

Title: Digilent Electronics Explorer Board in the Classroom

Speakers: Scott Hanson (Digilent and Washington State University) and Gerry Recktenwald (Portland State University)

Date: 8:30 – 11:30 Saturday, March 17, 2012

Place: University of Portland, Shiley Hall, Room 249 (map at <http://pnw.asee.org/Newsletters/2011/University-of-Portland-Campus-Map-2011-12.pdf>)

Cost: Free. RSVP to Branimir Pejcinovic (brano@cecs.pdx.edu)

Abstract: Lab experimentation is essential component of all engineering programs. Many such labs will involve some type of digital and analog circuit breadboarding and measurement experiments. During this workshop attendees will gain better understanding of: current state of the art, potential uses of Digilent and other platforms in engineering curricula, and will get some hands-on experience in utilizing Digilent's Electronics Explorer board. This board includes all of the basic instruments of a standard electronics lab bench (power supplies, full function generator, oscilloscope and logic analyzer,) and offers a low-cost personal electronics lab option for colleges and high schools alike, and for distance learning. Schedule is as follows:

1. Introduction to the Electronics Explorer board (15 min)
2. Explorer use in sophomore circuits & junior electronics (30 min)
3. Arduino in a freshman Mech Eng course (Recktenwald, PSU, 15min)
4. Arduino-compatible PIC32 Microcontroller from entry level to advanced (30 min)
Break 10.00-10.30am
5. Hands on workshop (60 min) on the Digilent EE and PIC32 boards in the classroom
(A limited number of attendees will receive free Digilent Cerebot Mx4cK kits.)

This workshop is also part of the 82nd Annual Pacific Northwest ASEE Section Conference 15-17th March
See http://pnw.asee.org/Newsletters/2011/ASEE_PNW_2011.htm for details