



UFBA

UNIVERSIDADE FEDERAL DA BAHIA
ESCOLA POLITÉCNICA
PROGRAMA DE PÓS-GRADUAÇÃO EM ENGENHARIAS ELÉTRICA E DE COMPUTAÇÃO



PPGEEC

PPGEE0017 - PROJETO DE CIRCUITOS INTEGRADOS	
OBRIGATORIA: Não	
CARGA HORÁRIA: 60 horas	
NÚMERO DE CRÉDITOS: 4	
EMENTA:	
Modelo do MOSFET; amplificadores (inversores, amplificadores diferenciais, OTA's, Amp-Op's); Amp-Op's de alto desempenho; conversores A-D e D-A; circuitos em modo corrente para processamento de sinais contínuos (espelhos, integradores, filtros); circuitos a corrente chaveada (copiador de corrente, célula T-H, célula de atraso, integradores, filtros); circuitos a capacitores chaveados; considerações sobre <i>layout</i> .	
BIBLIOGRAFIA:	[1] J. D. Plummer and P. B. Griffin. Integrated Circuit Fabrication: Science and Technology. Cambridge University Press; 1st edition, 2024. Roubick Gregorian, Gabor C. Temes. Analog MOS integrated circuits for signal processing. Wiley series on filters: design manufacturing and applications. John Wiley & Sons, Inc., 1986. [2] Kenneth R. Laker, Willy M.C. Sansen. Design of analog integrated circuits and systems. McGraw-Hill series in electrical and computer engineering. Electronics and VLSI circuits. McGraw Hill, Inc., New York, 1994. [3] Mohammed Ismail, Terri Fiez. Analog VLSI: signal and information processing McGraw-Hill series in electrical and computer engineering. Electronics and VLSI circuits. Mc Graw Hill, Inc., New York, 1994. [4] Low-voltage, low-power integrated circuits and systems: low-voltage mixed-signal circuits / edited by Edgar SánchezSinencio, Andreas G. Andreou. IEEE Press, Piscataway, 1998. [5] Rudy Van de Plassche. Integrated analog-to-digital and digital-to-analog converters / Kluwer Academic Publishers, Dordrecht, 1994. [6] Phillip E. Allen, Douglas R. Holberg. CMOS analog circuit design / HRW series in electrical and computer engineering. Holt, Rinehart and Winston, New York, 1987. [7] Neil H. E. Weste, Kamran Eshraghian. Principles of CMOS VLSI design: a systems perspective / Addison -Wesley Publishing Company, Reading, 1993. [8] Yannis P. Tsividis. Operation and modeling of the MOS transistor / McGraw-Hill series in electrical and computer engineering. VLSI, electronics, and electronics circuits. Mc Graw Hill, Inc., New York, 1987.