Imperial College London

Design of Analogue Integrated Circuit Blocks

Presented by Prof. Willy Sansen
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"Live" Masterclass
Engage with Imperial academics live online!

The insight in the operation of analogue circuit blocks is essential to understand how most electronic circuits operate. Examples are mixed-signal circuits such as analogue-to-digital converters, sensor interfaces, digital processors, biomedical systems, etc. Such insight allows the design and the optimisation towards low power consumption, for certain speed and noise requirements.

This master class will provide students with an understanding of the operation of electronic circuits. They will be able to apply the knowledge and learning experience to design, and optimise the most important circuit blocks.

Topics covered include:

- Single-transistor RC circuits
- Multiple-MOST circuit blocks
- Feedback systems
- Opamp circuit configurations
- Filters

Who should attend:

This masterclass is designed for undergraduate students studying degree in Electrical and Electronics Engineering or other related disciplines.

Students are expected to have a good level of English proficiency as well as the following technical knowledge:

- Use of the laws of Ohm and Kirchoff
- First-order Bode diagrams

Delivered via Microsoft Teams, over six weeks with a total of 12.5 hours live classes including interactive web-based exercises, quizzes, tutorial sessions, group discussions and project work and presentation.

Upon completion of this masterclass, participants will receive a digital certificate from Imperial College London.

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Centre for Continuing Professional Development
Imperial College London

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