

## Faculty of Applied Sciences



### ELEC2532 Electronics III : Analog electronic circuits

[30h+30h exercises] 5 credits

This course is taught in the 2nd semester

**Teacher(s):** Jean-Didier Legat, Charles Trullemans, Charles Trullemans (supplée Jean-Didier Legat)  
**Language:** French  
**Level:** Second cycle

#### Aims

During this activity, the students will be given the opportunity

- to discover the main classes of application electronic circuits such as operational amplifiers, voltage references, A/D and D/A converters, oscillators, mixers, phase locked loops, etc.
- to analyse the architecture, to understand the behaviour, and to determine, to compute and to simulate the characteristics of these circuits

#### Main themes

Identical to the contents of the course

#### Content and teaching methods

General purpose analog circuits  
 CMOS operational amplifier  
 Output stages  
 Signal generation  
 Noise  
 D/A and A/D converters  
 Telecommunication circuits  
 Active  
 Oscillators  
 Mixers  
 Phase locked loops

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Teaching and learning methods :

Lectures, exercises

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Prerequisites :

ELEC2530 : Electronics I

Assessment :

Oral examination

References :

Slides on : <http://www.icampus.ucl.ac.be/>

This course is often referring to : Analysis and design of analog integrated circuits, Gray, Hurst, Lewis and Meyer, John Wiley 2001

For more information:

<http://www.dice.ucl.ac.be/~jdl/InfoCours/InfoCours.htm>

**Programmes in which this activity is taught**

**FSA3DS** Diplôme d'études spécialisées en sciences appliquées

**Other credits in programs**

<b>ELEC22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil électricien	(5 credits)	Mandatory
<b>ELME22/M</b>	Deuxième année du programme conduisant au grade d'ingénieur civil électro-mécanicien (mécatronique)	(5 credits)	Mandatory
<b>FSA3DA</b>	Diplôme d'études approfondies en sciences appliquées	(5 credits)	