



PARTNERS



ENGAGING STUDENTS IN STEM EDUCATION THROUGH ARCTIC RESEARCH

PROGRAM FOR SECONDARY SCHOOLS

TRANSFORMING ARCTIC KNOWLEDGE INTO SKILLS

www.edu-arctic.eu

www.edu-arctic.eu



This project (EDU-ARCTIC) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 710240.

www.edu-arctic.eu

ABOUT EDU-ARCTIC

EDU-ARCTIC is an EU-funded project focused on using Arctic research as a vehicle to strengthen science education curricula across Europe. It aims to encourage students aged 13 to 20 to pursue further education in science, technology, engineering and mathematics (STEM).

The EDU-ARCTIC project uses a mix of different tools to offer a fresh approach to teaching STEM subjects, including:

- online webinar lessons in virtual classrooms with polar scientists;
- the “citizen science” environmental monitoring programme;
- teacher trainings and workshops;
- online “Polarpedia” portal;
- a chance for students to win a trip to an Arctic research station!

ABOUT THE PARTNERS

American Systems, Poland, develops innovative IT technology dedicated to the educational system, science and business organisations making use of its experience in IT services.

The Arctic Portal - The Arctic Gateway, Iceland. Provides access to data, information and organizations across the Arctic, facilitating information sharing and international co-operation.

Institute of Geophysics, Polish Academy of Sciences, IGF PAS, represents Polish research in Earth sciences including polar research. IGF PAS is the EDU-ARCTIC project leader.

FINI, part of the Geoinformation Department of Faroese Geology and Energy Directorate, operates environmental monitoring facilities on the Faroe Islands.

The Norwegian Institute of Bioeconomy Research - NIBIO conducts applied research on rural development, plant sciences, environmental protection and natural resource management.

The University of Versailles Saint-Quentin-en-Yvelines, is a young and dynamic institution with a strong focus on environment and sustainability research, including an international Masters 2 programme in Arctic Studies.

PROGRAM COMPONENTS



ONLINE LESSONS

Virtual classes from Arctic research stations by scientists



ARCTIC COMPETITIONS

A chance for students and their teachers to win a trip to an Arctic research station



EDUCATOR TRAINING SESSIONS

An EDU-ARCTIC Forum will be held in 3 European countries



MONITORING SYSTEM

Citizen science environmental monitoring carried out at participating schools



POLARPEDIA

Encyclopedia about the Arctic region, explaining polar phenomena and scientific terminology

MAIN OBJECTIVES

The primary goal of EDU-ARCTIC is to encourage interest in science, technology, engineering and mathematics (STEM) education among secondary school students, typically aged between 13 - 20, by providing an innovative and attractive educational programme accessible to schools all across Europe.

The project establishes strong links between the research and education communities by connecting schools participating in the project to scientists at Arctic research stations and research institutes throughout Europe.

Students participating in the project will have a unique possibility to get to know what scientific careers are like and learn more about different research disciplines while learning how to apply the scientific methods and develop crucial problem-solving skills.

THE PROJECT

- Allows students to better understand the role of scientific research, -messaging and -language in the modern world;
- Increases students knowledge on nature, geography, natural resources, history, social - and political science;
- Raises awareness of environmental issues and climate change;
- Encourages young people to choose STEM careers;
- Increases the number of girls pursuing scientific careers by using methods and language sensitive to gender issues in educational resources and programmes;
- Introduces innovative teaching tools via an e-learning portal, available in at least 10 European countries;
- Builds the confidence and competence of educators.