Graph algorithms

ECTS : 4

Enseignant responsable : Michail LAMPIS (https://www.lamsade.dauphine.fr/~mlampis/)

Langue du cours : Français

Volume horaire : 36

Description du contenu de l'enseignement :

This course, taught in English, covers the fundamentals of graph theory, its applications in computer science and operations research, and the most important graph algorithms. The focus is on the theoretical analysis of algorithms with performance guarantees. Topics covered include :- Undirected and directed graph fundamentals and representation- Graph Traversal Algorithms (BFS, DFS)- Shortest Path Algorithms- Minimum Spanning Trees- Minimum Cut

Compétences à acquérir :

Algorithm design and analysis for graph problems.

Mode de contrôle des connaissances :

Midterm (partiel) and a final exam.

Document susceptible de mise à jour - 04/11/2026
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