February 6-8, 2013
Phoenix, Arizona

CIEC
Engineering Education in an Era of Globalization
The Conference for Industry and Education Collaboration
February 6-8, 2013
Phoenix, Arizona

CIEC
Engineering Education in an Era of Globalization
The Conference for Industry and Education Collaboration
www.asee.org/ciec2013

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University of Cincinnati

Assistant General Conference Chair
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Indiana University-Purdue University Indianapolis

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North Carolina State University

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Linda Thurman
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Johns Hopkins University

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Rolls-Royce

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University of Tulsa

Nancy Kruse
University of Tulsa

Golf Outing Coordinator
Paul Plotkowski
Grand Valley State University

Companion Program Chair
Diana Rennels

CIEC Executive Board Chair
Ilka Balk
University of Kentucky

CIEC Acronym Guide

ASEE American Society for Engineering Education
CEED Cooperative and Experiential Education Division
CIEC Conference for Industry and Education Collaboration
CIPD College-Industry Partnerships Division
CMC Corporate Member Council
CPDD Continuing Professional Development Division
ET Engineering Technology
ETC Engineering Technology Council
ETD Engineering Technology Division
ECETDHA Electrical and Computer Engineering Technology Department Heads Association
ETLI Engineering Technology Leadership Institute
IACEE International Association of Continuing Engineering Education
JET Journal of Engineering and Technology

See page 2 for descriptions of organizations
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Sponsors

Altair
The Boeing Company
CD-adapco
Northrop Grumman Corporation
US Didactic
Pearson Publishing
Quanser
Regional Center for Next Generation Manufacturing (RCNGM)

Companion Program

Companions will meet for a breakfast orientation session on Wednesday, February 6 at 8:00 am in Annabelle’s Restaurant, North Room. Information about tours, shopping and other activities available for companions will be presented.

On-Site Registration Schedule

Tuesday, February 5, 2013  7:30 am – 5:00 pm
Wednesday, February 6, 2013  7:30 am – 5:00 pm
Thursday, February 7, 2013  7:30 am – 12:00 noon
Friday, February 8, 2013   8:00 am – 10:00 am
Organizations and Acronyms

American Society for Engineering Education (ASEE)
Founded in 1893, the American Society for Engineering Education is a non-profit organization of individuals and institutions committed to furthering education in engineering and engineering technology. It accomplishes this mission by promoting excellence in instruction, research, public service, and practice; exercising worldwide leadership; fostering the technological education of society; and providing quality products and services to members.
http://www.asee.org

Cooperative and Experiential Education Division (CEED)
This division strives to develop high principles and maintain the integrity of cooperative education throughout academia and industry. The general goals of the division are to foster a better understanding of cooperative education, improving co-op services to employers, and promote cooperative education in engineering and engineering technology to business and industry both national and international. The division also emphasizes professional standards and accreditation of co-op programs.
http://ceed.asee.org

Conference for Industry and Education Collaboration (CIEC)
The Conference for Industry and Education Collaboration is organized and supported by four divisions of the American Society for Engineering Education (ASEE): the Cooperative and Experiential Education Division (CEED), the College-Industry Partnerships Division (CIPD), the Continuing Professional Development Division (CPDD), and the Engineering Technology Division (ETD)
www.asee.org/ciec2013

College-Industry Partnerships Division (CIPD)
CIPD is an organization that fosters a strong alliance between engineering employers, educators and those interested in promoting partnerships that enhance science and technology
http://cip.asee.org

Continuing Professional Development Division (CPDD)
CPDD fosters the development, delivery and improvement of continuing education in all areas that pertain to allied branches of science, technology, engineering and math. CPDD provides advocacy for and leadership in lifelong learning, and it creates opportunities for the exchange of information and expertise among providers and consumers of educational programs.
http://cpd.asee.org

Corporate Member Council (CMC)
The Corporate Member Council’s mission is to foster, encourage and cultivate the dialogue between industry and engineering educators.
http://www.asee.org/member-resources/councils-and-chapters/corporate-member-council

Engineering Technology Division (ETD)
ETD has as its principal function the support of individual member interests related to the field of engineering technology. Its membership is composed of public and private two- and four-year engineering technology educators from around the world as well as representatives from industries that employ engineering technology graduates.
http://www.engtech.org

International Association for Continuing Engineering Education (IACEE)
The International Association for Continuing Engineering Education is a global, non-profit and non-governmental organization whose aim is to support and enhance lifelong technical education, training, and advanced engineering education worldwide, including the special needs of developing countries.
http://www.iacee.org
## PRE-CONFERENCE MEETINGS

### Saturday, February 2

| 8:00 am - 5:00 pm | Fairway 5-7 | ASEE Board Meetings |

### Sunday, February 3

| 8:00 am - 5:00 pm | Fairway 6 | ASEE 050 — ASEE Board Meetings |
| 3:00 pm - 5:00 pm | Suite 710 | CIEC 001 — CIEC 2013 Management Team |

### Monday, February 4

| 7:00 am - 8:00 am | Garden Pavilion | CIEC 111 — Social Networking Workshop and Breakfast |
| 8:00 am - 12:00 noon | Golf Course | CIEC 121 — Networking Hands-On Experience (Golf) |
| 12:00 noon - 1:00 pm | Garden Pavilion | CIEC 131 — Golfers Luncheon |
| 12:00 noon - 1:00 pm | Fairway 1 | CIEC 141 — PIC V Meeting |
| 1:00 pm - 5:00 pm | Fairway 2 | CIEC 151 — CIEC Board Meeting |
| 5:00 pm - 6:00 pm | Suite 709 | CIEC 161 — CIEC 2014 Management Team |

Members of the 2014 CIEC Management Team have the opportunity to meet each other and begin thinking about the 2014 conference.

| 6:00 pm - 8:30 pm | Annabelle’s Restaurant, North Room | CIEC 021 — General Conference Chair Reception — invitation only |
Open courseware and open courses are making news and making waves. This workshop is intended to explore free courseware and massive open online courses (MOOCs). What do these developments mean for CPDD members and their institutions/industries? Do we embrace the movement, and if so how? What institutions stand to gain from this new trend? How does industry view this emerging phenomenon and how will they evaluate prospective and current employees who take free online courses? In the first half of the workshop, presenters from academia and industry will brief the workshop participants on the current state of open courses, with time for questions after each presentation. For the second half of the workshop, the workshop participants will break into small groups to discuss and then to report back to the larger group on several focus questions.

**Presenters:**
Paul Marca, Stanford University
Ed Borbeley, University of Michigan
Paul Baker, Georgia Institute of Technology
Lucy Wang, Johns Hopkins University student
Eric Pearson, Northrop Grumman Corporation
Roberta Gotfried, Raytheon Company

**Moderator:**
Ellen Elliott, Johns Hopkins University
Wednesday, February 6

8:00 am - 5:00 pm West Conference Center Lobby
CIEC 301 — Registration

7:30 am - 8:45 am Fairway 2, 3, 4
CIEC 311 — All Conference Breakfast

9:00 am - 10:30 am Fairway 6, 7
CIEC 331 — PLENARY

Navigating the Global Job Market: The Role of Universities in Work Readiness

Presenter:
Nancy Zimpher, Chancellor
The State University of New York

Moderator:
Kettil Cedercreutz, University of Cincinnati

The plenary has been designed to address the conference theme of *Engineering Education in an Era of Globalization*. Central to the mission of universities is the recognition that we are preparing students not only as an educated citizenry, but as full participants in career and civic responsibility. As degree requirements transition to meet 21st century career demands, universities must increasingly provide for multiple applied learning opportunities that include assessment of prior learning experiences, career-specific internship and co-op placements, and a variety of volunteer and service learning responsibilities, all of which will be discussed in this presentation.

