

COURSE DETAIL

ELECTRONIC FUNCTIONS

Country

France

Host Institution

University of Bordeaux

Program(s)

University of Bordeaux

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

105

UCEAP Course Suffix**UCEAP Official Title**

ELECTRONIC FUNCTIONS

UCEAP Transcript Title

ELECTRONIC FUNCTIONS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course provides a comprehensive introduction to the fundamental functions of analog, digital, and mixed-signal electronics. It emphasizes the modular design of electronic systems and the role of basic functional blocks in modern applications. Topics include digital functions such as counters, registers, and multiplexers; analog functions such as integration, addition, subtraction, and modulation; and mixed functions including multiplexing, analog-to-digital conversion, and digital-to-analog conversion. It also studies functional and timing diagrams, as well as spectral concepts such as sampling and frequency multiplexing. Practical applications are explored in the context of measurement systems and sound transmission technologies, with a particular focus on telecommunications and mobile devices.

Language(s) of Instruction

French

Host Institution Course Number

4TSI307U

Host Institution Course Title

FONCTIONS ELECTRONIQUES

Host Institution Course Details

<https://formations.u-bordeaux.fr/details-formation?type=enseignement&id=73906>

Host Institution Campus

Université de Bordeaux

Host Institution Faculty

Unité de formation des sciences de l'ingénieur

Host Institution Degree

Host Institution Department

Engineering

Course Last Reviewed

2025-2026

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