

Faster, Smarter, Stronger: HPC in Action

Training: HPC and Industrial Collaboration – Opportunities and Perspectives

HPC Opportunities: From Idea to Solution

HPC Approaches: Efficiency and Optimization

Organizer: NCC Montenegro Location: Žabljak, Montenegro Duration: 2 days

Training Objective:

The aim of this two-day training is to present high-performance computing (HPC) as a key tool for improving business in industry. Through practical examples and discussions, participants will have the opportunity to consider the possibilities of implementing HPC in their companies, identify potential problems that can be solved, challenges and necessary resources, and establish B2B contacts with members of NCC Montenegro.

Special Activity within the Training: Visit to a High School in Žabljak

As part of the training, an educational visit to a local secondary school in Žabljak is also planned. During this visit, representatives of NCC Montenegro will give a presentation to students on the topic of high-performance computing (HPC), with special reference to:

- what HPC is and how it works,
- the importance of modern technologies for science, industry and everyday life,
- examples of HPC applications in various fields (medicine, ecology, transport, finance, etc.),
- perspectives of development and employment in the field of advanced technologies.

The aim of this activity is to motivate young people to become interested in STEM fields and to introduce them to the opportunities brought by digital transformation and the development of high technologies. Students will have the opportunity to ask questions and participate in the discussion, contributing to the strengthening of the local community through knowledge and inspiration.

AGENDA

29.5.2025.

09:00 – 09:30 | Registration and welcome

Welcoming remarks from the organizer and a brief introduction of participants

09:30 – 10:15 | Introduction to HPC and its Importance for Industry

Overview of the concept of high-performance computing and its significance for various industrial sectors.

10:15 – 11:00 | Services within NCC Montenegro - Count on HPC: Training and Applications

Presentation of available services and support that NCC Montenegro provides to companies.

11:00 – 11:15 | Coffee Break

11:15 – 12:30 | User Case Presentations

Presentation of specific industrial cases of HPC use and benefits for business

12:30 – 13:30 | Lunch and Networking

13:30 – 15:00 | Discussion – Potential Cases in Companies

Considering possible ways of using HPC in participating companies.

15:00 – 15:15 | Coffee Break

15:15 – 16:30 | Required Support, Services, and Resources

How to ensure efficient application of HPC – challenges and necessary infrastructure.

16:30 – 18:00 | Free Time and Informal Networking

Optional gathering of participants with organized outdoor activities.

AGENDA

30.05.2025.

08:30 – 9:15 | HPC Presentation to High School Students

NCC Montenegro members will present HPC to highschool students of SMŠ "17.septembar" - Žabljak.

09:30 – 10:30 | B2B Meetings with NCC Montenegro Members

Individual meetings and consultations with experts from NCC Montenegro.

10:30 – 11:15 | Planning Further Steps

How to continue collaboration after the training- forming NCC-industry working teams and implementation plan.

11:15 – 11:30 | Coffee Break

11:30 – 12:30 | Presentation of Potential Participant Projects

Participants present preliminary ideas and applications of HPC in their companies.

12:30 – 13:30 | Lunch and Final Networking

13:30 – 14:00 | Training Closure

Summarizing conclusions and final recommendations for further work.

Presentation (PPT)

Preparation of a PowerPoint presentation that includes:

1. Introduction to HPC – what is HPC, where is it used, benefits for industry.
2. NCC Montenegro Services – support, available resources, how to apply.
3. User case examples – successful examples of HPC application in industry.
4. Opportunities for companies – how to integrate HPC into business.
5. Discussion and conclusions – exchange of ideas and defining further steps.

This structure enables focused learning, exchange of experiences, and the creation of concrete plans for further industrial cooperation.