The Cooperative and Experiential Education Division had 29 abstracts submitted! We hope you will be able to attend this great conference. Following the tradition of the past two years, CEED will also host an off site get together for all of our division members and presenters. More information on this conference can be found at http://www.asee.org/conferences-and-events/conferences/annual-conference/2011
Chair’s Message

Dear CEED Members,

First I would like to extend my congratulations to all of you who have survived the winter weather. As always, I thoroughly enjoyed the insightful sessions and the camaraderie of the CIEC conference this year. I know many of you were unable to attend due to weather, and illness, and job markets, and budget cuts and, well, you can fill in your own blank here - 2010 was a challenging year. As we all continue to work toward our mutual goal of connecting the best students with the best experiential opportunities, 2011 will no doubt add its own set of challenges to those we are already working.

I’m not trying to depress you. What I am here to tell you is that you are not alone. (I know you were hoping I was going to say I had all the answers, but that would be stretching the truth a very long way.) Since I attended my first CIEC conference in 2004, I have found the membership of this organization more than capable of providing most of the answers I’ve ever needed. Some of our core academic institutions have been in the business of co-op for 100 years, while our employer-membership includes companies that have maintained co-op and internship programs for many years as well. Make use of this wisdom. Whatever issues you face, someone in CEED has been there before. So don’t hesitate to contact any member of the CEED board, or of CEED in general, if you find yourself stumped. The collective wisdom represented by this organization can help.

Well, now that I’ve got that off my chest, I want to express my great pride at being able to serve this organization as Chair. For those of you who do not know me, I have been involved in co-op and internships since 1983. That is to say, I was a co-op myself as an undergrad, I supervised co-ops as a test engineer at NASA, I placed co-op students as a faculty at the University of Cincinnati, and I now manage an internship program for NASA. Needless to say I am a big believer in the power and importance of experience in the educational process.

I am particularly honored to be working with a great group of experiential professionals on your board. They are both good friends and trusted colleagues. As I stated before, don’t hesitate to contact any of us if we can be of assistance to you. By the same token, CEED is a volunteer organization and we need your expertise as we continue to work on updating our website and transitioning the bi-annual co-op directory.

Before I close, I want to make sure you are all aware of the great professional development conference opportunities available to you over the next few months. The Cooperative Education and Internship Association will be holding their annual conference in San Antonio on April 10-12th and the Southeastern Regional Cooperative Education Conference will be held in Raleigh on June 7-9. These are both excellent opportunities for networking and professional development. Our own ASEE annual conference will be held in Vancouver June 26-29. Maureen Barcic has organized a wonderful slate of CEED presentations. (I guarantee that if you attend you will not be disappointed!) Finally, start planning now to join us for the next CIEC in Orlando February 1-3rd - and bring a friend!

Best wishes,
Bryan Dansberry, Chair
Dear CEED Colleagues:
It has been my privilege and pleasure to serve as CEED Chair this past year! It was indeed a year of challenges and transitions and I want to extend my sincere thanks to the Board and entire membership for their assistance and support in continuing to expand the mission and activities of this division.

Excellent programming for CIEC continued at the recent conference in San Antonio, led by Gayle Elliott, who will now assume her role as Assistant General Conference Chair for CIEC 2012. A warm welcome to Alison Cook Noguiera of Northeastern University who joins CEED as the new Program Chair for CIEC 2012, Dr Leo Hanifin, Dean of Engineering at the University of Detroit-Mercy and new Academic Rep for Co-op and Candee Chambers, of American Electric Power and winner of the 2010 Takacs Employer of the Year Award who will serve as the Awards Chair. Susan Matney, an outstanding supporter and previous Board member will return this year as Secretary. This mix of new and seasoned members will ensure continuity in maintaining the integrity of CEED while generating innovative strategies critical to its long-term viability.

Our new website, www.ceed.org, launched in early fall 2010 is still a work in progress and we now have a dedicated webmaster in Scott Green of Georgia Institute of Technology. You are invited to help keep this site dynamic by sending us pictures of your students in action, while on co-op or internship, as well as your feedback on how we might improve the site.

There are many opportunities for contributing to the work of CEED, whether it is project-based or short-term “behind the scenes” assistance and I hope you will consider participating as your time and interest allow.

My best wishes to Bryan Dansberry, new Chair and the 2011-12 Board of Directors for a successful and productive year.

