



# International School

## «ARCTIC ENGINEERING»

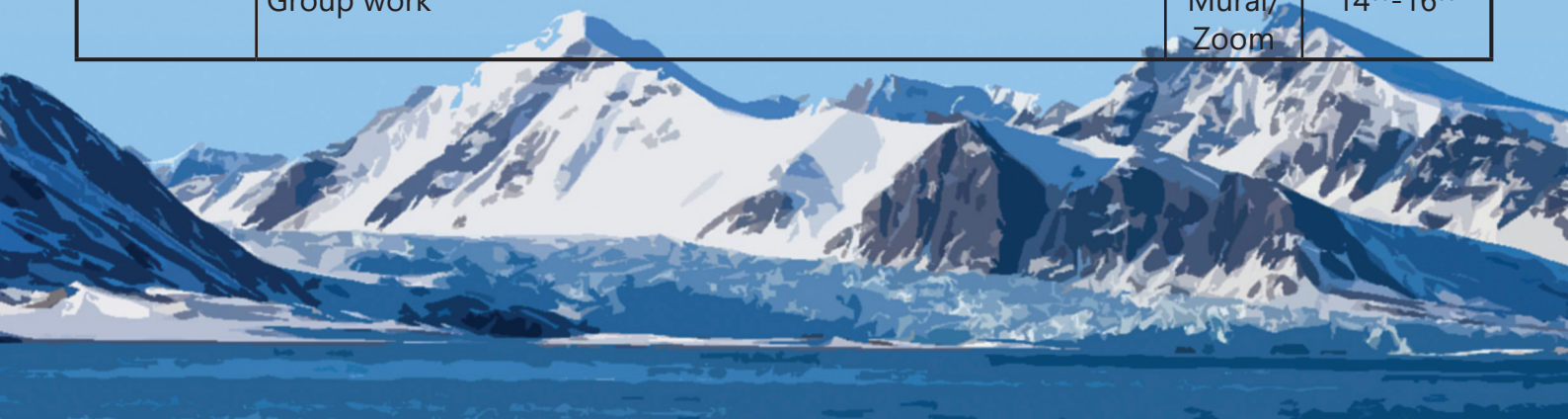
20.09.2021 – 25.09.2021



# INTERNATIONAL SCHOOL «ARCTIC ENGINEERING»

20-25 September 2021  
Online

Date	Subject	Place	Time
Day 1, September 20 <sup>th</sup>	Opening ceremony	Zoom	09 <sup>00</sup> -09 <sup>30</sup>
	"NArFU - is a brand new ambitious university of distinctiveness and innovations designed to meet the needs of the Arctic" <i>Prof. P. Maryandyshev</i>	Zoom	09 <sup>30</sup> -10 <sup>00</sup>
	"Hydrocarbon Resources Development and the Environment in the Arctic" <i>Prof. A. Zolotukhin</i>	Zoom	10 <sup>00</sup> -11 <sup>30</sup>
	Topic for the group work and further presentation development (Case Championship) (Case Championship)	Zoom	11 <sup>30</sup> -12 <sup>00</sup>
	Virtual tour, Arkhangelsk city	Zoom	12 <sup>00</sup> -12 <sup>30</sup>
	Virtual tour, Malye Karely	Zoom	12 <sup>30</sup> -13 <sup>00</sup>
Day 2, September 21 <sup>th</sup>	«Novel materials: self-cleaning methodology» <i>Prof. Dr Jonjaua Ranogajec</i>	Zoom	09 <sup>00</sup> -10 <sup>30</sup>
	"Laboratory studies of rock samples and hydrocarbons in the Arctic Oil and Gas Innovative Technological Center (AOG ITC)" <i>Engineer of The AOG ITC Belozarov I.P.</i>	Zoom	10 <sup>30</sup> -12 <sup>00</sup>
	«Icing on Structures in Arctic Region- An Engineering Perspective» <i>Prof. Muhammad Virk</i>	Zoom	13 <sup>00</sup> -14 <sup>30</sup>
	«Energy efficient materials in Cold Regions» <i>Prof. Mohamad Y. Mustafa</i>	Zoom	14 <sup>30</sup> -16 <sup>00</sup>
Day 3, September 22 <sup>th</sup>	<i>Introduction of NArFU</i>	Zoom	09 <sup>00</sup> -10 <sup>30</sup>
	"Alternative energy sources in the High North" <i>Prof. P. Maryandyshev</i>	Zoom	10 <sup>30</sup> -12 <sup>00</sup>
	«Features of the design of seaports in the Arctic» <i>Prof. Dr Igor Kantarzhi</i>	Zoom	12 <sup>30</sup> -13 <sup>30</sup>
	Group work	Mural/ Zoom	14 <sup>00</sup> -16 <sup>00</sup>
Day 4, September 23 <sup>th</sup>	<i>Introduction of NArFU</i>	Zoom	09 <sup>00</sup> -10 <sup>30</sup>
	«Mathematical tools to estimate the energy potential in the Arctic» <i>Prof. Alain Brillard</i>	Zoom	10 <sup>30</sup> -12 <sup>00</sup>
	«Ecologically green material in the Arctic conditions» <i>Maria Frolova</i>	Zoom	12 <sup>30</sup> -13 <sup>30</sup>
	Group work	Mural/ Zoom	14 <sup>00</sup> -16 <sup>00</sup>



# INTERNATIONAL SCHOOL «ARCTIC ENGINEERING»

20-25 September 2021  
Online

Date	Subject	Place	Time
Day 5, September 24 <sup>th</sup>	Admission in NArFU	Zoom	09 <sup>00</sup> -10 <sup>30</sup>
	«Environmental Safety and Risk Assessment in the Arctic» <i>Prof. Yi-Fan Li</i>	Zoom	10 <sup>30</sup> -12 <sup>00</sup>
	«Hydrocarbons Treatment» <i>Prof. Jens Hüppmeier</i>	Zoom	12 <sup>00</sup> -13 <sup>30</sup>
	Group work	Mural/ Zoom	13 <sup>30</sup> -16 <sup>00</sup>
Day 6, September 25 <sup>th</sup>	"Workshop and project presentation of the group work of students"	Zoom	09 <sup>00</sup> -13 <sup>00</sup>
	Reward and closing ceremony	Zoom	14 <sup>00</sup> -16 <sup>00</sup>

## Case Study: Design of the Oil and Gas Production Platform in the Arctic Shelf

The participants of the school will generalize the knowledge gained from the lecturers of the school and will take part in the design of a unique structure - the oil and gas platform, installed in the most severe conditions on the planet - the Arctic shelf!

When designing, it is necessary to take into account both the technological features of the platform and the selection of materials. Do not forget about the environmental, transport and economic aspects.

