



Faculté des sciences appliquées

FSA

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: 2nd cycle course

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

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>

Other credits in programs

ELEC22	Deuxième année du programme conduisant au grade d'ingénieur civil électricien	(5 credits)	Mandatory
ELME22/M	Deuxième année du programme conduisant au grade d'ingénieur civil électro-mécanicien (mécatronique)	(5 credits)	Mandatory
ELME23/M	Troisième année du programme conduisant au grade d'ingénieur civil électro-mécanicien (mécatronique)	(5 credits)	
FSA3DA	Diplôme d'études approfondies en sciences appliquées	(5 credits)	
FSA3DS/EL	Diplôme d'études spécialisées en sciences appliquées (électricité)	(5 credits)	