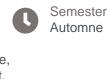


UE Radiofrequency Integrated Circuits





Component
UFR PhITEM
(physique,
ingénierie, terre,
environnement,
mécanique)



> Teaching language(s): English

> Open to exchange students: Yes

> Code d'export Apogée: PAX9ICAB

Presentation

Description

The goal of this teaching is to acquire a good understanding of:

- Analog RF integrated circuit design,
- Analog Signal Processing in RF,
- · Basic concepts in RF design.
- RF Front End Architectures for integration.
- · Technology and modeling of integrated devices for RF.
- Design principles of basic RF blocks (LNA, Mixers, VCO, Power Amplifiers).

This teaching module will be divided into 2 parts

- Radiofrequency Integrated Circuits (course) 14 hours 3 ECTS
- Lab work: Design of integrated RF circuits 24 hours 3 ECTS





Course parts

UE Radiofrequency Integrated Circuits - TP Practical work (TP) 24h

UE Radiofrequency Integrated Circuits - CM Lectures (CM) 14h

UE Radiofrequency Integrated Circuits - TD Tutorials (TD) 14h

Recommended prerequisites

Basic knowledge on analog integrated circuits design

Period: Semester 9

Bibliography

- T. H. Lee, "The design of CMOS Radio-frequency Integrated Circuits", Cambridge University Press, 1998.
- B. Razavi, "RF Microelectronics", Prentice Hall, 1998.

Useful info

Place

> Grenoble

Campus

> Grenoble - Scientific Polygon