Regards,
Louise Carrese, Past Chair

Check out the new CEED Website at http:www.ceed.asee.org.
COOPERATIVE & EXPERIENTIAL EDUCATION DIVISION/

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**ASEE CEED Financial Position**

Reported by Ken Little, Treasurer

The Cooperative and Experiential Education Division of ASEE began its fiscal year October 1, 2010 with total opening balances of $33,206.89. With many of the division’s CIEC 2011 expenses paid in February but no final 2011 CIEC income amount yet determined, the total closing balances as of February 28, 2011 are $30,851.75.

- **Total Opening Balances**: $33,206.89
- **Receipts**: $7,873.32
- **Disbursements**: $10,228.46
- **Total Closing Balances**: $30,851.75

Receipts coming into CEED typically include CEED dues, CIEC income, interest from E*Trade CDs and from the ASEE BASS Account, and from publishing the CEED directory. Three notable items are first, E*Trade no longer allows automatic rollover of its CD accounts. One of two CD’s just matured; the $10000 matured CD amount is temporarily deposited in our bank business account until a better interest bearing account is established. Second, no income from the CEED directory will be realized in fiscal year 2010-2011. With Mike Mathew’s retirement, a new committee is overseeing the publication of our directory. The transition will add a year to our publication, and therefore, income cycle. Third, two parties stepped forward to sponsor our awards reception at the 2011 CIEC. Hearty thanks go out to Grand Valley State University and to the University of Cincinnati which each contributed $500 to make the awards reception memorable!

During this fiscal year, the division has already addressed several needs that show up under the disbursements column. Some of the most significant items include: a complete renovation of the CEED web site ($3500); final payout to two previously committed research projects ($2000); the 2011 Student of the Year Award to Northwestern University’s Roshni Barot ($500); partial completion of a project to scan CEED archival records ($360); 2010-2011 conference and board meeting expenses ($2128.29), and the purchase of 500 imprinted micro lens cloths for marketing CEED.

**Membership and Member News!**

**Membership Report**

Our CEED membership continues to rise! Not only are the numbers of experiential professionals rising, but a number of employers have recently joined. We hope that you can all plan to attend the CIEC in Orlando next February, which is an outstanding learning and networking event. Now, there is a perk for membership.

**CEED Website**

The new CEED website is up and running. The new look of CEED’s more user friendly site should be very useful in your activities.

[http://www.ceed.as ee.org](http://www.ceed.as ee.org)
Co-op History

Cooperative education is a structured method of combining academic education with practical work experience. Research indicates that one of the attributes employers value most in newly hired employees is work experience. A cooperative education experience, commonly known as a "co-op", provides academic credit for career work. Cooperative education is taking on new importance in school-to-work transition, service learning, and experiential learning initiatives.

The history of cooperative education could and will fill an entire book but here are some fast facts about co-op at the University of Cincinnati:

- Founded at the University of Cincinnati by Dean Herman Schneider in 1906
- First Co-op Class had 27 students in 13 companies
- Second year over 400 inquiries from prospective students
- First Co-op Program in Business in 1919
- First Mandatory Co-op Program in the USA in 1920 in College of Engineering
- First Women Admitted to Co-op in 1920
- UC Co-op program split into 3 colleges in 1946
- Currently UC has approximately 3,500 students co-oping annually

Nationwide there are approximately 600 co-op programs with 241,000 students participating

Tom Akins  Executive Director of Professional Practice, Georgia Institute of Technology, Representative from the Cooperative Education Division of the American Society for Engineering Education

Muthar Al-Ubadi  Department Head, Mechanical Engineering Technology, College of Applied Science, University of Cincinnati

Kettil Cedercruz  Associate Provost and Director, Division of Professional Practice, University of Cincinnati, Chair of the Cooperative Education Hall of Honor Board of Trustees

Brenda LeMaster  Professor, Division of Professional Practice, University of Cincinnati

Marianne Lewis  Associate Professor, College of Business, University of Cincinnati

Richard Miller  Professor, Civil and Environmental Engineering, College of Engineering, University of Cincinnati

Karen Monzel  Associate Dean, College of Design, Architecture, Art and Planning, University of Cincinnati

E. Sam Sovilla  Professor Emeritus, Division of Professional Practice, University of Cincinnati

Anita Todd  Associate Professor, Division of Professional Practice, University of Cincinnati, Representative from the Cooperative Education and Internship Association

