

**055:191**

## **Electrical & Computer Engineering Graduate Seminar**

### **“Silicon Run I”**

**Thursday September 17, 2009 3:30-4:20 PM Room 3321 SC**

#### **ABSTRACT**

SILICON RUN I uses live industrial footage to show the many processes necessary to manufacture microchips, including crystal growth, circuit design, and the wafer fabrication process for CMOS technology. Using close-ups of manufacturing processes and device animation, SILICON RUN I provides a clear overview of front-end semiconductor manufacturing. It is an ideal training tool for college students and industry professionals at all levels. The topic summary includes:

- Time Lapse Silicon Crystal Growth
- Wafer Processing
- Design Tools
- CAD/CAE Design
- Design Specialist
- Circuit Design and Layout
- Clean Room Procedure
- Mask Fabrication
- CMOS Transistors
- Device Animation
- IC Manufacturing Process

Company Information: The Silicon Run series had its beginnings in 1986 when Ruth Carranza produced the original Silicon Run for her master's degree at Stanford University. Her advisor, Jim Plummer, Dean of Engineering, enthusiastically supported her goal to produce a film about microelectronics, incorporating the principles taught in academic courses with the fascinating images of live manufacturing.

The result was an award-winning film that launched the Silicon Run Series. The film Silicon Run I with its technical yet entertaining style, set a new standard for instructional films on semiconductors. Its success led to grants from industry and the National Science Foundation for the production of Silicon Run II and its distribution to the National Electrical Engineering Department Heads Association.

**All ECE graduate students are required to attend.**

For more information contact:

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