10:30 am - 11:00 am Garden Pavilion
CIEC 341 — Morning Refreshment Break in the Expo — Expo Opening

CIEC sponsors and other exhibitors will be available to meet with you during the morning break. Have a cup of coffee and visit with other conference participants and exhibitors from academia and industry.

11:00 am - 12:30 pm Fairway 1
ETD 315 — The National ET Forum

11:00 am - 12:30pm Fairway 2
CEED 312 — Measuring Global Learning Competencies: The Evolution of a Measuring Tool

Presenter:
Caroline Anderson, Georgia Institute of Technology

Moderator:
Debbie Pearson, Georgia Institute of Technology

The GT Work Abroad program is designed to give students the opportunity to experience international workplace culture. A questionnaire that was part of an expired grant is currently being used to assess students’ progress in intercultural learning objectives. In cooperation with GT’s Assessment Center, this measuring tool will be evaluated and re-issued. This session will examine the process and goals of the new assessment tool and how this applies to globalized industry education. The issues of tailoring the measurement outcomes to technology-focused work programs and best practices in recording information will also be addressed.
Wednesday, February 6 — continued

11:00 am - 12:30 pm Fairway 3

**CPDD 314 — Comparison of Cross Cultural Learning Styles in Engineering Education**

**Presenters:**
Zachary Gredlics, University of Kansas  
Soma Chakrabarti, University of Kansas  
Sue Bray, Keys 2 Culture

**Moderator:**
Wanda Lambert, Auburn University

In the era of globalization, continuing education providers are faced with an array of cultural learning styles. Professional engineering educators must adapt to fit the challenges posed by differences in learning styles in order to meet the mutual goals of students, employers and instructors. Cultural orientations regarding communication, hierarchy, individualism, time, and environment influence how diverse students learn; understanding these influences and can help create approaches that work across cultures. Four world regions with different cultural learning styles - China, India, North America and Western Europe - will be used as examples of how content and delivery can be adapted depending on the cultural landscape and communication styles.

11:00 am - 12:30 pm Fairway 4

**CIPD 313 — Preparing Students for Working in a Global Environment: An Industry Panel**

**Presenters:**
Reginald McGregor, Rolls-Royce,  
Melinda Tam-Cardillo, First Solar  
JoZell Johnson, Intel Corporation  
Rachel Liu, Intel Corporation

**Moderator:**
Letha Hammon, DuPont

Panelist representing a variety of industries will discuss what students need to do to prepare for the global workforce. Panelists will share their company’s programs that are helping young engineers achieve this goal.

12:45 pm - 1:45 pm Fairway 6,7

**CIEC 351 — Industry Day Luncheon and Awards**

**Presenters:**
Gayle Elliott, CIEC General Conference Chair, University of Cincinnati  
Diane Matt, Women in Engineering ProActive Network  
Terri Morse, The Boeing Company and Corporate Member Council Chair

Join us as we honor industry representatives, CIEC sponsors, and Corporate Member Council award winners. This is a great opportunity for industry and education representatives to dialogue and reflect upon the day’s sessions. The luncheon is included in your conference registration.

2:00 pm - 3:30 pm Fairway 1

**ETD 325 — Curriculum Innovation Driven by Industry Input**

**Chair:**
Walter W. Buchanan, Texas A&M University

**Presenters:**
Niaz Latif, Mohammad Zahraee, Saeed Foroudastan, Ravi Shankar, Borko Furht, Jaime Borras, Robert J. Durkin, Jaime Borras, Ravi Shankar, Fran McAfee, Michael Harris, Don Ploeger, Oren Masory, and Ravi Behara

Examples are covered here of curriculum innovation driven by industry input. At Purdue University - Calumet an industry and education partnership is taking place providing research experience for students through industry projects. At the Florida Advanced Technological Education Center of Excellence integrating industry validated credentials into engineering technology degrees is happening. At Middle Tennessee State University an engineering management degree forms an innovative partnership with industry. At Florida Atlantic University the Mobile Technology Consortium (MTC) has formed through an Industry-University Alliance as well as using Motorola’s vision to impact its engineering curriculum. IUPUI is forging an industrial partnership with engineering technology capstone courses. And at Daytona State College its Prism Project is fostering green energy industry training.

2:00 pm - 3:30 pm Fairway 4

**CEED 322 — Attributes of a Global Engineer**  
*(joint session with CIPD)*

**Presenters:**
Lynn Brown, The Boeing Company  
Stephen Hundley, Indiana University-Purdue University Indianapolis

**Moderator:**
Sandra Ingram, University of Manitoba

ASEE’s Corporate Member Council’s Special Interest Group for International Engineering Education developed and vetted with its stakeholders attributes representing competencies needed by engineers to perform in a global context. An online survey was launched to validate each attribute and identify when the attribute should be attained. Educators, employers, and engineers in the global community participated in the survey. ASEE collaborated with the International Federation of Engineering Education Societies to translate the survey into 13 languages. This presentation describes the process to identify attributes of a global engineer; survey development and sampling procedures; summary of key findings; and discussion of implications and considerations.
Wednesday, February 6 — continued

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<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Session Title</th>
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<tbody>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>Fairway 3</td>
<td>CPDD 324 — Continuing Professional Development Programs in 5 European Countries</td>
</tr>
<tr>
<td>Presenter:</td>
<td>Alfredo Soeiro, University of Porto, Portugal</td>
<td></td>
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<tr>
<td>Moderator:</td>
<td>Terri Gaffney, University of Idaho</td>
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Four professional engineering organizations in Portugal, Slovakia, Slovenia and Romania have joined efforts to promote continuing professional development in engineering companies following the example of the Institution of Engineers Ireland. Over the past decade Engineers Ireland and the Irish Government have co-financed and developed a model which employers of engineering professionals can use to connect disparate training, learning & development initiatives under a best-practices umbrella. In essence, the standard provides a framework for employers to support good practices in the area of lifelong learning for engineers and technicians. It is designed to reflect and reward the ever-changing environments in which engineering and technical professionals work and learn. Five case studies from participating companies are presented and conclusions are drawn about the possibility of using it in other countries. Participants will engage in the utilization of the procedures in a concrete case during the session.

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<th>Session Title</th>
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<tbody>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>Fairway 4</td>
<td>CIPD 323 — Attributes of a Global Engineer (Joint Session with CEED)</td>
</tr>
<tr>
<td>Presenters:</td>
<td>Lynn Brown, Boeing  Stephen Hundley, Indiana University-Purdue University Indianapolis</td>
<td></td>
</tr>
<tr>
<td>Moderator:</td>
<td>Sandra Ingram, University of Manitoba</td>
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2:15 pm - 3:30 pm | Fairway 5 | ETD345 — ETD Executive Board

3:30 pm - 4:00 pm | Garden Pavilion | CIEC 361 — Afternoon Refreshment Break in the Expo
Join us for afternoon refreshments with the CIEC Exhibitors in the Expo. Expo closes Thursday, February 7 at 12:30 pm.

