

Rf Instrumentation

Number of ECTS credits: 3

Coefficient:

Description: RF Signals Network analyzer

Antenna and transmission of information

Microwave

Resonator and oscillator for detection

Noise in oscillators

Labs1: Antenna

Labs2: Microwave circuit

Labs3: Resonant sensor (network analyzer)

Pedagogical objectives:

Sizing an antenna

Design an antenna circuit

Dimension a microwave circuit

To implement a resonant sensor in the RF range

Bibliography: Prerequisite:

Electromagnetism, Maxwell's equations, waves

Lectures Hours: 12.5

Tutorials Hours: 8

Labs Hours: 8

Knowledge monitoring modalities: 100% continuous assesement

Assesement: Reports of labs, exam

Leader: Enrico RUBIOLA

Participants: