

ARGONNE TRAINING PROGRAM ON EXTREME-SCALE COMPUTING (ATPESC)

Intensive two-week training on the key skills, approaches, and tools to design, implement, and execute Computational Science and Engineering (CSE) applications on current and next-generation supercomputers.

ATPESC 2026

JULY 26 – AUGUST 7

PROGRAM CURRICULUM

Renowned computer scientists and high-performance computing (HPC) experts from U.S. National Laboratories, universities, and industry serve as lecturers and effectively guide hands-on training sessions.

ATPESC participants will be granted access to **U.S. Department of Energy (DOE) Office of Science User Facilities**, which are home to some of the world's most powerful supercomputers.

The core curriculum includes:

- ☐ Computer architectures and predicted evolution
- ☐ Numerical algorithms and mathematical software
- ☐ Software productivity and sustainability
- ☐ Data analysis, visualization, I/O, and methodologies and tools for big data applications
- ☐ Performance measurement and debugging tools
- ☐ Machine learning and data science

COST

There are no fees to participate. Domestic airfare, meals, and lodging are provided.

ELIGIBILITY

Graduate students, postdocs, and computational scientists are encouraged to submit applications. Visit the website for eligibility details.

APPLICATION

The program provides **advanced training to 70 participants**.

Qualified applicants must have:

- ☐ Substantial experience in MPI, OpenMP, and/or Data Science Frameworks,
- ☐ Used at least one HPC system for a complex application, and
- ☐ Plans to conduct CSE research or RSE support on large-scale computers

The call for applications for ATPESC 2026 will open in early January, 2026. For updates via email, please subscribe on our website.

SPONSORS

ATPESC is funded by the DOE Office of Science Advanced Scientific Computing Research Program.



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