## CS-4234 (CRN 83395)

# Parallel Computation

**Fall 2023**

## Quick Info

**Topics:**

This class will introduce the fundamental concepts of parallel computing. Topics include a survey of parallel computer architectures, models of parallel computation, and interconnection networks; parallel algorithm development and analysis; programming paradigms and languages for parallel computation; example applications; performance measurement and evaluation. If time permits we will discuss additional topics as well.

**Instructor**: Dr. Adrian Sandu

**E-mail**: sandu@cs.vt.edu

**Phone**: 231-2193

**Office**: Torgersen 3060E

**Teaching Assistant**: TBA

E-mail:

**Prerequisites:**

CS 3214

Programming in C/Fortran

**Textbook**:

* Ananth Grama, George Karypis, Vipin Kumar, and Anshul Gupta: "Introduction to Parallel Computing". 656 pages, ISBN 0201648652, Addison-Wesley, 2003.

**Grading**:

The grade is based on:

* 25%    Midterm exam
* 25%    Final Exam
* 50%    Homework (theoretical and programming assignments)

**Syllabus**:

For detailed information please consult the syllabus ([PDF](http://www.cs.vt.edu/~asandu/Courses/CS4234/syllabus4234.pdf))

## Homework

Please check the [list of assignments](http://www.cs.vt.edu/~asandu/Courses/CS4234/Homework/homework.html).

sandu@cs.vt.edu (Adrian Sandu)

http://www.cs.vt.edu/~asandu/Courses/CS4234/CS4234.html