

# The University Center in Svalbard (UNIS)



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Student Advisor

Photo: Nils Petter Dale

# BACKGROUND....

- An alternative to coal mining and tourism
- Infrastructure of Longyearbyen
- Unique conditions for education and research



# MISSION

An aerial photograph of a vast, snow-covered mountain range. In the foreground, a flat, snow-covered slope features several pieces of research equipment, including two large satellite dishes and a smaller antenna. A winding path or road is visible in the snow. The background shows steep, rugged mountain peaks under a clear sky.

- Provide university level education in Arctic studies
- Carry out high quality research
- Educate tomorrow's Arctic experts
- Contribute to the development of Svalbard as an international research platform
- Use natural environment as a laboratory and arena for observations
- Use the extensive research infrastructure in Longyearbyen
- All education and research shall follow the Svalbard Environmental Act



# STUDIES



- 41 courses (bachelor, master, Ph.D.)
- 4 departments:
  - Arctic biology
  - Arctic geology
  - Arctic geophysics
  - Arctic technology
- Field-based education
- 353 students from 32 nations
- 47 % Norwegian
- 53 % international students\*
- All instruction in English



# UNIS 2010

- UNIS has staff of 50 people living and working in Longyearbyen
  - half of staff from abroad
- UNIS has 30 Ph.D. students and Post Docs
- UNIS represents 15 % of the Longyearbyen population

# RESEARCH



**UNIS**

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- **Arctic biology:**  
Terrestrial and marine environments;  
management of resources and environmental  
qualities
- **Arctic geophysics:**  
Oceanography, Snow and ice physics,  
meteorology, middle- and upper atmosphere
- **Arctic geology:**  
Glaciology, geology, permafrost and linkages  
between climate, glaciers and geological  
processes
- **Arctic technology:**  
Frozen ground engineering, offshore engineering,  
applied hydrology, and environmental technology



# Examples of activity in Ny- Ålesund 2010



UNIS

The University Centre in Svalbard

- NORUS: Technology Development for Marine Monitoring and Ocean Observation (Jørgen Berge ++)
  - How climate-induced changes impact ecosystems in the Arctic
  - 14 days in January 2010, not likely in 2011
- Terrestrial Biology: Different projects during summer season (Pernille B. Eidesen)
- AT-324: Techniques for the Detection of Organo-Chemical Pollutants in the Arctic Environment (Roland Kallenborn)
  - Week 10 in 2010, most likely next year
- The Dynamics of calving and surging glaciers (Monica Sund)
  - Several stays throughout the year (uses UNIS office)
- The Ecology of a High Arctic Freshwater Crustacean, *Lepidurus arcticus* (Branchiopoda, Notostraca) (Steve Coulson)
  - End of August, beginning of September
- Icebound (Anne Hormes): Reconstruction of the last glacial Svalbard-Barents sea ice sheet.
  - Week 15-18