

## Simulation of discrete event systems



### SCHOOL

Polytech Graduate School of  
Engineering



### CAMPUS

Belle-Beille



### LEVEL

Engineering 5th year



### OPEN TO EXCHANGE STUDENTS

Yes



### SEMESTER

Fall (S1)

- > **Degree course:** Graduate School of Engineering - Automation and Computer Engineering
- > **Teaching unit:** UE 9.4.1 Voie d'approfondissement syst mes cyber physiques
- > **Course language:** English
- > **Duration (hours):** 24
- > **ECTS:** 2
- > **Teacher(s):** Jean-Louis Boimond

#### > Assessment:

- Continuous assessment
- Final exam

#### > Teaching methods:

- Lecture course          hours
- Tutorial course      16    hours
- Practical work        8     hours
- Case study
- Project

## COURSE DESCRIPTION

Introduction to the simulation,

- Simulation of production systems,
- Reminders on probability and statistics,
- Data on system input,
- Verification and validation of models,
- Interpretation of results,
- Basic notions on Petri nets,
- The Siman-Arena simulation language. -

## OBJECTIVES

Study on the discrete event systems simulation.

## PREREQUISITES

Notions on production systems.

## SELECTIVE BIBLIOGRAPHY

Introduction to Simulation Using SIMAN. Second Edition, C. Dennis Pegden, R.E. Shannon, R.P. Sadowski, Ed. Mc Graw-Hill. - Probabilit s et statistiques. 3 me  dition, A. Ruegg, Presses Polytechniques Romandes