

Graphs and Scheduling



Component

École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications

In brief

- **Code:** N8EE16B
- **Open to exchange students:** Yes

Presentation

Objectives

- Understand the basic concepts and terminology of graphs
- Identify and model issues from different fields or specifications in the form of identification, enumeration or optimisation problems in a graph.
- Master methods for identifying and enumerating paths, trees, circuits and stable points in a graph.
- Solve polynomial optimisation problems on graphs: finding the shortest path, minimum weight spanning tree, maximum matching, etc.
- Apply graph algorithms to real-world problems from different fields, including project management

Description

This course provides an introduction to graphs and related algorithms, with an emphasis on their application to concrete problems from different fields.

Pre-requisites

None