4:00 pm - 5:30 pm | Fairway 1 | ETD 335 — Program Development I

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<tr>
<th>Time</th>
<th>Location</th>
<th>Session Title</th>
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<tr>
<td>2:00 pm - 3:30 pm</td>
<td>Fairway 2</td>
<td>CEED 332 — Technology’s Impact on Cooperative Education</td>
</tr>
<tr>
<td>Presenters:</td>
<td>1) Anita Todd, University of Cincinnati 2) Connie Justice, Indiana University-Purdue University Indianapolis Scot Barnes, Simon Property Group</td>
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<tr>
<td>Moderator:</td>
<td>Lorraine Mountain, Northeastern University</td>
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</table>

1) In summer and fall 2011, UC electrical engineering co-op students participated in an online community while on co-op. Students had access to resources and information, discussion boards, blogs, and wikis. Student participants were compared to co-op students in previous quarters to determine if participation in the community, or the type or level of participation affected student perceived performance, perceived learning or measured learning. The results of this study will be presented.

2) This session presents the relationship of Simon Property Group, Inc. IT division and the Living Lab in the Computer Information Technology Program in the School of Engineering and Technology at IUPUI. The Living Lab is a real IT department where students, faculty, and staff are responsible for systems and infrastructure within the department as well as service and external projects. The VP of IT and clinical faculty have a formal relationship where students gain experience working on projects and job shadow employees. We will discuss the integration of business processes, projects and the facilitation of learning outcomes throughout the course. quarters to determine if participation in the community, or the type or level of participation affected student perceived performance, perceived learning or measured learning. The results of this study will be presented.
Wednesday, February 6 — continued

4:00 pm - 5:30 pm  Fairway 3

**CPDD 334 — Global Programs - Multiple Delivery Formats, Flexible Programs**

**First presentation:**
Tomasz Arkusz, Arizona State University

**Second presentation:**
Octavio Heredia, Arizona State University
Amy Wolsey, Arizona State University
Huy Hoang, Intel Corporation-Vietnam.

**Moderator:**
Kim Scalzo, SUNY

This session offers two presentations from the Office of Global Outreach and Extended Education of Arizona State University. Multipronged Approach for Implementing Global Partnership Curriculum. The Office has been continuously developing new partnerships with centers in Mexico, Vietnam, the Middle East, Colombia, Singapore and China. Some of the courses have included projects done by student groups collaborating from two or three geographically distant locations. The most successful approach to delivering instruction and facilitating collaboration in this challenging environment has turned out to be multipronged, where we simultaneously use 1) live Mediasite broadcast with later on-demand availability and 2) live videoconferencing to remote classrooms. We supplement both modes by Adobe Connect web conferencing. Developing Convenient & Flexible Graduate Programs for a Global Workforce. The Office has offered non-credit short courses, customized programs, online graduate degrees and certificate programs for over twenty years. Recently ASU and Intel Vietnam have developed a graduate program to meet the needs of the employees within the global Intel workplace. We will discuss this partnership, along with the implementation, delivery methods, and ways to sustain successful global partnerships for effective workforce development.

4:00 pm - 5:30 pm  Fairway 4

**CIPD 333 — Industry Involvement in Developing Soft Skills for Students**

**Presenters:**
Norali Pernalete, California State Polytechnic University
Cordelia Ontiveros, California State Polytechnic University
Phil Rosenkrantz, California State Polytechnic University
Steven W. Villachica, Boise State University
Don Plumlee, Boise State University
Linda Huglin, Boise State University
Amy Chegash, Boise State University
Tony Marker, Boise State University
Thomas Cossio, The Boeing Company

**Moderator:**
Bill Woodward, Omaha Public Power District (retired)

1) Industry Involvement in Developing Soft Skills for Students in the College of Engineering at Cal Poly Pomona. 2) But What’s Happening On the Job? An Investigation of Fresh Outs Performance in the Engineering Workplace. The College of Engineering at Cal Poly-Pomona will discuss how they use their Project Symposium event to engage alumni and industry representatives to enhance their senior students’ soft skills. Assessment data will be shared. Boise State: To identify factors that influence the time that newly graduated and hired engineers (a.k.a. fresh outs) need to reach competent performance in the workplace, the researchers conducted a series of focus groups at selected industry sites. This presentation will highlight results researchers have obtained to date.

4:00 pm - 6:00 pm  Fairway 5

**ETD 355 — ETD Board**

6:00 pm - 8:30 pm  Goldfield Ghost Town

**CIPD 343 — CIPD Hospitality**

Join CIP Members for a visit and dinner at the Goldfield Ghost Town and enjoy the times of the Wild West with your colleagues. The bus will leave promptly at 6:00 p.m. in front of the hotel. Everyone must have a CIPD ticket to board.
### Thursday, February 7

<table>
<thead>
<tr>
<th>Time</th>
<th>Venue</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 am - 12:00 noon</td>
<td>West Conference Center Lobby</td>
<td>CIEC 401 — Registration</td>
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<tr>
<td>7:30 am - 8:45 am</td>
<td>Fairway 6</td>
<td>ETD 415 — ETD Breakfast</td>
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<tr>
<td>7:30 am - 8:45 am</td>
<td>Fairway 7</td>
<td>CEED 412 — CEED Business Meeting Breakfast</td>
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<tr>
<td>Meet your colleagues for breakfast and a brief business meeting. First-Time Attendees are welcome to join us to meet members and learn more about the Cooperative and Experiential Education Division.</td>
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<tr>
<td>7:30 am - 8:45 am</td>
<td>Fairway 5a</td>
<td>CIPD 413 — CIPD Business Meeting and Awards Breakfast</td>
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<tr>
<td>7:30 am - 8:45 am</td>
<td>Fairway 5b</td>
<td>CPDD 414 — CPDD Business Meeting Breakfast</td>
</tr>
<tr>
<td>8:00 am - 12:30 pm</td>
<td>Garden Pavilion</td>
<td>CIEC 411 — EXPO</td>
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<tr>
<td>This is your last opportunity to meet with CIEC sponsors and other exhibitors.</td>
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<tr>
<td>9:00 am - 10:30 am</td>
<td>Fairway 1</td>
<td>ETD 425 — The Deans’ Forum</td>
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<td>Chair: Babak D. Beheshti</td>
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<tr>
<td>The ET National Forum is asking industry what it wants from our graduates. Another important driving force is the pressure being applied to deans by their universities. This panel of three deans will discuss these forces and their vision for what success will look like in five years.</td>
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<td>9:00 am - 10:30 am</td>
<td>Fairway 2</td>
<td>CEED 422 — Unique Ways to Collaborate Between Corporate Partners and the Universities</td>
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<td>Moderator: Leo Hanifin, University of Detroit Mercy</td>
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<td>As the need for talented engineers increases while the number of young people pursuing and completing engineering degrees is on a decline, branding one’s company on campus has become the battle of the century. Rather than fight the battle of who has the best Marketing and Social Media techniques, Eric Pearson from Northrop Grumman worked with academia on a program which allowed students to see what the company has to offer through small group and one-on-one conversations. Details of pilot programs and student group activities with multiple universities that created the direct branding opportunity and led to students flocking to the company for consideration and job placements will be shared. The session will include open discussion of techniques and tools that really click with the students. The sharing of past ideas will spawn greater ROI for recruiters and university partners.</td>
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<tr>
<td>9:00 am - 10:30 am</td>
<td>Fairway 3</td>
<td>CPDD 424 — Measuring Industry Outcomes: ROI, Online vs Face-to-Face Programs</td>
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<tr>
<td>First Presentation: Suzzanne Ippel, Raytheon Company Raul Almazon, Raytheon Company</td>
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<td>Second presentation: Susan Flaming, The Boeing Company</td>
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<td>Moderator: Ellen Elliott, Johns Hopkins University</td>
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<td>Two presentations: 1) Measuring Outcomes for Industry Partnerships. What makes investment in education worthwhile for corporate partners? How do they measure the success of academic programs? This interactive session will include discussion of corporate strategies for measuring outcomes of educational partnerships and academic best practices for designing programs to maximize value to organizations. 2) Industry outcomes: measuring the value of online vs. face-to-face programs. The Boeing Company recently surveyed employees participating in college STEM programs offered online and programs held face-to-face. A summary will be presented of which school and organizational influences were significant for three outcome measures: employee career success, improvement of work processes and productivity, and innovation of products and services.</td>
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Thursday, February 7 — continued

