Modeling and analysis of discrete systems

Component
École Nationale Supérieure d'Électrotechnique d'Électronique

In brief

- **Ametys Code:** N9EE18A
- **Open to exchange students:** Yes

Presentation

Objectives

Understanding and mastering formal tools for modelling and analysing concurrent systems, in particular coloured Petri nets, integrating time management (temporal, T-timed, P-timed), stochastic, possibilistic, hybrid, nested, etc.

Description

This course focuses on concurrent systems where concurrent and sometimes non-deterministic processes must be carried out with various constraints: order of event execution, interactions between subsystems, time. It aims to establish a formal and graphical modelling and analysis framework, with simulation and analysis tools using ordinary Petri nets (low-level PN) and high-level Petri nets (high-level PN).

Pre-requisites

N8EE16E: Petri network