Dr. Luther Epting

Year Inducted: 2011

Affiliation: Mississippi State University

About: Dr. Luther Epting’s thirty-seven year career in cooperative education was one of great distinction. Over his career at Mississippi State University, Epting built his University’s program from 300 co-op students on work terms to over 1,100, elevating the program to that of the second largest in the South. Among his many leadership roles, he was the charter president and first president of the Mississippi Association of Colleges and Employers (MACE). In the American Society for Engineering Education (ASEE) he served as chair of the Cooperative Education Division (CED) and also as the general conference chair for the ASEE Conference for Industry/Education Collaboration (CIEC), a conference which involves four divisions of the overall Society. He also served as a vice president on the Board of the national Cooperative Education and Internship Association (CEIA) and was an important contributor and leader in the formative years of the Accreditation Council for Cooperative Education (ACCE). In recognition of his many contributions for the benefit of cooperative education, Dr. Epting received many awards, including the Clement J. Freund Award as well as the Alvah K. Borman Award. Epting was inducted as a member of the Academy of Fellows in the American Society for Engineering Education. Selection based upon a career of unusual professional distinction with outstanding and extraordinary contributions in engineering and engineering technology. In addition to his leadership roles in his professional organizations, Dr. Epting served as a consultant to the U.S. Department of Education and was the Principle Investigator for DOE grants totaling over $200,000. Luther Epting is a superb builder of a large scale high quality program at his home institution, a significant innovator, and continues to be recognized as a national leader in the overall field of cooperative education.
Roshni is a Biomedical Engineering student at Northwestern University where she was recently named Co-op Student of the Year. She is actively involved in student organizations including the Biomedical Engineering Society, Multicultural Students Association and the Society of Women Engineers. She also completed a study abroad program in Cape Town, South Africa.

Roshni co-oped in the Renal Division of Baxter Healthcare. She is “an outstanding engineer and an exceptional employee,” according to her supervisor Justin Rhode, a principal engineer at Baxter. At Baxter Roshni completed requirement specification documents and risk analyses and led the Clinical Trial Ancillary team responsible for identifying, sourcing and designing ancillary devices needed for a clinical trial. She also created a complete risk summary for a device and took a lead role in analyzing the reliability of prototype devices.

“Roshni has become one of the most valued members of our team,” Rhode wrote. “She has consistently outperformed her peers, and in many cases, blown away even our expectations for a full-time engineer, let alone a co-op.” Roshni chose to work at Baxter because of the company’s reputation for giving co-op students challenges and leadership opportunities. “The experience was priceless,” she said. “The amount that I learned and the networks I set up – it’s not something I would have gotten without a co-op experience.”

CEED is proud to honor Roshni Barot with the 2011 Student of the Year Award.
Laura Chessa    Johnson & Johnson Consumer

Laura graduated from the University of Pittsburgh Swanson School of Engineering with a degree in chemical engineering. She was the first co-op hired at McNeil Consumer Healthcare and accepted a full-time position with them after her graduation.

Laura is currently a Strategic Sourcing Lead for Johnson & Johnson Consumer for the Americas Packaging Procurement, lead recruiter for the University of Pittsburgh, and chairperson for the Women’s Leadership Initiative Community Events Team. Laura has had two additional roles at Johnson & Johnson/McNeil Consumer Healthcare. Her first was a National Process Engineer, supporting well-known brands such as Tylenol®, Motrin®, and St. Joseph’s®, and her second was a Process Excellence Engineer.

With the 2010 recall of Tylenol products, Laura made certain that none of the eight co-op students working was furloughed. She exhibited extraordinary effort, even when her own future was in jeopardy, to make certain that the co-op students were not only exempt from layoff, but also received quality experiences.

Jessica Huynh, an engineering student who co-oped with McNeil Consumer Healthcare, stated: “Even though they faced such a difficult time, they still treated us as a part of their family. I could not have picked a better company to work for.”
Cooperative Pirates ALL!
Professor J. E. McDaniel  
Director of Cooperative Courses  
Georgia School of Technology  
Atlanta, Ga.

Dear Prof. McDaniel:

I am glad to inform you that the Council has voted unanimously to form a Division of Cooperative Engineering.

The program this year at Montreal will be on Thursday morning, June 26, and will consist of a joint session with the A.C.C. It is planned to have a short special session of the A.C.C. to take up the question of whether or not it is wise to continue the Association.