9:00 am - 10:30 am  Fairway 4

**CIPD 423 — Industry and Academia Success Stories for Recruiting, Mentoring and Retaining Students in Engineering**

**Presenters:**
Marcos Chu, The Boeing Company  
Patricia Sandoval, The Boeing Company  
Susannah Howe, Smith College  
Mary Moriarty, National Science Foundation

**Moderator:**  
Daphene Koch, Purdue University

Boeing professionals will discuss how they were able to build and promote innovative learning environments focused on science, technology, engineering, and math (STEM) to all stakeholders in the community and not only to the pre-engineering population. During 2011-2012, Smith College piloted an engineering job shadowing initiative. The project offered engineering students the opportunity to gain a window into roles, responsibilities, and daily tasks of professionals in their work environments. Presenters will discuss this pilot initiative and report findings about impact based on quantitative and qualitative evaluation. The presenters will also suggest strategies for implementing a job shadow program at other institutions.

10:30 am - 11:00 am  Garden Pavilion

**CIEC 421 — Morning Refreshment Break in the Expo**

CIEC sponsors and other exhibitors will be available to meet with you during the morning break. Have a cup of coffee and visit with other conference participants and exhibitors from academia and industry.

11:00 am - 12:30 pm  Fairway 1

**ETD 435 — Internships, Capstone Projects, Engineering Centers, and Other Methods to Work with Industry**

**Presenters:**
Walter W. Buchanan, Texas A&M University  
Jose Galvan, Eden Fisher, Elizabeth Casman, Mitch Small, Ricky Orr, Sejun Song, Kim Deranek, Edie Schmidt, William Leonard, Barbara MacQueen, Donald Ploger

**Moderator:**  
Daphene Koch, Purdue University

Examples are covered here of internships, capstone projects, engineering centers, and other methods to work with industry to give students more real world experiences. At Carnegie Mellon University assessing the impact of mandatory internships on employability of recent college graduates in Mexico is taking place. At Weber State University changing capstone projects in a way to improve the curriculum is happening. At Texas A&M University telecommunication engineering technology students are learning via the Cisco Test Engineering Center. At Purdue University – West Lafayette they are making it real by immersing students in week long enterprise resource planning simulations. At Rochester Institute of Technology curriculum development driven by industry input is taking place. At Vancouver Island University their Mission Impossible is providing maximum learning in minimum time. And at Florida Atlantic University engineers and other people are communicating engineering results to a larger audience.

11:00 am - 12:30 pm  Fairway 2

**CEED 432 — Recruit them Here, Place Them There: Leveraging Global Organizations for International Student Co-op Experiences**

**Presenters:**
Bernadette Friedrich, Michigan State University  
Anna Avalos, Stryker

**Moderator:**  
Sheila Moses, University of Memphis

This interactive presentation will present and discuss a university-corporate partnership that builds on existing relationships between global organizations and U.S. universities to develop experiential opportunities for international students. We will present the need for such programs, the relationship building between U.S. and non-U.S. entities within the same organizations, guidelines for developing opportunities, hurdles specific to the international student population and industry, and what really is the ultimate outcome.
Thursday, February 7 — continued

11:00 am - 12:30 pm Fairway 3

**CPDD 434 — Building Strategies for Effective Virtual Collaboration between Industry and Academia**

*Presenters:*
Paul Jewell, Iowa State University
Tom Brumm, Iowa State University
Peter Kelling, Iowa State University

*Moderator:
Meghan Balding, USC

Research at institutions of higher education is becoming an increasingly multi-institutional effort that involves industry partners and that frequently requires virtual collaboration. The Engineering-LAS Online Learning unit of Iowa State University is partnering with campus IT to create new systems for course delivery and virtual academic-industry collaboration to meet expanding needs in the coming years. Join us for this interactive session to explore the potential for virtual collaboration, identify roadblocks to success in your organization, and learn how to develop strategies that can facilitate success for these new types of industry-academia collaboration.

11:00 am - 12:30 pm Fairway 4

**CIPD 433 — IP Issues in Higher Ed**

*Presenter:*
Lori Glover, Worcester Polytechnic Institute

*Moderator:
Ranji Vaidyanathan, Oklahoma State University

Come learn more about Intellectual Property and hear discussions on topics such as: what constitutes publication, contractual protection-negotiating points, technology transfer, IP under the America Invents Act and trends.

12:45 pm - 1:45 pm Fairway 6, 7

**CIEC 431 — CIEC Awards Luncheon**

*Moderators:*
Ilka Balk, University of Kentucky
Ken Rennels, Indiana University-Purdue University Indianapolis

Join your friends and colleagues as we honor the 2012 CIEC Award Recipients. Outstanding sessions, presenters, and moderators will be recognized from each division.

2:00 pm - 3:30 pm Fairway 1

**ETD 445 — Program Development II**

*Chair:
Daphene Koch, Purdue University

*Presenters:
Scott L. Springer, Edie Schmidt, Brent A Payne, Shweta Chopra, and Chad Laux

This session is centered on the topic new program development as well as enhancing existing programs. This session also focuses on innovative techniques and activities that have been introduced in the classroom. These innovations range from usage of new tools, a different way of using existing tools, applying active learning and other pedagogy.

