Masters of Antarctic Sciences
Specialization in Glaciology

Dirección De Programas Antárticos (DPA)

Universidad de Magallanes
CHILE
**Objectives**

Graduates will have a strong fundamental understanding of the Antarctic related subjects; comprehensive knowledge of Glaciology; understanding of the principles that guide the design and execution of high-quality research; field experience and substantial research skills. Graduates will be able to teach and to communicate Antarctic issues to the public.

**Degree Granted**

Masters of Antarctic Sciences with specialization in Glaciology.

**Requirements**

Applicants must have one of the following degrees:

- B.Sc. in any natural science
- B.Sc. in engineering
- University degree with at least eight semesters.

- Special cases will be evaluated by the Dirección de Programas Antárticos.
- Intermediate Spanish knowledge is required.

**Mandatory Coursework**  (3 credits each)

1.- Antarctic Geography  
2.- Antarctic Glaciology  
3.- Antarctic Geology  
4.- Antarctic Geophysics  
5.- Antarctic Oceanography  
6.- Polar Ice Physical-Chemistry  
7.- Antarctic Climatology  
8.- Principles of remote sensing

**Elective Courses**

1.- Research Methods  
2.- Applied Electromagnetism  
3.- Paleoclimate and Global Warming
Aditional Coursework

Workshops (2 credits each)

1. Leadership and communications
2. Living in extreme conditions
3. Logistic and planning
4. Instrumentation for cold environments

Field Experience
Students will receive field experience in the Antarctic and/or the Southern Ice Fields.

Thesis
Each student will carry out an original research project which will be presented as a final thesis.

Faculty

Dr. Ricardo Jaña, Geographer, Chilean Antarctic Institute, INACH
Dr. Gino Casassa, Glaciologist, Center for Scientific Studies, CECS
Dr. Rolf Kilian, Geologist, Universidad de Trier, Germany
Dr. Gernot Reitmayr, Geophysicist, BGR, Germany
Dr. Cristian Rodrigo, Oceanographer, Chilean Antarctic Institute, INACH
Dr. Pedro Cid-Agüero, Chemist, Universidad de Magallanes, UMAG
Dr. Jorge Carrasco, Meteorologist, Dirección Meteorológica de Chile, DMC
Dr. Carlos Cárdenas, Radio-glaciologist, Universidad de Magallanes, UMAG
Dr. Rodrigo Villa, Evolutionary Biologist, Centro de Estudios del Cuaternario, CEQUA
Dr. Juan Carlos Aravena, Environmental Scientist, Centro de Estudios del Cuaternario, CEQUA.
Dra. Pilar Rivas, Chemist, Universidad de Magallanes, UMAG.
Prof. Rubén Carvallo, Electrical engineer, Universidad de Magallanes, UMAG
Dr. Cedomir Marangunic, Glaciologist, Geoestudios Ltda., Chile
International Support

This program is part of the offering of the International Antarctic Institute (IAI). http://www.iai.utas.edu.au/cms/home

Coordinator

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Information

Further information and applications forms are available at:
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Phone: (56-61) 209358
Masters of Antarctic Sciences Major in Glaciology

Semester I
- Geography
- Geology
- Glaciology
- Remote Sensing
- Workshops

Semester II
- Geophysics
- Oceanography
- Climatology
- Polar Ice
- Workshops

Field

Semester III
- Research

Semester IV
- Thesis work
- Thesis Defense