UE GPU computing

Niveau d'étude
Bac +5

ECTS
6 crédits

Composante
UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)

Période de l'année
Automne (sept. à dec./janv.)

- **Langue(s) d'enseignement:** Anglais
- **Ouvert aux étudiants en échange:** Oui
- **Code d'export Apogée:** GBX9AM49

Présentation

Description

In this course, we will introduce parallel programming paradigms to the students in the context of applied mathematics. The students will learn to identify the parallel pattern in numerical algorithm. The key components that the course will focus on are : efficiency, scalability, parallel pattern, comparison of parallel algorithms, operational intensity and emerging programming paradigm. Trough different lab assignments, the students will apply the concepts of efficient parallel programming using Graphic Processing Unit. In the final project, the students will have the possibility to parallelize one of their own numerical application developed in a previous course.

Heures d'enseignement

UE GPU computing - CM	CM	18h
UE GPU computing - TP	TP	18h

Pré-requis recommandés

C or C++, Compiling, Data structures, Architecture, Concurrency

Période : Semestre 9

Infos pratiques

Campus

Grenoble - Domaine universitaire