ELEC8323: Analogue Integrated Circuit Design

Contact Details:

NOTE: Email addresses have been obscured - remove the '[' and ']' to make real addresses.

Unit Coordinator:

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Other pages about this Unit:

- Unit area - http://student.ee.uwa.edu.au/units/elec8323

Policies:

- Plagiarism - http://www.ecm.uwa.edu.au/for/students/plagiarism
- Student OS&H - http://www.safety.uwa.edu.au/students

Supplementary assessment is not available in this unit except in the case of a bachelor’s pass degree student who has obtained a mark of 45 to 49 and is currently enrolled in this unit, and it is the only remaining unit that the student must pass in order to complete their course.

Credit: 6 points  Availability: Semester 1 (see Timetable)  Old unit code: ENGT8323, ENGT8323

Outcomes: Students are able to perform design and analysis of various analogue integrated circuits.

Content: This unit provides students with a thorough understanding of the design and analysis of analogue integrated circuits—single and multi-stage amplifiers, current mirrors, band gap voltage references, output stages and other analogue building blocks. Students gain practical design experience with industry standard computer-aided design tools. Students leave with a fresh understanding of best analogue design practices to address the requirements of lower power, lower noise or higher speed. Each student completes the analysis and design of an analogue building block using a state-of-the-art deep sub-0.18 micron CMOS process. This real-world project highlights current issues that analogue IC designers must face, such as mismatch and voltage supply reduction.

Assessment: This consists of an examination and laboratory/project reports. The examination assesses students' understanding of concepts covered in the subject. The laboratory reports assess students' understanding of the area.

Supplementary assessment is not available in this unit.

Location: UWA (Crawley)
Mode: on-campus
Unit Rules:
Prerequisites: ELEC2301 Digital System Design (or equivalent) and ELEC3300 Analogue Electronics (or equivalent)
Contact hours—60 (lectures: 24 hrs; tutorials: 12 hrs; labs: 24 hrs)

Unit Web Page: http://student.ee.uwa.edu.au/units/elec8323
Note: Some unit web pages are still under construction and will be available in 2009.