

## Arctic Winter School, 3 ECTS

### Contents:

- Environment and society in the changing Arctic. The Arctic Five collaboration.
- Polar atmosphere and its significance for solar-terrestrial interactions, space weather.
- Auroral physics and observations.
- Optical phenomena in the polar regions.
- Snow and ice in different perspectives.
- Arctic climate systems and climate change.
- Nano satellites, rockets, and balloons for polar research.
- Survival in the cold environment.
- Space product innovation.
- Language studies: terminology for New Space and polar research.
- Linguistic aspect of intercultural communication.

### Programme – Kiruna campus

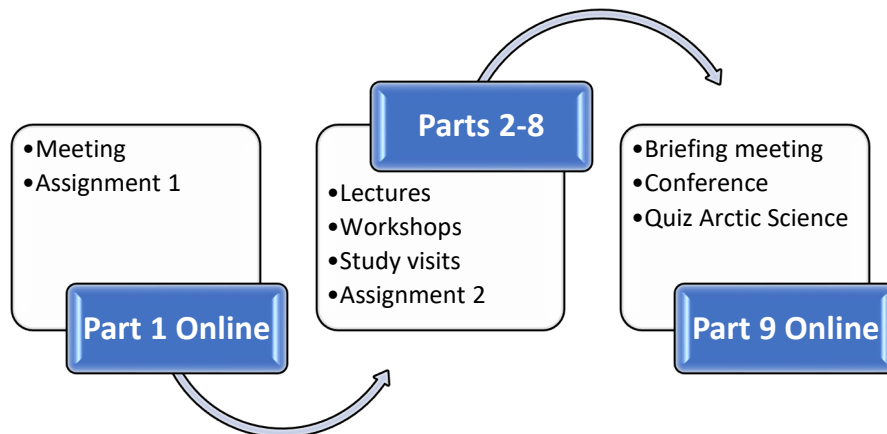
Dates	Activities
<b>February 5-23</b>	Team building via zoom
Saturday-Sunday <b>February 24-25</b>	Arrival to Kiruna
<b>Monday Feb 26</b>	9:00 Welcome and introduction to the School and UNIVERSEH  9:25 Environment and society in the changing Arctic Resource extraction and sustainable Arctic communities  12:00 Lunch on Campus (paid by LTU)  13:00 Polar atmosphere and space weather, auroral/polar practical  14:00 Snow and ice clouds -Arctic climate systems and climate change  15.45 LTU, IRF, EISCAT presentations and guided tour  17:00 Language and Culture  19:00 Dinner & team building, language, and culture (dinner paid by LTU)

<b>Tuesday Feb 27</b>	<p>8:00 Visit to <a href="#">Esrange Space Center</a></p> <p>12.30 Lunch (paid by LTU)</p> <p>14:00 Snow and ice in different perspectives</p> <p>19:30 Dinner (at own cost)</p>
<b>Wednesday Feb 28</b>	<p>8.00 Visit to <a href="#">LKAB</a>- Europe's largest iron ore producer</p> <p>11:30 Lunch</p> <p>12:30 Snow and ice in different perspectives- check of ice constructions</p> <p>13:30 Product innovation workshop</p> <p>18:30 Pizza party in Ljussgården (paid by LTU)</p>
<b>Thursday Feb 29</b>	<p>8:45 NanoSat and balloons workshop</p> <hr/> <p>12:15 Lunch on Campus (at own costs)</p> <p>13:30 Work with the Auroral/polar practical</p> <p>15:00 Visit to the <a href="#">Icehotel</a></p>
<b>Friday March 1</b>	<p>8:45 LTU, IRF, EISCAT presentations and guided tour</p> <p>11:00 Group work with the project</p> <p>12.00 Lunch at Campus at own costs</p> <p>13.00-15.00 Briefing meeting for the Project - All teachers present.</p> <p>15:00 Innovation workshop</p> <p>Language and Culture</p> <p>18:00 Summery, reflections and dinner at Folkhögskolan</p>
<b>Saturday March 2</b>	<p>Abisko – own excursion possible (at own costs)</p>
<b>Sunday March 3</b>	<p>Departure from Kiruna</p>

Week	Activities
February 5-23	Team building and information about UNIVERSEH Report delivery
March	Home work (group and individual - log)  Meeting(s) with a teacher/mentor (team building, multicultural aspects) February 1-17
	Interactive session(s)
March	Home work
	Interactive sessions
March	Final conference with the student project presentation What have been done experience (group work with mentimeter) – highlights from the learning log, pitch from every team.

**Examination:**

The school is assessed through assignments, practical and project work. In order to pass the course it is required that all compulsory tasks are completed satisfactory with a grade "Pass". The final grade for the course reflects the results obtained for all compulsory tasks and is given after all compulsory tasks are approved. The grading scale for the course is 3, 4, 5.



- Part 1. Meet your team.
- Part 2. Language and linguistic aspects of intercultural communications
- Part 3. Sustainable Arctic
- Part 4. Snow and ice
- Part 5. Polar atmosphere and Arctic climate systems
- Part 6. Snow and ice in different perspectives
- Part 7. Nano satellites and balloons
- Part 8. Product innovation
- Part 9. Conference