core subjects:

Take three out of six core subjects offered.
Each with a winter- (9 CP) and a summer term module (6 CP).

Alternatives:

- If you are fluent in German one core subject can be taken from the postgraduate program MSc Geowissenschaften
- If you are well qualified in physics you can choose courses from the postgraduate program Environmental Physics (PEP) in the amount of 15 CP.
  Please visit http://www.geo.uni-bremen.de/page.php?pageid=663


2nd year (60 CP)
Winter sem.
Summer sem.
Geoscientific project
15 CP
Initiation and management of a self-designed research project
Geoscientific research seminar
15 CP
Development of a sound research proposal for MSc thesis, discussion of the scientific goals and methods to be used
Master Thesis
30 CP
Independent scientific study resulting in a written essay (time period: 22 weeks)
Final colloquium (presentation and defense)

# Marine Geosciences

International Masters Programme at the University of Bremen

## Requirements

- Explicit interest in marine geosciences
- Bachelor of Science in a geoscientific field (a qualification in marine sciences will be assessed regarding specialisation)
- Very good command of the English language (English proficiency test, level C1 after CEFR)
- Capacity to think in four dimensions
- Ability to work both independently and as part of a team
- Intercultural competence
- Willingness to participate in partly strenuous field courses

# Marine Geosciences

## What is important?