

XSEDE Training Opportunities

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XSEDE

Extreme Science and Engineering
Discovery Environment



XSEDE Training Mission

To develop and enhance the skills of the national open science community for the effective conduct of research and education activities utilizing advanced computational resources.



XSEDE

Training Focus

Systems and Software supported by XSEDE Service Providers

- Systems: Stampede, Blacklight, Gordon, and others

Principles and techniques for effective use of resources

- Program optimization
- Data management



Training Opportunities

- In Person
- Webcast
- Self paced Learning
- On-site – Bring Your Own Code Days



XSEDE

In Person and Webcast

For those in Texas:

Several courses are taught in Austin at the
Texas Advanced Computing Center

Outside of Texas:

You can attend many of the offerings via
webcast

Courses are regularly offered in Pittsburgh PA,
Knoxville TN, San Diego CA, and Austin TX



XSEDE

Example Courses

Introduction Courses:

Linux Basics

Introduction to C & Fortran

Introduction to Parallel Computing

Intermediate / Advanced Courses:

Optimizing Code for Xeon Phi

Parallel I/O

HPC for NextGen Sequence Analysis



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Self Paced Learning

Cornell Virtual Workshop

<https://www.cac.cornell.edu/VW/>

CI Tutor

<http://www.citutor.org>

HPC University

<http://www.hpcuniversity.org/>



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Cornell Virtual Workshop

High Performance Computing topics:

- system architecture
- parallel programming with MPI and OpenMP
- code optimization for performance and scalability
- parallel code debugging
- basic visualization
- data management



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Cyberinfrastructure Tutor (CI Tutor)

Tutorials on high-end computing topics

- parallel computing
- multi-core performance
- performance tools



XSEDE

HPC University

Provides a cohesive, persistent, and sustainable on-line environment to share educational and training materials

Guides you to:

- 1) choose successful paths for HPC learning and workforce development
- 2) contribute high-quality and pedagogically effective materials that allow individuals at all levels and in all fields of study to advance scientific discovery



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More Information

Check out the course calendar:

<http://portal.xsede.org/course-calendar>

Upcoming Dates

Registration

Course Descriptions



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