

Architecture des Ordinateurs



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

In brief

> **Code:** N5EN03A

Presentation

Objectives

- master a hardware description language
 - know how to analyze and design a combinatorial logic or arithmetic circuit
 - know how to analyze and design a synchronous sequential circuit
 - know how to realize a wired algorithm with a sequential circuit
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Description

- introduction to Boolean logic
 - introduction to binary arithmetic: 2's complement, fixed point, floating point, basic arithmetic operations
 - introduction to the analysis and design of combinatorial logic and arithmetic circuits
 - introduction to the analysis and design of sequential circuits
 - construction of wired algorithms
 - architecture of a processor
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Pre-requisites

Basics of Boolean logic