

EUmaster4HPC is an European consortium. It consists of European universities, research/ supercomputing centres and industrial partners, funded by the EuroHPC Joint Undertaking to design and implement the first pan-European Master's programme in High Performance Computing.

# 8 Awarding Universities:

- Sorbonne Université, France
- Universitat Politècnica de Catalunya, Spain
- Politecnico di Milano, Italy
- Università della Svizzera Italiana, Switzerland
- Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- University of Luxembourg, Luxembourg
- Sofia University "St. Kliment Ohridski", Bulgaria
- KTH Royal Institute of Technology, Sweden
- **23** Participant Countries
- 27 Partner universities
- **16** Contributing parties (industry and research)
- 36 Additional supporting partners

EUmaster4HPC brings together the major players in HPC education in Europe to train the next generation of highly skilled and talented HPC experts to drive the European digital transformation





# European Master for High Performance Computing

an innovative pan-European master programme in High Performance Computing, Data Analytics and Artificial Intelligence

#### **GET IN TOUCH!**

eumaster4hpc@uni.lu www.eumaster4hpc.uni.lu



HPC IS A FLAGSHIP
OF THE EUROPEAN ECONOMY



**Apply now!** 

### **PROGRAM**

Degree: 2 European degrees

Language: English

**Duration:** 2 year full-time programme /

4 semesters (120 ECTS)

- 1 FUNDAMENTAL courses 12 months
- 2 SPECIALIZATION 6 months
- 3 INTERNSHIP 6 months

# **ACADEMIC JOURNEY**

# SUMMER SCHOOL Core year - HPC fundamentals WORKSHOP WORKSHOP WORKSHOP Semester 1 Semester 2 Semester 3 Semester 4 UNIVERSITY A UNIVERSITY B INTERNSHIP Mobility between universities possible for internship

### EUMASTER4HPC STUDENT'S PROFILE

# HPC EXPERT WITH CUTTING EDGE KNOWLEDGE IN:

- HPC/HPDA/AI/ML
- Mathematical modelling and algorithms
- Software engineering
- Parallel programming and parallel architecture
- High performance computing applications for science and engineering

### **SPECIALIZATIONS:**

Application
Domain Expert

System •
Architect

- Performance Analyst and Advisor
- System Development and Support
- Numerical and Data Specialist for Science Domain

#### **EUMASTER4HPC STUDENTS GRADUATE WITH:**

- They own network in the global HPC community
- Highly developed soft skills

## WHAT'S IN STORE FOR YOU?

- 2 EUROPEAN DEGREES IN 2 YEARS! Choose from among 8 TOP European universities
- INTERNSHIP AT INDUSTRY, RESEARCH/SUPERCOMPUTER CENTERS. Industry is a key partner of the programme.
- SUMMER SCHOOLS AND WORKSHOPS!
  Network and practical experience!
- 10,000 EUR "MOBILITY SCHOLARSHIPS".

  Discover Europe with EUmaster4HPC and mobility between awarding universities!
- **O EUR "TUITION FEES"** for eligible students!

# EUMaster4HPC is your access to the fastest and top-ranked supercomputers in Europe!

LUMI & Leonardo are among the WORLD's FIVE most powerful supercomputers!

Karolina, Discoverer, Vega, Meluxina are among the most powerful supercomputers in Europe!

And soon-to-come MareNostrum5

# **OUTSTANDING CAREERS IN INDUSTRY AND RESEARCH**