



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Microwave engineering

2526-1-113R049

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#### Title

Microwave Engineering

#### Teacher(s)

Giuseppe Macchiarella

#### Language

English

#### Short description

The course aims to introduce students to the fundamentals of microwave engineering. Specifically, the basic concepts of microwave circuits are introduced, highlighting their differences from traditional electronic circuits operating at lower frequencies.

The main topics covered in the course include:

- Guided propagation of electromagnetic waves (3h)
- Transmission lines employed at microwaves frequencies (2h)
- Linear analysis of multi-port networks (1h)

- Introduction to microwave circuits (1h)
- Passive devices conceived for microwave frequencies (2h)
- Microwave filters (3h)
- Active devices at microwaves (3h).
- Overview of CAD for microwave circuits (1h)

## **CFU / Hours**

2/16

## **Teaching period**

March 17, 2026 - April 21, 2026 (eight 2-hour lectures)

## **Sustainable Development Goals**

QUALITY EDUCATION

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