

RF equipment



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique

In brief

- > **Ametys Code:** N9EE10A
- > **Open to exchange students:** Yes

Presentation

Objectives

At the end of this course, students will be able to:

- Implement design methods for complex telecommunications systems that must meet electrical performance criteria.
 - Define a system architecture and analyze its performance.
 - Develop equipment by applying RF integrated circuit design methods.
-

Description

Course by S. George, Thales Alenia Space:

General information about satellites:

Satellite missions

Telecommunications payload architecture:

Equipment

Technologies

Future developments: Flexible payloads

Impact on equipment and technologies

Application BE:

Development of satellite payload architecture using COTS (Components On The Shelf) components that must meet the following criteria: gain, noise figure, and linearity

Design of equipment (VGA: Voltage Gain Amplifier) using 12GHz MMIC technology.