

# TFE4152 - Design of Integrated Circuits Curriculum

## Book: Analog Integrated Circuit Design

Authors: Carusone, Tony Chan Johns, David Martin, Kenneth at [akademia.no](http://akademia.no)

This is one of the best books in existence on analog integrated circuit design, maybe rivaled by Razavi's Design of Analog CMOS Integrated Circuits

All information in chapters 1 - 3 are part of the curriculum for the written exam.

## Book: Integrated Circuit Design

Neil H. E. Weste, David Money Harris at [akademia.no](http://akademia.no)

This book provides a view into integrated circuits from the digital perspective. Some of the topics overlap with CJM (Carusone, Johns, Martin), however, the digital perspective is useful.

The table below shows the excluded sections of the book, in other words, those sections that are **not** part of the curriculum for the written exam.

Chapter	Title	Excluded	—	—	—	1	Welcome to VLSI	1.6, 1.7, 1.9-1.12	2	Devices
2.3.2, 2.3.3	3	Speed	3.3.7, 3.4.6, 3.5, 3.8	4	Power	4.2.2.1, 4.7	5	Wires	5.3.4, 5.3.5, 5.4.3, 5.4.4, 5.4.5	6
6	Scaling, Reliability and Variability	6.4, 6.6, 6.8	7	SPICE	8	Gates	8.2.2, 8.2.3, 8.2.4.2-8.2.4.7, 8.4, 8.7	9	Sequencing	9.3.6 - 9.3.10, 9.4, 9.5.5, 9.5.6, 9.6
10	Datapaths	10.2.5, 10.5.2, 10.5.3, 10.9.3 - 10.9.7, 10.10	11	Memories	11.2.2.3, 11.2.2.4, 11.2.4 - 11.2.7, 11.3.1-11.3.3, 11.4, 11.6, 11.7, 11.8, 11.9	12	Packaging, Power, Clock, I/O	12.4.4 - 12.4.7, 12.5, 12.6.3, 12.6.4, 12.7, 12.8	13	Methodology
All sections excluded from written exam										
14	Test	14.1, 14.3.4, 14.3.5, 14.4, 14.7, 14.8	15	Fabrication	15.3, 15.4, 15.5, 15.6, 15.8					