

# 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 2020

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, including upcoming exascale systems.

#### The core curriculum includes:

- Computer architectures and predicted evolution.
- Numerical algorithms and mathematical software.
- Approaches to building community codes for HPC systems.
- 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

**Doctoral 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 and/or OpenMP programming,
- Used at least one HPC system for a complex application, and
- Plans to conduct CSE research on large-scale computers.

The call for applications for ATPESC 2020 is now open. **Applications are due March 2, 2020.**

### TO APPLY

[extremecomputingtraining.anl.gov](http://extremecomputingtraining.anl.gov)

### SPONSORS

ATPESC is funded by the Exascale Computing Project, a collaborative effort of the DOE Office of Science's Advanced Scientific Computing Research Program and the National Nuclear Security Administration.



### SUPPORT CONTACT

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