2:00 pm - 3:30 pm Fairway 2

**CEED 442 — The Scale Matters: Creating Global Community Engineers through Engineers without Borders-USA**

*Presenter:
Catherine Leslie, Engineers Without Borders

*Moderator:
Daniel Saulnier, Northeastern University

Engineers Without Borders USA is putting the why back into engineering for the next generation of engineers. After only one decade, nearly two hundred university chapters have been created, involving thousands of engineering students in the delivery of hundreds of community projects with thousands of beneficiaries in 45 countries around the world. The EWB-USA model is built upon community, NGO, industry and university partnerships mutually focused on grassroots community development. This presentation will share results to date, initiatives that scale well, and educational outcomes that are producing a new kind of global, yet community-focused, engineer.

2:00 pm - 3:30 pm Fairway 3

**CPDD 444 - Longitudinal Study of Compensation Models for Multiply Employed Faculty**

*Presenters:
Mitchell L. Springer, Purdue University
Mark T. Schuver, Purdue University

*Moderator:
Richard Corey, Mississippi State University

Courses and curricula are owned by the academic departments that provide faculty to teach. Thus, in considering incentives for participating in professional studies programs, there needs to be some incentive for the home department of the faculty who teach in those programs, as well as direct incentive to the faculty themselves. After all expenses are accounted for, what model will provide maximum incentive for faculty and their home department? This presentation will focus on the impact of numerous compensation models tried over a ten year period and the analysis of those that most incentivize department and faculty participation.
The Hyperion aircraft project was an international collaboration to develop an aerial vehicle derived from the Boeing X48 hybrid wing body to investigate new technologies with a focus on performance efficiencies. An international team of graduate and undergraduate students conceived, designed, implemented, and operated the aircraft. A university program adopted courses that required emerging, interdependent relationships between physical product constraints and multidisciplinary, multicultural, globally dispersed members of a design team. Geographically dispersed teams of students complete a design assignment, with subgroups leveraging distributive expertise independently contributing and collectively impacting the design plan. The design-build teams partnering with industry, were enrolled in courses across multiple universities, time zones, and functional disciplines university departments. This project details a cyber-infrastructure platform enabling multiple users to access and modify the same CAD part simultaneously as well as distributive expertise within the students, faculty and industry advisory board members.

This session includes presentations that apply professional aspects of a discipline to the classroom. The topics include industry-academia collaboration as well as relations to other entities outside of the university.

The purpose of this study has been to identify factors that contribute to the development of three self-efficacy dimensions thought to be most relevant to the retention of students in undergraduate engineering: work, academic, and career. Of particular interest is whether the participation of students in formal undergraduate engineering programs that provide work experiences while enrolled is related to enhanced self-efficacy. Self-efficacy theory provides an important framework for differentiating the career outcomes of students in engineering. In particular, positive self-efficacy beliefs appear to significantly affect persistence in undergraduate engineering programs. This presentation reports on results to date.
Thursday, February 7 — continued

4:00 pm - 5:30 pm Fairway 3

**CPDD 464 — “University and Industry Partnership for an Executive Education Program”, and “Meeting the Technological and Infrastructure Challenges of Emerging Trends in Online Education”**

*First Presenter:*  
Kathryne A. Newton, Purdue University

*Second Presenter:*  
Marty Ronning, University of Maryland

*Moderator:*  
Greg Ruff, Auburn University

The first presentation describes an on-going collaboration between the Industrial Distribution Program in the College of Technology at Purdue University and a four-day international executive education program called the University of Industrial Distribution (UID). The evolution and benefits of the collaboration will be described. The second presentation describes how the University of Maryland Clark School of Engineering has met the technological and infrastructure challenges of emerging trends in online education. The process of identifying needs, designing and building new studio classrooms, and funding the new facility will be described.

4:00 pm - 5:30 pm Fairway 4

**CIPD 453 — Retaining US Workforce**

*Presenters:*  
Gayle Tenen Spak, New Jersey Institute of Technology  
Layla Reitmeier, Arizona State University  
Kimberly Faust, City of Phoenix  
Robert Bowling, First Solar

*Moderator:*  
Mahesh Aggarwal, Gannon University

Advanced Manufacturing holds prospect for reviving the US economy. Paper discusses several programs, sponsored by different sources (Federal, New Jersey and national higher education associations) to facilitate more advanced-related higher education training with industry. Presentation explores similar, disparate and overlapping ways in which NJIT seeks through each program to catalyze investment in and deployment of emerging technology with transformative potential for US advanced manufacturing; encourage and provide appropriate and advanced workforce training and disseminate emerging lessons and insights to the global training community.

The City of Phoenix partnered with Arizona State University to develop a training program using State Energy Sector Partnership funds to train the local workforce. Through an industry forum, solar leaders provided invaluable input to create a training program in Solar Energy Engineering and Commercialization of value to the workforce. First Solar will discuss the impact of the training program on their organization and the program’s success and outcomes will be discussed.

5:00 pm - 6:00 pm Suite 710 and Courtyard

**CEED 462 — CEED Student and Employer Awards Reception**

This special gathering will honor the winners of this year’s CEED Awards: Co-op Student of the Year, Intern Student of the Year and the Takacs Employer Award. The awards are presented at the luncheon earlier this day. Join your CEED colleagues in congratulating the winners and enjoy light refreshments to start off the evening.

6:00 pm - 8:00 pm Suite 710 and Courtyard

**CEED 472 — CEED Hosted Hospitality - All Divisions are Welcome**

6:00 pm - 8:00 pm Suite 709

**ETD 465 — ETD Hosted Hospitality - All Divisions are Welcome**

8:00 pm - 10:00 pm Suite 709

**CPDD 464 — CPD Hosted Hospitality Dessert — All Divisions are Welcome**
Friday, February 8

7:00 am - 12:00 noon  Garden Pavilion
ETD 515 — ETD Meetings
7:00 am - 8:00 am: ETLI
8:00 am - 9:15 am: ECETDHA
9:15 am - 10:30 am: ETC
10:30 am - 12:00 noon: JET

7:30 am - 8:00 am  East Conference Center Lobby
CIEC 510 — Continental Breakfast

8:00 am - 10:00 am  West Conference Center Lobby
CIEC 501 — Registration

8:00 am - 9:15 am  Fairway 1
ETD 525 — Writing for Professional Publications
Chair:
Babak D. Beheshti
Presenter:
Marilyn Dyrud
This session is designed to give writers a complete picture of the journal publication process. The panel members all represent the Journal of Engineering Technology (JET), but the process and requirements are applicable to most professional journals. Presenters include current and past editors-in-chief, the manuscript editor, the production editor, and the communications editor. Each will address his or her particular area of responsibility. Attendees will leave the session with a full understanding of the publication process, from submission through publication, and techniques to improve their manuscripts to increase their acceptance rates.

8:00 am - 9:15 am  Fairway 2
CEED 512 — Vision 2030 for Mechanical Engineering Education
What 2,500 industry managers and young engineers (and others) tell us, and how it shapes ASME education strategy.
Presenter:
Allan Kirkpatrick, Colorado State University
Moderator:
Ken Rennels, Indiana University-Purdue University Indianapolis
The ASME Vision 2030 Project investigated the current state of mechanical engineering education and practice through an industry lens via a multipronged approach. A major part of the process was extensive surveys of over 2,500 industry managers, early career engineers and academic department heads about strengths and weaknesses of recent graduates. The resulting data provide a unique and statically valid industry-based data set evaluating mechanical engineering education. The results, presented and discussed in this session, are interesting and challenging, to industry and to academia. Of specific interest, are the data from early career engineers about their professional development needs.

