

Quick Links

- [Year-at-a-Glance School Calendar](#) (pdf)
- [CCE Online Calendar](#)
- [Advising Sign-Up](#)
- [Scholarships](#)
- [OSU Career Services](#)

Contact Us

School of Civil and
Construction Engineering
Oregon State University
220 Owen Hall
Corvallis, OR 97331
541-737-4934
cce@engr.oregonstate.edu
<http://cce.oregonstate.edu/>

Calendar

APR 9, Mon – [Science Pub](#). What Goes Around Comes Around: Chasing Air Pollution in the Western United States. Old World Deli, 6-8pm.

APR 13, Fri – CCE Faculty Meeting, 311 Kearney Hall, 9-10am.

APR 13, Fri – [Contractors Night](#). Student attendance is complimentary. Guest registration is \$25. Stop by 101 Kearney Hall to register. Deadline to reserve your spot is 5pm on Tuesday, April 10th. This is a great opportunity to meet and network with industry contacts.

APR 14, Sat – Good luck to all those taking the [FE & FLS Exam!](#)

APR 16 - Last day to submit [Faculty Regalia Order](#)

Seminars

APR 9, Mon - **Structures** Faculty Candidate Presentation, 311 Kearney Library, 2pm. Open to all. [Abstract here](#).

APR 10, Tues – “*Safety Performance of Curve Advisory Speed Signs*,” presented by Mr. Raul Avelar in defense of his thesis for the Doctor Philosophy in Civil Engineering Degree. 103 Owen Hall, 1pm. Advisor: Dr. Karen Dixon. [Read abstract here](#).

APR 11, Wed - **Geomatics** Faculty Candidate Presentation, 311 Kearney Library, 11am. Open to all. [Abstract here](#).

In the News

Congratulations to Christopher Gifford-Miears, recipient of [ASCE's Arthur S. Tuttle Memorial Scholarship](#). Through the generosity of ASCE President, Arthur S. Tuttle, a scholarship bequest was established in 1983. The proceeds of the memorial fund are for tuition assistance to students during the first year of graduate studies in civil engineering. Scholarship selection is based on appraisal of applicants' justification, educational plans, academic performance, potential for development, leadership and financial need.

[What do you do when you see yellow?](#) (KVAL-TV)

The area of the road where this choice is made is known as the “dilemma zone,” and OSU's [David Hurwitz](#) says they're studying this area to cut down on the number of crashes on roadways.

In Memoriam

We are saddened to share that that one of our CEM Sophomores, Colton Fettig, was killed in a car crash in Alaska during Spring break. He was living & working in Alaska

this term and taking online courses. If students want to talk with someone, [Counseling and Psychological Services](#) (CAPS) is available. [Corvallis Gazette-Times](#)

Opportunities

MECOP Applications are due April 10, 2012, by 5pm. The application template is here, <http://mecop.ous.edu>. In addition to the on-line application submittal, required materials include two printed copies of the application, two copies of unofficial transcripts, and one copy of the student agreement mailed or delivered to the MECOP office in Corvallis.

Career Services - [How to Apply for State and Federal Jobs](#) (4/13); coming up, [Career Fair](#) (4/25).

Library Workshops for Undergrads - free workshops designed to help undergraduates advance their research skills. Classes begin next week!

The **SMILE Program** is looking for volunteers to help with the High School Challenge on Friday, April 13, 11-12pm and 1-3:45pm. Volunteers will assist teams of students in completing a science communications media project, in which high school students will be making video, podcasts, and social media sites around the topic of Harmful Algal Blooms. No science background necessary- just an interest in working with youth! If you can't be there for the entire time, also not a problem, though we do ask that you commit to at least half the time period. These students come from around the state of Oregon, primarily from rural and low-income and educationally under-served communities, and all participate in after-school science and math clubs. As SMILE is a pre-college program, we try to get SMILE students excited about college, and the best way to do this is for them to interact with people like you! There will be two trainings at the SMILE office next week (18 Gladys Valley Center, bottom of gymnastics building across from Kerr and next to the library- our office is on the side of the building facing 15th St). Volunteers need to attend only one: Tuesday, April 10th at 5-6pm *or* Wednesday, April 11 at 5-6pm.

Advising

The COE professional school application for Fall 2012 is now open and available at <http://engineering.oregonstate.edu/content/applying-engineering-professional-program>. Application is due on July 1, 2012 at 11:59 pm. Please make sure you read the Fall 2012 Frequently Asked Questions regarding pro-school admission linked on the page above. If you have questions regarding the pro-school admission process, please contact your academic advisor or email askengineering@oregonstate.edu

Friday, April 13 is the last day to add or drop a class for Spring Term. You may drop a class via the web up to 11:55 pm on Friday night. To add a class in the second week, you must get an override from the department offering the class and add by 5 pm, Friday, April 13.

Electronic wait-listing is now frozen. You can no longer place yourself on an electronic waitlist and the nightly registration process is no longer running. If you are on a waitlist and unsure of your status, check with the department offering the course.

