

## Aspects structurels et algorithmiques dans les graphes

**ECTS** : 3

**Volume horaire** : 15

### **Description du contenu de l'enseignement :**

We will see how structural, algorithmical and geometrical aspects are deeply intertwined in combinatorial optimization.

We will focus on graph theory and, in particular, on the maximum clique and the minimum coloring problems in sub-classes of perfect graphs.

We will prove the so called weak perfect graph theorem.

### **Compétence à acquérir :**

Structural, algorithmical and geometrical aspects of in combinatorial optimization .

### **Bibliographie, lectures recommandées :**

Bibliographie

Combinatorial Optimization : Polyedra and Efficiency. A. Schrijver , Springer (2003)