



3D INTEGRATED CIRCUITS LAB SESSIONS

Introduction to Chip Design

- Available days 1 through 10
 - Basics of schematic capture
 - Using MicroMagic SUE
 - Basics of physical design
 - Using MicroMagic MAX
- The focus of this labs will be introduction to chip design concepts and basic design tools.
- No previous experience is necessary.

Chip Verification

- Available days ~5-10
 - In this lab you will design a simple circuit, capture the schematic and then implement the physical design.
 - This builds on the basics of the Introduction to EDA adding the concepts of Design Rule Checking (DRC) and Layout Verses Schematic (LVS) checking.
 - The student will learn to use Mentor Graphics Calibre DRC and LVS tools and debugging interface.
 - Previous Introduction to Chip Design lab session or past experience is a prerequisite.

3D Chip Design

- Available days 5-10
 - In this lab, the student will work through a tutorial on 3D chip editing.
 - The lab will also spend time discussing the issues of 3D design and implementation logistics as well as 3D verification.
 - Previous Introduction to Chip Design lab session or past experience is a prerequisite.