CERN openlab is a unique public-private partnership.

We work to drive innovation in computing technologies.

We collaborate with leading technology companies (including Intel, Oracle, Siemens, Micron, Google).

We also work with other research laboratories (including Fermilab and INFN).

Education and training are important aspects of our work.

Over 1700 applicants for this year’s CERN openlab summer-student programme.

32 students selected from 18 different countries.

More info on our website: openlab.cern.

Follow us on Twitter/Facebook: @CERNopenlab.
The lecture programme

All lectures webcast, except the two marked with red bullet points.

Welcome to CERN openlab
Alberto Di Meglio
IT Amphitheatre (31-3-004)
14:00-14:30, 5 July

DAQ-filtering data (50TB/s to 1GB/s)
Flavio Pisani
IT Amphitheatre (31-3-004)
13:30-15:30, 7 July

Introduction to Machine Learning
Jean-Roch Vlimant
IT Amphitheatre (31-3-004)
13:30-15:30, 14 July

Tackling computer challenges at CERN in 2022
Maria Girone
IT Amphitheatre (31-3-004)
14:30-15:30, 5 July

Computer security in 2022
Stefan Lueders
IT Amphitheatre (31-3-004)
13:30-15:00, 12 July

Writing code that’s less bad
Axel Naumann
IT Amphitheatre (31-3-004)
13:30-15:30, 20 July
The lecture programme
All students from all programmes are welcome to attend!

FPGA programming
Marco Barbone
IT Amphitheatre (31-3-004)
13:30-15:30, 22 July

CERN Science for open data
Anna Ferrari
IT Amphitheatre (31-3-004)
13:30-15:30, 28 July

GPU programming
Stephan Hageboeck
IT Amphitheatre (31-3-004)
13:30-15:30, 26 July

Quantum Computing for HEP applications
Sofia Vallecorsa
IT Amphitheatre (31-3-004)
13:30-15:30, 4 August

https://indico.cern.ch/category/15588
Lightning talks

• Students work on projects over nine weeks, gaining hands-on experience with latest computing technologies.
• 5-minute presentations by each student, with prizes for best talks.
• Split into two sessions (dates TBC in September).
• Events will be online and open to all.

Webfest

• Celebrating 10 years!
• Open to all – held online.
• A two-month hackathon challenge: 8 July to 31 August.
• Sign up by Tuesday 5 July. Kick-off event on Friday 8 July.
• Collaborate on environment-related computing projects using open-web technologies.
• Full details on the event website: webfest.cern.