

Csci 557: GPU Computing Computer & Information Science

This course examines the use of GPU for general-purpose high performance parallel computing. It covers the key principles, practices, and hardware/software architectures for design of general-purpose, parallel programs using GPUs. The course surveys and analyzes real-world applications that benefit from GPUs, and involves hands-on programming as well as performance profiling and analysis. The fundamentals of concurrent programming and its challenges at algorithm and coding levels are also discussed.

3 Credits

Prerequisites

• Pre-requisite (Csci 211 and Csci 223) OR (El E 385 and Csci 356) OR Graduate Standing

Instruction Type(s)

• Lecture: Lecture for Csci 557

Subject Areas

<u>Computer Science</u>

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