SENIORS –The DEADLINE to apply for Spring Term graduation is Friday, April 13. To apply or update your application to graduate, go to your Student Online Services account, enter the Student Records menu, and choose the appropriate item. If you have ALREADY applied to graduate, you do not need to reapply unless you are changing terms.

If you plan to graduate Summer or Fall term of this year and have NOT already applied to graduate, please complete the Online Application for Graduation by Friday, April 13.

You may view your degree audit online by going to your Student Online Services account, choosing Student Records MyDegrees. Be sure to check over your degree audit to make sure that all requirements will be met. If you have any questions, see your advisor or consult graduation information online at <http://oregonstate.edu/registrar/apply-graduation>

SUMMER SCHOOL REGISTRATION – begins Sunday, April 15. This is a great time to catch up on classes.

Graduation

APRIL 13 – deadline to apply for graduation.

APRIL 17-18 - [Graduation Fair](#) (Grad Fair) 10 - 4 pm, in the MU Ballroom. This is your opportunity to get information about the ceremony and make contact with the OSU Alumni Association. You can also buy:

- Cap and gown
- Class rings and other souvenirs
- Yearbooks
- Commencement announcements

APRIL 26 – deadline to confirm commencement attendance

JUNE 15, Fri - [CCE Graduation Celebration](#), an evening celebration for parents, relatives, and friends with your CCE faculty and staff. Plan on joining us for a few short speeches, student chapter year-in-review presentations, and a grad walk across the stage. Seating is unlimited, lots of photo opportunities and a year-end send off! Cake and coffee follow ceremony. All graduates in Spring, Summer & Fall 2012 will be invited to participate via email in mid-May. Tentative timeline is 7-9pm. (*Note: cap & gown are required.*) And remember that area lodging fills up quickly! A follow-up email to all graduates forthcoming in the next few weeks.

JUNE 17, Sun – [OSU Commencement](#), Reser Stadium, *rain or shine*

Student Groups

APR 11, Wed – **AGC Speaker Meeting**, SD Deacon in 112 Kearney Hall, 6pm.

APR 12, Thurs - **ASCE Speaker Meeting**. Jason Thompson, PE, SE, LEED® AP, from KPFF Consulting Engineers will speaking on structural systems selection. 305 Kearney Hall. Refreshments provided. Please provide ASCE Student # at door.

Save the Date: The AGC Student Chapter Golf Tournament takes place on Friday, May 4th. Participation is complimentary for AGC Student Chapter members and includes a round of golf as well as a BBQ lunch. Sign up will be available on Monday, April 16th in Kearney Hall 101. Mark your calendars!

Interviews

APR 13, Fri - Traylor Bros. will conduct interviews for full time and summer internship positions. Sign up will be available starting at 9am on Monday – please bring your resume.

Jobs

The STEM Academy, the OSU program for science and engineering outreach to K12 students, is looking for a student worker for spring and summer. If interested, please contact Cathy Law (catherine.law@oregonstate.edu; 541-737-1822). Qualifications desired:

1. Bilingual Spanish/English
2. Office work experience (or a quick-learner).
3. Can work spring term.
4. Can for sure work this summer as a work study student (will need to be enrolled in summer term).
5. Experience or interest in working with youth (particularly underrepresented youth).

GIS Intern - Tualatin Valley Water District, Beaverton; \$15-17/hr. Deadline to apply is April 26.

The **Student Sustainability Initiative** (SSI) has two internship positions available. Both positions are 1-5 hours per week minimum, *unpaid*, and come with the opportunity of credit. Applications can be submitted by emailing a cover letter and resume to the Alisa Narvaez, the SSI Visibility Coordinator (ssi.visibility@oregonstate.edu). The deadline for both positions is Wednesday, April 11th, 2012.

1. **Journalism Intern**: The News and Journalism Intern (Journalism Intern) will be responsible for promoting the Student Sustainability Initiative (SSI) through the research, writing, and publication of original content (e.g. articles, blog posts, news stories, etc.).
2. **Web Intern**: The Web Intern will be responsible for promoting the Student Sustainability Initiative (SSI) through the pursuit and improvement of digital visibility efforts (e.g. website, online social media, etc.)

The National Institute of Standards and Technology (NIST) Engineering Laboratory (EL) seeks a graduate student interested in earthquake engineering for a student appointment in support of its role in the National Earthquake Hazards Reduction Program (NEHRP). The student will conduct research supervised by a research structural engineer within the NEHRP group at NIST. The research project deals with investigating current simplified code provisions in ASCE 7 for approximating the fundamental period of a building. The student must hold an undergraduate degree in Civil, Architectural or Structural Engineering, which included courses in steel and concrete design and must have completed a graduate course in structural dynamics. A student with an undergraduate degree from an ABET accredited program and a good understanding of US building codes is preferred. A parametric study, directed by the research structural engineer, will be carried out to investigate the efficacy of the current code provisions and to make recommendations for any needed improvements.

