

MICRO-704

**IC design for robustness**

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Cursus	Sem.	Type	Language of teaching	English
Electrical Engineering		Opt.	Credits	2
Microsystems and Microelectronics		Opt.	Session	
			Exam	Written & Oral
			Workload	60h
			Hours	33
			Courses	33
			Number of positions	

**Remark**

Cours supprimé du plan d'études EDMI et EDEE

**Summary**

This course is aimed at providing engineers with up-to-date information on important current issues of design in analog and mixed-mode integrated circuits. In general, the content of the lectures covers introduction, state-of-the-art in the specific field and practical case studies.

**Content****Resources****Ressources en bibliothèque**

- Understanding delta-sigma data converters / Schreier
- Analog-to-Digital Conversion / Pelgrom
- Methodology for the Digital Calibration of Analog Circuits & Systems / Kayal
- Understanding Delta-Sigma Data Converters / Pavan
- All-Digital Frequency Synthesizer in Deep-Submicron CMOS / Staszewski
- Analog Design Essentials / Sansen
- RF analog impairments modeling for communication systems simulation : application to OFDM-based transceivers / Smaini
- Structured Analog CMOS Design / Kayal
- Charge-Based MOS Transistor Modeling: The EKV Model for Low-Power and RF IC Design / Enz

**Websites**

- <http://mead.ch/MEADNEW/practical-aspects-of-mixed-signal-ics/>