

Organisation: *Face to face: 27 hours* *Homework: 27 hours* *total load: 54 h*

Objectives: Capacity to model an operational process, architecture... through queuing theory.

Prerequisites: None

Program: This standard probability and statistics refresher module is essentially intended for giving the tools for the modelling of queuing processes.

Content:

- General theorems of probability;
- Random variable, change of variables;
- Distributions derived from Poisson and Gaussian distributions;
- Convergence of sequences of random variables;
- Markov processes, Markov chains;
- Random variable simulation;
- Parameter estimation;
- Introduction to the asymptotic theory;
- Least mean square estimation.

Evaluation: Grading is as follows

Homeworks given at the issue of each of the 10 classes No written exam.

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