



CSCS

Centro Svizzero di Calcolo Scientifico
Swiss National Supercomputing Centre

Università
della
Svizzera
italiana

Summer School 2020

Effective High-Performance Computing & Data Analytics with GPUs

July 13 - 24, 2020

Online Course

The **Swiss National Supercomputing Centre** and **Università della Svizzera italiana** are pleased to announce that the annual Summer School will be held exceptionally as an **online course** this year, at the time originally announced - **from July 13 to July 24, 2020**.

This summer school will focus on the effective exploitation of state-of-the-art hybrid High-Performance Computing (HPC) systems with a special focus on Data Analytics.

The following topics will be covered:

- GPU architecture
- GPU programming (CUDA and OpenACC)
- Performance optimization and scientific libraries
- Interactive supercomputing (JupyterLab)
- Python HPC libraries (Numpy/SciPy/Dask/Numba)
- Introduction to Machine Learning and GPU optimized frameworks (Rapids)
- Deep Learning on HPC platforms (TensorFlow)

Students will be able to earn **six ECT credit points** for this course from Università della Svizzera italiana (subject to exam).

The content of the course is tailored for **3rd year Bachelor's students, Master's students, Ph.D students**, and **early stage Postdocs** interested in learning parallel programming models and having hands-on experience using HPC systems.

For additional information on the format, application and examination methodology:
www.cscs.ch/events

Deadline for application: **May 31, 2020**

