If you think you know seismic ground motions, think again:

**A practical course for working professionals to understand the basis for code-mandated seismic ground motions**

**Purpose:**
The seminar is intended to bridge the gap of understanding between seismologists, civil, structural, and geotechnical engineers. Attendees will leave the short course with an improved understanding of seismic ground motions and with an understanding of the background used to develop the ground motion values used in the building code. Speakers will help demystify and clarify the terms and concepts used in the development of seismic ground motions.

**Location:**

**Thursday, March 5, 2015**  
The Gathering Place at Gardner Village  
1100 West 7800 South, Building 24, West Jordan, Utah 84088

**Invited instructors:**
Dr. David Boore, Geophysicist, U.S. Geological Survey  
Ivan Wong, Principal Seismologist, AECOM.

**Speakers on Selected Topics:**

Brent Maxfield, SE, Church of Jesus Christ of Latter-day Saints  
Barry Welliver, SE, BHW Engineers,  
Leah O’Neill, EIT, Reaveley Engineers

**Who Should Attend:**

- Structural Engineers  
- Geotechnical Engineers  
- Seismologists  
- Civil Engineers  
- Geologists  
- Students

**Associated EERI Joyner Lecture by David Boore:**
Ground Motion Prediction Equations - Past, Present, and Future  

**Wednesday, March 4, 2015 - 5:30 P.M. Social, 6:00 P.M Lecture**  
Warnock Engineering Building - Room 2230  
72 Central Campus Drive, Salt Lake City, Utah 84112  
The Joyner Lecture will provide background and context to the short course. This lecture will have a different focus than Dr. Boore’s presentation at the short course.  

http://utah.eeri.org/?p=255
Bios:

David M. Boore is a geophysicist with the USGS in Menlo Park, CA. He is one of the developers of one of the Next Generation Attenuation Relationships Ground Motion Prediction Equation (GMPE) Models. David will be speaking on the topic of deterministic ground motions and explain how ground motion prediction equations are developed.

Ivan Wong is a principal seismologist with AECOM (previously URS/Woodward-Clyde), based in Oakland, California, a firm for which he has worked since 1976. He is an internationally recognized expert in seismic hazard evaluations with 38 years of experience in seismology, seismic geology, seismotectonics, and earthquake ground motions. Ivan will be speaking on the specific characteristics of the Wasatch Fault and other Utah Faults. He will also discuss the development of probabilistic and code ground motions and explain how these differ from deterministic ground motions.

Brent Maxfield is a structural engineer with the Church of Jesus Christ of Latter-day Saints based in Salt Lake City, Utah. Brent will introduce the topic of seismic ground motions and lay a foundation of understanding for the topic covered in the short course. He will help bridge the gap of understanding between structural engineers, geotechnical engineers, geologists, and seismologists.

Leah O’Neill is a structural engineer with Reaveley Engineering in Salt Lake City, Utah. Leah will introduce the PEER Ground Motion Prediction Equation (GMPE) Excel spreadsheet and provide direction on how to use it. A newly-developed Ground Motion Comparison spreadsheet will also be presented.

Course schedule:

7:15 am Registration opens, continental breakfast
8:00 am Welcome and Introduction - Brent Maxfield | 2015 President, EERI Utah Chapter
8:15 am Simplified Seismic Ground Motions - Bridging Information between Science and Engineering - Brent Maxfield
9:45 am Morning Break
10:00 am Deterministic Seismic Ground Motions and the PEER NGA Ground Motion Prediction Equations (GMPEs) - David Boore
11:15 am Utah Fault Parameters for use in GMPEs - Ivan Wong
12:00 pm Introduction of GMPE Excel Worksheet - Leah O’Neill
12:30 pm Lunch and GMPE Variable Study (Please bring your laptop)
1:30 pm Results of Variable Study - Leah O’Neill
2:00 pm Design Ground Motions. Comparing Code, Site-Specific Deterministic and Probabilistic Ground Motions in Utah - Ivan Wong
3:15 pm Afternoon Break
3:30 pm Utah Earthquake Scenario - Barry Welliver
4:15 pm Wrap-up Discussion - Brent Maxfield
4:45 pm Adjourn

Registration fees:

Online until February 26, 2015:

- All Attendees $220.00
- Students $30.00

Online after February 26, 2015 or at the door (registration will be capped at 200 persons, please register early to ensure a seat):

- All Attendees $250.00
- Students $35.00

You can register for the short course at the following website:

http://utah.eeri.org/?p=259