



nCore Training Courses

Complete hands-on training courses offering state-of-the-art solutions to increase your software's correctness and performance on multicore and manycore platforms

• Introduction

nCore Design is the world leader in providing instructor-led, hands-on intensive training workshops focused on multicore technologies, GPUs, and embedded systems.

Our passion for the art and science of high-performance software provides you with the solid theoretical foundations and experience to jump-start your next parallel project.

• What's Covered?

- **Programming multicore processors** – Learn to correctly architect, design, and develop efficient parallel applications for multicore processors by understanding how to deal with synchronization, mutual exclusion, processor caches, shared memory, and special methods for multithreaded programming using modern methods, such as OpenMP and Intel Threading Building Blocks.
- **Mastering advanced multicore techniques** – Learn how to successfully profile and optimize multicore software in order to achieve maximum performance. You will master advanced multicore programming concepts, debugging and profiling multicore programs, and practice parallelizing applications.
- **Programming GPU processors** – Learn the fundamentals of GPU programming through in-depth, hands-on laboratories using CUDA and OpenCL. By integrating multicore software development techniques and mathematical algorithms used by scientists and engineers, students gain expertise in developing high-performance GPU software on Linux or Windows platforms.
- For complete course descriptions, please visit <http://www.ncorehpc.com/training/>

• Why Enroll?

- All courses taught by experts in multicore, multithreaded, GPU/manycore, and parallel software systems and architectures.
- Courses offered worldwide and without the need for travel – on-site classes offered at your convenience at your facility or a nearby partner training center.
- In addition to nCore's standard courses, comprehensive training workshops and courseware can be customized to meet your organization's educational needs.
- Optional on-site follow-on consultation to bridge the gap between the course and your organization's strategic objectives.

• What Are The Benefits?

- Avoid the substantial technical risk of not having the necessary skills to tackle the multicore and manycore parallel computing paradigm.
- Comprehensive training workshops offer students an in-depth overview of fundamental concepts, while offering advanced training and practical advice on programming.
- Online training delivery platform and instructor-led, hands-on laboratories provide detailed instruction and deep background, increasing students' knowledge and skills.
- Gain critical insights on how to improve your software's performance and efficiency.
- Acquire a competitive advantage by learning to correctly design efficient multicore-aware algorithms necessary for applications to run on modern platforms, while reducing time-to-market and product development slippage.
- Complete set of standard training courses, custom course options, and consulting help fine tune your organization's capabilities and eliminate the training-to-implementation gap.