The student will work at the NIST campus in Gaithersburg, MD for approximately 10-12 weeks. Once the student returns to their university, the results will be distilled into a formal NIST technical report and disseminated to the public. The results can form the basis for the student's graduate thesis. Applications for this position should be submitted through one of the following NIST Student Employment Programs:

- [Student Temporary Employment Program \(STEP\)](#)
- [Student Career Experience Program \(SCEP\)](#)

Interested students are encouraged to apply for the program that best fits their qualifications and situation. This is a paid position with competitive compensation based on the student's qualifications. Additional information about the NEHRP group at NIST and the research project the student will be working on can be found at:

- NEHRP @ NIST - <http://www.nist.gov/el/nehrrp>
- Lateral loads research project - <http://www.nist.gov/el/nehrrp/lfdp.cfm>

Contact Dr. Matthew Speicher (speicher@nist.gov) if you have questions about the project that is the subject of the student appointment.

Build Change is an international non-profit social enterprise that designs earthquake-resistant houses in developing countries and trains builders, homeowners, engineers, and government officials to build them. We have opportunities at our Headquarters in Denver as well as our Haiti and Indonesia offices. [Applications are currently being accepted.](#)

The **Missile Defense Agency** offers a 2 year developmental program for graduating engineers (Bachelor, Master and PhD) for [30 entry level engineers with degrees](#) conferred prior to 30 Jun 12. All disciplines of engineering are sought for this very formalized program. The program is designed to prepare selectees for non-competitive appointment to the Missile Defense Agency at the full performance level upon successful completion of the program. This is a fully paid (with full benefits) position where each selectee has an individualized development plan, a supervisor and a mentor. Career services officers may contact me to set up a Video teleconference VTCs with MDA's MDCCDP entry Level engineers in the program to talk about the MDA mission and engineering. We are conducting VTCs almost every weekday during April with up to three schools at a time. Potential candidates may find current recruiting data at www.MDACareers.com at the Entry Level

Structures Faculty Candidate Presentation

"Earthquake Performance of Reinforced Concrete Structures"

presented by Anna Birely (Univ. of Washington), 4/9

Abstract:

This presentation will focus on past and current activities to study the seismic performance of reinforced concrete structures. Topics discussed include practical modeling of beam-column connections, a structural wall experimental test program, and evaluation of walled buildings damaged in the 2010 Chilean earthquake.

In reinforced concrete moment frames, beam-column joints add flexibility to the system that must be accounted for in models used for design and/or evaluation of existing structures. Linear and nonlinear modeling recommendations to account for joint flexibility are discussed. Recommendations were developed to be readily adopted in structural analysis software used in design offices and were validated using an experimental data set of beam-column joint subassemblages.

Reinforced concrete structural walls are one of the most common lateral load resisting systems used in mid- and high-rise buildings. However, post-earthquake reconnaissance teams have documented many instances of severe damage to and/or failure of structural walls following major earthquakes. Such severe damage can result in significant economic losses and loss of life, either of which can be devastating to a community. To enable performance-based design of buildings and to enhance current evaluation techniques for existing buildings, engineers require detailed performance data to develop damage prediction models and high-resolution response data to validate numerical models. Such data is typically obtained from experimental test programs; however, there have been few experimental test programs that are representative of modern, code-compliant structural walls, and the necessary performance and response data are limited. To address these needs, an experimental test program representative of modern construction was undertaken. Results presented will focus on unique damage states observed in walls with lap splices and innovative data analysis methods to improve the understanding of wall performance and to support the validation and development of numerical models.

Finally, current activities to study the performance of reinforced concrete walled buildings in the 2010 Chile earthquake are presented. The goals of the study include the evaluation of current tools for the assessment of existing buildings in seismic regions and evaluation of the ability of current analysis methods to predict observed behaviors and failure modes.

Geomatics Faculty Candidate Presentation

"New Technology Equals New Roles, Responsibilities for a Surveyor"

presented by Dan Gillins, PLS (Univ. of Utah) 4/11

Abstract:

From the early 1700's to the 1950's, surveyors typically measured angles with transits and pulled distances with chains. However, recent advancements in technology, especially over the past 20 years, have given the surveyor new roles and responsibilities. Global positioning satellite systems (GPS), Geographic Information Systems (GIS), and high definition surveying technology (e.g. LiDAR) are rapidly changing the surveying industry, as well as engineering, construction, architecture, forensics, archeology, and the marketing industries. These changes lead to new opportunities and demands on surveyors to educate new information, and perform collaborative research with other disciplines.

This presentation discusses how my surveying expertise in GPS, GIS, and LiDAR prepares me to partner with future research endeavors. I will explain how each of these technologies provides methods to efficiently gather, model, integrate design, and store large quantities of spatial data. Well organized spatial databases provide a researcher extra perspective, and can be used in a wide range functions. For example, I will explain how I used a spatial database to model and predict liquefaction hazards from seismic events. In addition, I will discuss how to develop highly

accurate 3D spatial databases that are excellent for as-built surveys, models, measurements of deformations, integrative designs, non-destructive tests, and much more.

Go Beavs!

Forward newsletter submissions to nancy.brickman@oregonstate.edu by **Friday** each week. Prior newsletters archived at <http://cce.oregonstate.edu/news/>