

Course requirements

The applicant must be enrolled in a program at Master level, or document that the courses are approved into the applicant's current study program. Enrolment in a relevant master program in social-, technological- or natural sciences.

AS-302

Safety Management in the Arctic

10 ECTS, 5 weeks in aug./sept.

Course Responsible: Eirik Albrechtsen



Academic Content:

The main focus of the course is prevention of accidents and unwanted occurrences that may lead to loss of life in the Arctic. The course demonstrates how systematic work with loss prevention should be performed in organizations operating in the Arctic, i.e. by generating knowledge to support decisions about mitigating measures. In addition the course provides knowledge about the theoretical foundations for systematic safety management in the Arctic.

The course content can be categorized into four modules:

1. Safety management in the Arctic: theories, models and framework conditions
2. Methods and tools for control of hazards in the Arctic: application, principles, limits and merits
3. Mitigating occupational accident risk in the Arctic
4. Practical management of Arctic safety

AS-303

Emergency Preparedness and Response in the Arctic

10 ECTS, 5 weeks in sept./oct.

Course Responsible: Bjørn Ivar Kruke



Academic Content:

The course focus on emergency preparedness and response in Arctic conditions. Fundamental concepts in the course are hazard, risk, resilience, preparedness, crises, emergency and crisis management.

Course content:

- Key characteristics of different types of undesirable events, such as incidents, accidents, crises, emergencies and disasters.
- The particular challenges of the Arctic, such as remoteness, cold climate, long distances, darkness, etc.
- Key challenges (individual and organizational) we may face in different types of undesired events (such as stress and stress management (human reactions prior to, during and after undesirable events); information collection, communication and processing; decision-making; emergency management).
- Understanding of the structure of the preparedness and response systems in the Arctic, with special emphasis on Svalbard.
- International maritime preparedness and emergency management.

AS-304

Risk, Technology and Human Performance in Arctic Operations

10 ECTS, 5 weeks in oct./nov.

Course Responsible: Abbas Barabadi



Academic Content:

Challenging operational conditions in the Arctic may change human and technical system performance significantly and lead to increasing accident risk for any activities. The course aims to introduce how Arctic operational conditions may affect human and technical equipment performance as well as the resilience of critical infrastructures. The course gives an introduction to appropriate models to quantify these effects. In addition, the course provides understanding to support decisions regarding design and operation of technology in the Arctic region. The course will be particularly useful for students who specialize in design and planning of different type of activities (e.g. maintenance, emergency evacuation, etc.) for cold regions, especially the Arctic region.

The course content can be categorized into four modules:

1. Human and equipment performance in cold climate conditions
2. Risk and uncertainty analysis in the Arctic
3. Logistic and spare part planning in remote areas
4. Resilience concept and unforeseen failure in the complex operational conditions

Apply for this course online through the UNIS website:

<https://www.unis.no/autumn-courses-2019-open-application/>

Application deadline 15 April 2019