Announcing…

BEYOND CMOS:
EMERGING NANOTECHNOLOGIES

3 credits
Fall 2017 - EECS 598 Section 002
Instructor: Professor Becky Peterson

Silicon CMOS technology has enabled all of modern communications and electronics. The scaling of integrated circuits predicted by Gordon Moore in 1965 has dominated the industry for the last 50 years. But in the next five years, it is predicted that we will reach the end of the road for transistor scaling. In this course, we'll discuss the multitude of devices and circuit architectures that may (or may not!) replace silicon CMOS in the years to come.

Beyond CMOS will survey the devices, circuit architectures, and integration challenges facing the semiconductor industry in the "More than Moore" era, using a mix of lectures, discussions, and student-led projects. The content will be suitable for **junior/senior undergraduates or graduate students** interested in IC design/VLSI or solid state materials and device/nanotechnology. The course counts as a *Flexible Technical Elective for undergraduate EE & CE majors* and an *EECS elective for CE majors*. Within the ECE graduate program, it counts as a *Major Course for Solid State/Nano* and as an *Elective Course for VLSI/IC*.

Questions? Contact Prof. Peterson at blpeters@umich.edu

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