8:00 am - 9:15 am  Fairway 5
CPDD 514 — CPDD Special Interest Groups Planning Session for 2014 (breakfast included)
The Continuing Professional Development Division planning session is open to all conference attendees. In this interactive session, the various Special Interest Group (SIG) members and other session attendees will interact to discuss topics relevant to Continuing Professional Development at their company or university for consideration as session topics for the 2014 CIEC conference. The CPDD SIG group areas include: Industry, Technical Delivery, Faculty, Professional Development Administration, and International Programs.
Friday, February 8

8:00 am - 9:15 am Fairway 4
CIPD 513 — CIPD Planning for the Future

Presenters:
Terri Schultz, Project Lead the Way
Linda Krute, North Carolina State University

An opportunity to plan the future! Join the CIPD Chair-Elect and Program Chair to discuss and share topics for CIEC 2014.

9:30 am - 10:45 am Fairway 2
CEED 522 — Strategies for Improving Cooperative Education:
1) Motivating Faculty for Co-op: Is it even possible?
2) Career Services: A Decentralized but Collaborative Model

Presenters:
Bernadette Friedrich, Michigan State University
Terri Talbert-Hatch, Indiana University-Purdue University Indianapolis
Jennifer Williams, Indiana University-Purdue University Indianapolis

Moderator:
Reginald McGregor, Rolls-Royce

1) This interactive presentation will report on research exploring the factors that may relate to engineering faculty engagement in Cooperative Education. The intent was to identify specific personal attributes and environmental conditions that relate to faculty engagement in cooperative education. This study compared the engagement level of engineering faculty from programs with similar characteristics. Faculty from ten universities were surveyed and follow-up interviews were completed with select faculty survey respondents. The selection process guaranteed a blend of faculty representing two institutions, one high in faculty engagement, and one low in faculty engagement.

2) In most universities, Career Services is either centralized, serving all students from one common office, or decentralized, providing unique independent career services for specific academic schools. Both approaches have their weaknesses - but you don’t have to choose! You can have the best of both worlds with a decentralized but collaborative career services structure. During this session, participants will learn how decentralized Career Services offices can operate within an academic school and successfully collaborate with other Career Services operations on campus to maximize resources, coordinate joint events, and conduct unified employer outreach.

9:30 am - 10:45 am Fairway 3
CPDD 524 — From a Failed Class to a Fruitful Online Engineering Technology Program

Presenters:
Kevin G. Curry, University of Kansas
Soma Chakrabarti, University of Kansas

Moderator:
Doug Ernie, University of Minnesota

While face-to-face classes have traditionally addressed the needs of engineering technology workforce, the introductory live session of an industrial technology seminar was financially unsuccessful due to low enrollment. After assessing the demands of a mobile workforce, the course was re-launched as a live online class. Now in its third year, the course has enrolled over 50 participants in each session. The changes in delivery format, marketing tools, and improved instructor reimbursement strategy helped create a financially successful course. We will discuss how the lessons learned from this class were used to launch a number of new, related online courses.

9:30 am - 10:45 am Fairway 4

Presenters:
Derek Duplisea, Raytheon Company
Duane Hardesty, Northrop Grumman Corporation
Keith Finkle, ASU, Student Veterans of America
Devdas Pai, North Carolina A&T University
Linda Krute, North Carolina State University

Moderator:
Jack Selter, University of Central Florida

Is your college or university military friendly? If not, why not? Only 1,518 colleges, universities and trade schools out of 8,000 have been approved by the military. Join this session and learn how many colleges and universities are supporting not only veterans but also the active duty personnel and their families and what impact these new workers may have upon the US workforce in the next few years.

11:00 am - 12:15 pm Fairway 2
CEED 532 — CIEC 2014 Planning

Discussion Leaders:
Maureen Barcic, University of Pittsburgh
Joy Watson, University of Cincinnati

An opportunity to plan the future! Join the CEED Chair-Elect and Program Chair to discuss and share topics for CIEC 2014.
There have been many works detailing how to effectively teach adult learners, dating back to the seminal work of Malcolm Knowles. One of the basic principles put forth by Knowles is that adults must be able to relate the material being conveyed to real-life opportunities or experiences. To best satisfy this connection, the teaching must be premised on faculty- and facilitator-applied experience versus pure theoretical experience. Adjunct Faculty provide the natural connection to applied and use-inspired experience. This presentation focuses on the added value of using industry-oriented adjunct faculty to achieve professional program success.
CEED Programs at a Glance

Monday, February 4

7:00 am - 8:00 am  CIEC 111 — Social Networking Workshop and Breakfast. Garden Pavilion
8:00 am - 12:00 noon CIEC 121 — Networking Hands-On Experience (Golf). Golf Course
12:00 noon - 1:00 pm CIEC 131 — Golfers Luncheon. Garden Pavilion

Tuesday, February 5

1:00 pm - 4:30 pm  CEE 222 — Tour: Lunar Reconnaissance Orbiter Camera Facility and Mars Space Flight Facility. Arizona State University (meet in hotel lobby)
3:00 pm - 5:00 pm  CIEC 211 — Putting Tutorial and Miniature Golf Event. Golf Course
6:00 pm - 6:30 pm  CIEC 231 — Red Stars Welcome Reception. Bonanza’s Ponderosa House
6:30 pm - 8:00 pm  CIEC 221 — CIEC Opening Reception. Bonanza’s Ponderosa House

Wednesday, February 6

7:30 am - 8:45 am  CIEC 311 — All Conference Breakfast. Fairway 2, 3, 4
9:00 am - 10:30 am CIEC 331 — Plenary: Navigating the Global Job Market: The Role of Universities in Work Readiness Fairway 6, 7
10:30 am - 11:00 am CIEC 341 — Morning Refreshment Break in the Expo — Expo Opening. Garden Pavilion
11:00 am - 12:30 pm CEE 312 — Measuring Global Learning Competencies: The Evolution of a Measuring Tool. Fairway 2
12:45 pm - 1:45 pm  CIEC 351 — Industry Day Luncheon and Awards. Fairway 6, 7
2:00 pm - 3:00 pm  CEE 322 — Attributes of a Global Engineer (joint session with CIPD) Fairway 4
3:30 pm - 4:00 pm  CIEC 361 — Afternoon Refreshment Break in the Expo. Garden Pavilion
4:00 pm - 5:30 pm  CEE 332 — Technology’s Impact on Cooperative Education: 1) Does participation in an Online Community Affect Student Learning through Work? 2) Integrating IT Business Partnership into Experiential Learning. Fairway 2

