

SCHOOL OF SUSTAINABLE ENGINEERING AND THE BUILT ENVIRONMENT

Del E. Webb School of Construction

Students shine at construction competition



The Project Risk team consisted of (left to right) Alexandra Taylor, Scott Carli, Rebecca Freitas, Josh Mischung and Ian Kennedy.

Each year ASU students travel to Reno, NV to compete in the **Associated Schools of Construction (ASC)** competition. This year 50 students consisting of eight teams competed against teams from universities and colleges in the West Coast and Southwest that have construction management programs.

ASU placed **first** in the **Determining Project Risk** competition that challenged students to assess the risks for the construction of a large medical and research building for the University of California in San Francisco. Students had to show how they would manage costs and work schedules, negotiate subcontractor services and work out site logistics.

The **Design-Build** team took **third** place in the Design-Build category. Students had to devise viable plans for a 1,100 stall parking structure that could

be integrated into an adjacent casino/amphitheater complex in Tucson. The project had to be cost-estimated, designed and built within roughly one year.

Teams were judged by representatives of companies who worked on these actual projects. Besides showcasing their skills, students met with industry recruiters. Many companies in construction and related businesses sponsor the competitions. ASU's teams are supported in part by more than 20 local construction companies, some of whose employees volunteer time to mentor student teams.

The primary goal of the competition is to prepare students for their eventual careers in construction by working through real-life problems and scenarios that they actually might encounter.

ASU competed with teams in the following problem categories: LEED, BIM, Determining Project Risk, Design Build, Commercial, Heavy/Civil, and Electrical Concrete. All teams gave solid efforts and represented ASU well.



The Design Build team consisted of (left to right) Richard Stradling, Jessica Haycock, Skyler Holloway, Brittany Hoste, William Dietz and Bret Burnham.

Greetings from DEWSC



Despite what might appear as a stormy period in the industry and in academia, the Del E. Webb School of Construction remains steadfast on its course. In their personal exit interview with me, all the graduating seniors expressed their satisfaction with the education they received. The overwhelming majority of them (about 90%) have already found appropriate jobs when they graduate. This is no small accomplishment when one takes into account that this spring we graduated our largest class in the history of DEWSC and that the construction industry is yet to recuperate. I attribute this success to the superb quality of our students, our faculty and last, but not least, to the strong support of our alumni. I am proud to have been part of the school for the past 16 years and honored to have been trusted with its helm.

Avi Wiesel, PhD, PE, DEWSC Interim Programs Chair



Community outreach activities by ASU student chapter earn Excellent University Award

Arizona State University has been named an **ACI Excellent University for 2010**. The American Concrete Institute (ACI) Award for University Student Activities was initiated to recognize universities that have participated in ACI-related activities. Only 12 of the 60 eligible universities are receiving this award for 2010! ASU met criteria for the award largely through achievements of faculty members and students in the Concrete Industry Management program, particularly activities by members of the **ASU ACI student chapter**.

The chapter, which has more than 25 members, has established a working relationship with the Arizona ACI professional chapter. That partnership has helped provide construction professionals to teach courses or serve as guest speakers in classes, organize field tours, assist students in construction-related competitions, and provide funding for student scholarships and trips to national conferences.

ACI Excellent University Award winners were formally announced at the institute's national convention in Tampa, FL on April 3-7, 2011.



Pictured are chapter board members (left to right) Joshua Marriott, Sawyer Zuber, Amanda Nichols, Ashley Bagley and Kim Rahberger.

Student organizations provide a way to reach out

The **ASU Associated General Contractors (AGC) student chapter** participated in the **2010 Rock and Roll Paint-A-Thon**. On October 23, 2010, over 80 homes across the Valley and state were painted by over 2,000 volunteers. More than 150 lives were personally touched by the generosity of neighbors and community members.

First DEWSC PhD in Construction to take a faculty position



Marcel Maghiar, a graduate of the MS and PhD program in construction, will join the Construction Management & Civil Engineering faculty at Georgia Southern University. Marcel's expertise is in computer modeling of construction processes. His PhD work allows the profiling of each journeyman's affinity for productivity, quality and safety. By analyzing the behavior of framers, Maghiar has also found that safety is held at the same level of importance as productivity.

Student Awards

Leadership and Service Award – This award is chosen by the DEWSC program chair and staff when we have a deserving undergraduate or graduate student or students. These awardees have shown outstanding leadership qualities during their time at ASU in various student-lead endeavors within DEWSC and/or the community. The fall 2010 Leadership and Service Award went to **Ashleigh Feiring** and **Josephine Bierwagen**. The spring 2011 Leadership and Service Award went to **Brittany Hoste** and **Homero Garcia, Jr.**

Outstanding Student Award – This award recognizes one student for outstanding effort in the classroom and out of the classroom over their career in the DEWSC program. The award for fall 2010 went to **Chase Farnsworth** and spring 2011 to **Rebecca Freitas**.



Ashleigh Feiring



Homero Garcia, Jr.



