

Automates



Component

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

In brief

> **Code:** N7EN10A

Presentation

Objectives

To discover, understand and know how to exploit the mathematical tools necessary for the formal modeling of the dynamics of discrete systems and for the analysis of structured information: finite automata, stack automata and Turing machines. The subject covers both theoretical and practical aspects through the use of state-of-the-art tools for modeling discrete systems, and the use of formal description languages for the exploitation of structured information.

Description

Theoretical and practical study of :

- Finite automata
- Stacked automata
- Structured information analysis techniques
- Recursive top-down analysis
- Generators of lexical and syntactic parsers

Pre-requisites

Language theory (see the Modelling subject of the Modelling and Programming UE)