Thursday, February 7

7:30 am - 8:45 am  CEE 412 — CEE Business Meeting Breakfast Fairway 7
8:00 am - 12:30 pm CIEC 411 — EXPO Garden Pavilion
9:00 am - 10:30 am CEE 422 — Unique Ways to Collaborate Between Corporate Partners and the Universities Fairway 2
10:30 am - 11:00 am CIEC 421 — Morning Refreshment Break in the Expo. Garden Pavilion
11:00 am - 12:30 pm CEE 432 — Recruit them Here, Place Them There: Leveraging Global Organizations for International Student Co-op Experiences. Fairway 2
12:45 pm - 1:45 pm  CIEC 431 — CIEC Awards Luncheon Fairway 6, 7
2:00 pm - 3:00 pm  CEE 442 — The Scale Matters: Creating Global Community Engineers through Engineers without Borders-USA, Fairway 2
3:30 pm - 4:00 pm  CIEC 431 — Break East Conference Center Lobby
4:00 pm - 5:30 pm  CEE 452 — Self-Efficacy in Undergraduate Engineering Programs: The Impact on Persistence. Fairway 2
5:00 pm - 6:00 pm  CEE 462 — CEE Student and Employer Awards Reception. Suite 710 and Courtyard
6:00 pm - 8:00 pm  CEE 472 — CEE Hosted Hospitality - All Divisions are Welcome. Suite 710 and Courtyard
6:00 pm - 8:00 pm  ETD 465 — ETD Hosted Hospitality - All Divisions are Welcome. Suite 709
8:00 pm - 10:00 pm CPDD 464 — CPDD Hosted Hospitality Dessert - All Divisions are Welcome. Suite 709

Friday, February 8

7:30 am - 8:00 am  CIEC 510 — Continental Breakfast East Conference Center Lobby
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11:00 am - 12:15 pm CEE 532 — CIEC 2014 Planning. Come share your ideas for sessions at the 2014 CIEC in Savannah. Fairway 2
### CIPD Programs at a Glance

#### Monday, February 4

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<tr>
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<td>CIEC 311 — All Conference Breakfast</td>
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<tr>
<td>9:00 am-10:30 am</td>
<td>CIEC 331 — Plenary: Navigating the Global Job Market: The Role of Universities in Work Readiness”</td>
<td>Fairway 6, 7</td>
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<tr>
<td>10:30 am-11:00 am</td>
<td>CIEC 341 — Morning Refreshment Break in the Expo — Expo Opening</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>11:00 am-12:30 pm</td>
<td>CIEC 313 — Preparing Students for Working in a Global Environment: An Industry Panel</td>
<td>Fairway 4</td>
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<tr>
<td>12:45 pm-1:45 pm</td>
<td>CIEC 351 — Industry Day Luncheon and Awards</td>
<td>Fairway 6, 7</td>
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<tr>
<td>2:00 pm-3:30 pm</td>
<td>CIEC 323 — Attributes of a Global Engineer (Joint Session with CEED)</td>
<td>Fairway 4</td>
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<tr>
<td>3:30 pm-4:00 pm</td>
<td>CIEC 361 — Afternoon Refreshment Break in the Expo</td>
<td>Garden Pavilion</td>
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<tr>
<td>4:00 pm-5:30 pm</td>
<td>CIEC 333 — Industry Involvement in Developing Soft Skills for Students</td>
<td>Fairway 4</td>
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<tr>
<td>6:00 pm-8:30 pm</td>
<td>CIEC 343 — CIPD Hospitality</td>
<td>Goldfield Ghost Town</td>
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<tbody>
<tr>
<td>7:30 am-8:45 am</td>
<td>CIPD 413 — CIPD Business Meeting and Awards Breakfast</td>
<td>Fairway 5a</td>
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<tr>
<td>8:00 am-12:30 pm</td>
<td>CIEC 411 — EXPO</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>9:00 am-10:30 am</td>
<td>CIPD 423 — Industry and Academia Success Stories for Recruiting, Mentoring and Retaining Students in Engineering</td>
<td>Fairway 4</td>
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<tr>
<td>10:30 am-11:00 am</td>
<td>CIEC 421 — Morning Refreshment Break in the Expo</td>
<td>Garden Pavilion</td>
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<tr>
<td>11:00 am-12:30 pm</td>
<td>CIPD 433 — IP Issues in Higher Education</td>
<td>Fairway 4</td>
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<tr>
<td>12:45 pm-1:45 pm</td>
<td>CIEC 431 — CIEC Awards Luncheon</td>
<td>Fairway 6, 7</td>
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<tr>
<td>2:00 pm-3:30 pm</td>
<td>CIPD 454 — Taking Capstone Projects to the Next Level: Going High Tech &amp; Abroad</td>
<td>Fairway 4</td>
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<tr>
<td>3:30 pm-4:00 pm</td>
<td>CIEC 431 — Break</td>
<td>East Conference Center Lobby</td>
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<tr>
<td>4:00 pm-5:30 pm</td>
<td>CIPD 453 — Retaining US Workforce</td>
<td>Fairway 4</td>
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<tr>
<td>6:00 pm-8:00 pm</td>
<td>CEEB 472 — CEEB Hosted Hospitality - All Divisions are Welcome</td>
<td>Suite 710 and Courtyard</td>
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<td>CPDD 464 — CPDD Hosted Hospitality Dessert- All Divisions are Welcome</td>
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<td>CIEC 510 — Continental Breakfast</td>
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<td>8:00 am-9:15 am</td>
<td>CIPD 513 — CIPD Planning for the Future</td>
<td>Fairway 4</td>
</tr>
<tr>
<td>9:30 am-10:45 am</td>
<td>CIPD 523 — Encouraging and Supporting Returning Military-VETS to Enter and Succeed in Technical and Professional Careers: An Industry-Education-Government Partnership</td>
<td>Fairway 4</td>
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</table>
## CPDD Programs at a Glance

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</thead>
<tbody>
<tr>
<td>1:00 pm - 4:00 pm</td>
<td>CPDD 224</td>
<td>Workshop: Open Courses / Open Education for the World: What Does it Mean for Your Program?</td>
</tr>
<tr>
<td>3:00 pm - 5:00 pm</td>
<td>CIEC 211</td>
<td>Putting Tutorial and Miniature Golf Event.</td>
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<td>Plenary: Navigating the Global Job Market: The Role of Universities in Work Readiness</td>
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<td>10:30 am - 11:00 am</td>
<td>CIEC 341</td>
<td>Morning Refreshment Break in the Expo --- Expo Opening.</td>
</tr>
<tr>
<td>11:00 am - 12:30 pm</td>
<td>CPDD 314</td>
<td>Comparison of Cross Cultural Learning Styles in Engineering Education</td>
</tr>
<tr>
<td>12:45 pm - 1:45 pm</td>
<td>CIEC 351</td>
<td>Industry Day Luncheon and Awards.</td>
</tr>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>CPDD 324</td>
<td>Continuing Professional Development Programs in 5 European Countries</td>
</tr>
<tr>
<td>3:30 pm - 4:00 pm</td>
<td>CIEC 361</td>
<td>Afternoon Refreshment Break in the Expo.</td>
</tr>
<tr>
<td>4:00 pm - 5:30 pm</td>
<td>CPDD 334</td>
<td>Global Programs - Multiple Delivery Formats, Flexible Programs</td>
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<td>CIEC 411</td>
<td>EXPO</td>
</tr>
<tr>
<td>9:00 am - 10:30 am</td>
<td>CPDD 424</td>
<td>Measuring Industry Outcomes: ROI, Online vs Face-to-Face Programs</td>
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<tr>
<td>10:30 am - 11:00 am</td>
<td>CIEC 421</td>
<td>Morning Refreshment Break in the Expo.</td>
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<tr>
<td>11:00 am - 12:30 pm</td>
<td>CPDD 434</td>
<td>Building Strategies for Effective Virtual Collaboration between Industry and Academia</td>
</tr>
<tr>
<td>12:45 pm - 1:45 pm</td>
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<tr>
<td>2:00 pm - 3:30 pm</td>
<td>CPDD 444</td>
<td>Longitudinal Study of Compensation Models for Multiply Employed Faculty</td>
</tr>
<tr>
<td>3:30 pm - 4:00 pm</td>
<td>CIEC 431</td>
<td>Break</td>
</tr>
<tr>
<td>4:00 pm - 5:30 pm</td>
<td>CPDD 464</td>
<td>University and Industry Partnership for an Executive Education Program, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meeting the Technological and Infrastructure Challenges of Emerging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trends in Online Education”</td>
</tr>
<tr>
<td>6:00 pm - 8:00 pm</td>
<td>CEED 472</td>
<td>CEED Hosted Hospitality - All Divisions are Welcome.</td>
</tr>
<tr>
<td>6:00 pm - 8:00 pm</td>
<td>ETD 465</td>
<td>ETD Hosted Hospitality - All Divisions are Welcome.</td>
</tr>
<tr>
<td>8:00 pm - 10:00 pm</td>
<td>CPDD 464</td>
<td>CPDD Hosted Hospitality Dessert- All Divisions are Welcome.</td>
</tr>
</tbody>
</table>

