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 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.S. in any natural science
- B.S. 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. - Quantitative Research Methods
2. - Applied Electromagnetism
3. - Hydrology
4. - Paleoclimate and Global Warming
Aditional Coursework

**Workshops** (2 credits each)

1. Leadership and communications  
2. Living in extreme conditions  
3. Logistics 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 that will be presented as a final thesis.

Faculty

Dr. Ricardo Jaña, Geographer, Chilean National Antarctic Institute, INACH  
Dr. Gino Casassa, Glaciologist, Center for Scientific Studies, CECS  
Dr. Rolf Kilian, Geologist, Universidad de Trier, Germany  
Dr. Volkmar Damm, Geophysicist, BGR, Germany  
Dr. Cristian Rodrigo, Oceanographer, Chilean National 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  
Prof. Fernando Harambour, Hydrologist, Universidad de Magallanes, UMAG
Coordinator

Dr. Pedro Cid-Agüero
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Informations

Further information and applications forms are available at:
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Masters of Antarctic Sciences Major in Glaciology

Semester I
- Geography
- Geology
- Glaciology
- Remote Sensing

Workshops

Semester II
- Geophysics
- Oceanography
- Climatology
- Polar Ice

Workshops

Semester III
- Field
- Research

Semester IV
- Thesis work
- Thesis Defense