Rebecca Freitas



Chase Farnsworth

Student teams finish in the top 10 at Concrete Construction Competition

Three student teams finished in the top 10 in a national construction project competition sponsored by the American Concrete Institute and the American Society of Concrete Contractors. Close to 50 teams from 16 universities throughout the United States entered the competition. Students presented to a panel of experts their solutions to a concrete paving and construction problem involving rehabilitation of the Dames Point Bridge, a cable-stayed bridge over the St. Johns River in Jacksonville, FL. The competition problem simulated a potential difficulty that builders and managers could face in a real bridge construction project of this kind.

The **three ASU teams** competing won **third-place, sixth-place and 10th place awards**. The **third-place team** consisting of **Alexander Bertheau, Morgan Spears, Ashley Bagley** and **Patrick Tarkowski** was invited to the American Concrete Institute national convention in Tampa, FL to present their concrete construction problem solution to the institute's Construction Liaison Committee and be recognized for their achievement.



Del Webb School students captured third place in the 2011 Concrete Construction Competition sponsored by the American Concrete Institute. (l to r) Larry Taber, ACI Student Committee chairman, Alex Bertheau, Ashley Bagley, Morgan Spears. Not shown; Patrick Tarkowski

Fulbright Scholar helps evolve construction industry



Kristen Barlish sees a panorama of cause-and-effect when she examines buildings.

Her studies at Arizona State University in construction and facilities management have taught her to see structures as more than just the sum of tools, materials and designs.

To her, the ways in which buildings are constructed reflect the varied cultural, historical and even psychological perspectives of the builders.

Her aspirations to go beyond technical comprehension of the construction industry and delve into these deeper aspects have helped Barlish earn a prestigious **Fulbright Scholarship**. She intends to use the scholarship funding to support research into how understanding such motivational roots can help pave the way for more efficient and sustainable approaches to constructing new buildings and rehabilitating older ones.

Fulbright grants are part of a U.S. government-sponsored

international educational exchange program to promote understanding between U.S. citizens and people from other countries. Students are awarded scholarships based on academic merit and leadership potential. They get opportunities to study, teach, conduct research and exchange ideas, with the goal of contributing to efforts to find solutions to common international challenges.

Beginning in September, Barlish will study for nine months in Turin, Italy, at the Politecnico di Torino, which boasts one of Europe's most prominent engineering and construction programs. Barlish earned a bachelor's degree in 2010 from the Del E. Webb School of Construction Programs, part of the School of Sustainable Engineering and the Built Environment, which is one of ASU's Ira A. Fulton Schools of Engineering.

She's now pursuing a master's degree in the same program and already has been accepted into the doctorate program. During her Fulbright school year abroad, she plans to begin work that will form the basis for her doctoral dissertation. Her primary career ambition isn't a narrow one. "I want to do more than work in the construction industry," Barlish says. "I want to change it. I want to be part of its evolution."

Students visit project sites

One of the challenges inherent in teaching construction courses from a classroom is the lack of perspective on the work being done in the field. As such, we are always seeking opportunities to provide students with field exposure and allow them to observe the actual work being done. Students in the Heavy/Civil Degree Concentration visit project sites to gain first-hand field experience.



Students visit the Caterpillar Proving Grounds in Green Valley, AZ

Students visit the Pulice/Granite joint venture construction project on the south 101/202 interchange HOV flyover lane in Chandler, AZ

Pass it Forward!

DEWSC alumni know that giving is an even greater pleasure than receiving. DEWSC alumni such as **Steve Basila, Brien Brenfleck, Jeremy Meek, Eric Petrie, Martin Ramirez, Jason Rusky**, and **Jeff Stoddard** give back by teaching current students. Members of our spring graduating class are mentoring high school students as a way of giving back and passing forward the DEWSC legacy.

Keep the DEWSC spirit going!



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Desert Doghouse: Building a bridge between industry and education



The Del E. Webb School of Construction developed a design/construction competition titled Desert Doghouse as an educational challenge to Arizona high school students. The challenge was to design and construct a doghouse utilizing sustainable and environmentally conscious material and methods.

This student competition aligned with the design aspirations guiding ASU to become The New American University and with the Arizona Department of Education's Student Education and Career Action Plan to help develop the student's academic and career goals. Desert Doghouse is a unique way to bring industry, ASU, and high school students together by providing an opportunity to learn about career possibilities in construction and sustainability with the built environment and encourages high school students to continue their education.

Industry interaction with ASU and the high schools also helps connect the three groups that are dependent on each other for learning and future employees. Desert Doghouse provides an outstanding recruiting effort to bring the best and brightest students to ASU who are excited about how they can have an impact on society. The doghouses were featured at the Build It Green Conference in April at the Phoenix Convention Center with awards going to the Most Sustainable, the Most Innovative, and the People's Choice Award.

*Top left: People's Choice Award
Brophy College Preparatory*

*Left: Most Sustainable Award
Payson High School*

*Right: Most Innovative Award
Liberty High School*