### Friday, February 8

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am - 9:15 am</td>
<td>CPDD 514</td>
<td>CPDD Special Interest Groups Planning Session for 2014 (breakfast included)</td>
</tr>
<tr>
<td>9:30 am - 10:45 am</td>
<td>CPDD 524</td>
<td>From a Failed Class to a Fruitful Online Engineering Technology Program</td>
</tr>
<tr>
<td>11:00 am - 12:15 am</td>
<td>CPDD 534</td>
<td>Successful Programs and the Role of Adjunct Faculty</td>
</tr>
</tbody>
</table>
## ETD Programs at a Glance

### Monday, February 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am - 8:00 am</td>
<td>CIEC 111 — Social Networking Workshop and Breakfast.</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>8:00 am - 12:00 noon</td>
<td>CIEC 121 — Networking Hands-On Experience (Golf).</td>
<td>Golf Course</td>
</tr>
<tr>
<td>12:00 noon - 1:00 pm</td>
<td>CIEC 131 — Golfers Luncheon.</td>
<td>Garden Pavilion</td>
</tr>
</tbody>
</table>

### Tuesday, February 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 pm - 4:00 pm</td>
<td>CIEC 211 — Putting Tutorial and Miniature Golf Event.</td>
<td>Golf Course</td>
</tr>
<tr>
<td>6:00 pm - 6:30 pm</td>
<td>CIEC 231 — Red Stars Welcome Reception.</td>
<td>Bonanza’s Ponderosa House</td>
</tr>
<tr>
<td>6:30 pm - 8:00 pm</td>
<td>CIEC 221 — CIEC Opening Reception.</td>
<td>Bonanza’s Ponderosa House</td>
</tr>
</tbody>
</table>

### Wednesday, February 6

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 am - 8:45 am</td>
<td>CIEC 311 — All Conference Breakfast.</td>
<td>Fairway 2, 3, 4</td>
</tr>
<tr>
<td>9:00 am - 10:30 am</td>
<td>CIEC 331 — Plenary: Navigating the Global Job Market: The Role of Universities in Work Readiness</td>
<td>Fairway 6, 7</td>
</tr>
<tr>
<td>10:30 am - 11:00 am</td>
<td>CIEC 341 — Morning Refreshment Break in the Expo — Expo Opening.</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>11:00 am - 12:30 pm</td>
<td>ETD 315 — The National ET Forum.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>12:45 pm - 1:45 pm</td>
<td>CIEC 351 — Industry Day Luncheon and Awards.</td>
<td>Fairway 6, 7</td>
</tr>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>ETD 325 — Curriculum Innovation Driven by Industry Input.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>2:15 pm - 3:30 pm</td>
<td>ETD 345 — ETD Executive Board.</td>
<td>Fairway 5</td>
</tr>
<tr>
<td>3:30 pm - 4:00 pm</td>
<td>CIEC 361 — Afternoon Refreshment Break in the Expo.</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>4:00 pm - 5:30 pm</td>
<td>ETD 335 — Program Development I.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>4:00 pm - 6:00 pm</td>
<td>ETD 355 — ETD Board.</td>
<td>Fairway 5</td>
</tr>
</tbody>
</table>

### Thursday, February 7

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 am - 8:45 am</td>
<td>ETD 415 — ETD Breakfast.</td>
<td>Fairway 6</td>
</tr>
<tr>
<td>8:00 am - 12:30 pm</td>
<td>CIEC 411 — EXPO.</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>9:00 am - 10:30 am</td>
<td>ETD 425 — The Deans’ Forum.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>10:30 am - 11:00 am</td>
<td>CIEC 421 — Morning Refreshment Break in the Expo.</td>
<td>Garden Pavilion</td>
</tr>
<tr>
<td>11:00 am - 12:30 pm</td>
<td>ETD 435 — Internships, Capstone Projects, Engineering Centers, and Other Methods to Work with Industry.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>12:45 pm - 1:45 pm</td>
<td>CIEC 431 — CIEC Awards Luncheon.</td>
<td>Fairway 6, 7</td>
</tr>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>ETD 445 — Program Development II.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>3:30 pm - 4:00 pm</td>
<td>ETD 431 — Break.</td>
<td>East Conference Center Lobby</td>
</tr>
<tr>
<td>4:00 pm - 5:30 pm</td>
<td>ETD 455 — Professional Aspects of Education.</td>
<td>Fairway 1</td>
</tr>
<tr>
<td>6:00 pm - 8:00 pm</td>
<td>ETD 465 — ETD Hosted Hospitality - All Divisions are Welcome.</td>
<td>Suite 709</td>
</tr>
<tr>
<td>6:00 pm - 8:00 pm</td>
<td>CEEF 472 — CEEF Hosted Hospitality - All Divisions are Welcome.</td>
<td>Suite 710 and Courtyard</td>
</tr>
<tr>
<td>8:00 pm - 10:00 pm</td>
<td>CPDD 464 — CPD Hosted Hospitality Dessert- All Divisions are Welcome.</td>
<td>Suite 709</td>
</tr>
</tbody>
</table>

### Friday, February 8

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
</table>
| 7:00 am - 9:15 am | ETD 515 — ETD Meetings:  
7:00 - 8:00: ETLI  
8:00 - 9:15: ECETDHA  
9:15 - 10:30: ETC  
10:30 - 12:00: JET | Garden Pavilion |
| 8:00 am - 9:15 am | ETD 525 — Writing for Professional Publications.                      | Fairway 5      |
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Conference for Industry and Education Collaboration
American Society for Engineering Education
February 5-7, 2014, Savannah, GA

2014 General Conference Chair

Ken Rennels
Indiana University-Purdue University
Indianapolis