

Nanyang Technological University
School of Electrical & Electronic Engineering

TERP 2001

Project Proposal Form

Project Title : Design and Optimization of Ultra-Small Transistors

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Description : (about 100 words)

Transistor design and optimization has been the corner-stone of modern VLSI circuits. In this project, state-of-the-art technology computer-aided design (TCAD) tools will be used to virtually fabricate and characterize ultra-small transistors used in semiconductor wafer fabs. Students will have a first-hand experience in visualizing modern wafer processing and device operation. Through the project, students will gain practical knowledge as well as stimulating motivation on future research and development in the fascinating field of microelectronics.