nanoHUB-U offers NEW course on edX

Fundamentals of Nanoelectronics: Basic Concepts

Starts March 26th, 2015

Join the 2,200+ students already registered!!!

The modern smartphone is enabled by a billion-plus nanotransistors, each having an active region that is barely a few hundred atoms long. Interestingly the same amazing technology has also led to a deeper understanding of the nature of current flow on an atomic scale.

This course aims to make these lessons from nanoelectronics accessible to anyone in any branch of science or engineering.

The course is comprised of 4 units covering the following topics:

UNIT ONE: The New Perspective
UNIT TWO: Energy Band Model
UNIT THREE: What and Where is the Voltage
UNIT FOUR: Heat & Electricity, Second Law and Information

Learn more

More nanoHUB-U courses

- Nanoscale Transistors
- Nanophotonic Modeling
- Thermal Energy at the Nanoscale
- Thermoelectricity: From Atoms to Systems