Ideal Passive Circuits

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

In brief

- **Ametys Code:** N7EE09B
- **Open to exchange students:** Yes

Presentation

Objectives

Upon completion of this course, students will be able to:
- Implement distributed passive functions (using transmission lines)
- Understand the difficulties associated with the use of distributed techniques
- Predict the electrical behavior of functions
- Propose function architectures that meet specifications
- Implement passive multipole synthesis techniques

Description

RF spectrum and applications
Filter integration:
- Stub filters
- Impedance jump filters
- Impedance inverters-based filters
- Coupled line filters

Multipoles :

- Divider
- Coupler
- Hybrid couplers
- Proximity couplers
- Coupler applications: Attenuators, phase shifters, mixers, balanced circuits