

Modelling and Optimization

 **ECTS**
5 credits **Number of hours**
60h

Presentation

Objectives

At the end of this module, the student will have understood and be able to explain :

- Various approaches to analyze and evaluate the performances of discrete event system DES
- Various types of modelling adapted to the problems considered (deterministic or stochastic models, numerical and combinatorics optimization models, models of concurrency)
- Algorithms available to solve these problems.

The student will be able to :


- Model and solve operational research problems (optimization, linear programming, graphs, stochastic process) and discrete event systems problems
- Model stochastic systems, such as a network of queues, using Markov chains. Compute their stationary performance measures, and dimension its capacity
- Model a DES by Petri net, analyse the properties of the Petri net by various methods of analysis (exhaustive and structural).


Useful info

Contacts

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