

PROJETO DE CIRCUITOS INTEGRADOS	
OBRIGATORIA:	Não
CARGA HORÁRIA:	68 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 leiautes.
BIBLIOGRAFIA:	1. 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. Mc Graw 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 Sánchez-Sinencio, 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.