Yours very truly,

W. H. Timbie.
April 10th, 1930.

Prof. W. H. Timbie  
Dept. of Electrical Engineering  
Mass. Institute of Technology,  

My dear Prof. Timbie:

I wish to thank you for your letter of April 8th informing me that the Council has voted to have a Division of Co-operative Engineering. I believe that this movement will be for the good both of the Co-operative Colleges and the S. P. E. E.

Yours very truly,

J. E. McDaniel,  
Director of Co-operative Courses.

JEMcD/d
A Co-Op’s Experience
Through Grad School

It costs nothing and requires little effort to treat the co-op as a professional, but such measures can make a world of difference to his performance and dedication.


If the experience acquired in a co-op program is to have the greatest value for the employee-student, the company must carefully select the jobs assigned to him. This selection should be based on the position of the specific job in the job sequence, on some well-defined guidelines, and should recognize the value of developing professional attitudes. These points will be discussed here in terms of my own co-op experience.

I worked for Du Pont at the Savannah River Plant in the program described by J. W. Morris in another article in this issue (pp. 78-82). Although the production of nuclear isotopes is not a usual activity for chemical engineers, the basic principles of chemical engineering apply to these processes. The nine positions I was assigned, Table 1, each lasted 11 to 14 weeks. The first seven were part of the undergraduate program at Georgia Tech, beginning immediately after the first freshman quarter. The last two were undertaken during graduate work at the University of Wisconsin.

Work Assignments

My initial job assignment was in the industrial engineering department. Here I assisted engineers in work sampling, labor standards, and material handling studies in the plant area where mechanical parts are assembled into reactor fuel. I worked with people who had assignments in all areas of the plant, which helped give me an overview of the entire operation. The job involved very concrete problems which could be solved by basic algebra and descriptive statistics.

My second job assignment was a natural extension of the first. I worked with a quality control group in this same plant area making a statistical and cost study of the dimensions of machined parts. This was an individual project which required me to develop my own program. The technical experience included statistics, computer programming, and machine work on metals.

“… co-ops can usually handle twice the responsibility they are given so there should be no hesitancy about overloading them with work.”

My work assignments during the following five undergraduate work quarters were also interrelated, progressing from specific unit operations to general applications of transport phenomena.

The first of these assignments was in an equipment test facility. Testing pumps required very little prior experience, and was a good introduction to the concepts of flow and pressure relationships. Working with the hardware provided a basis for visualizing equations encountered in later work. I believe that the ability to see the meaning of equations in realistic terms is based solely on experiences of this sort.

In the second and third of these assignments, I made routine fluid flow and heat transfer calculations of progressively greater complexity. The basic equations were set up by other engineers and I carried out the calculations.
This work was followed by an experimental problem. I optimized a filtration process for which the chemistry had been developed. This project combined the techniques I had learned about unit operations during the preceding work quarters with what I had been taught in the classroom about transport phenomena. This lab work also helped provide real situations which made the equations meaningful.

In my last undergraduate quarter I was involved with a more abstract heat transfer calculation. I converted and used a computer program which calculates temperature distributions in solids of arbitrary geometry and boundary conditions.

During the first of the graduate quarters I extended the numeric technique to other problems which could not be solved by the general program. Throughout the last quarter I was busy accumulating data for my dissertation (1).

Job Assignment Principles

From the job sequence just described, and after talking with several other co-ops, I drew up a few general job assignment principles which should prove useful to any firm involved in, or contemplating, a work-study program.

First of all, the co-op should progress from being a member of a team, to working on his own projects, to leading a team. In addition, the co-op should be introduced to his work inductively, that is, acquainted with specific applications where he can see the results directly, before he is confronted with the general principle. This gives him a decided advantage over the non co-op student who is just given “laws on stone tablets” without the benefit of demonstration.

Secondly, co-ops are usually capable of twice as much responsibility as they are given, so there should be no hesitancy about overloading them with work. They will gladly undertake a heavy work schedule and perform their tasks satisfactorily if they believe the jobs is real and not just make-work.

Finally, to keep the co-op from becoming too specialized and to develop both his analytical and experimental abilities, there should be a balance between those aspects of the job devoted to calculations and experimentation. This also helps build student interest and to prevent boredom.

There are several things a company can do to instill a professional attitude in the student-worker. It costs nothing and requires little effort to associate him with engineers, help him to see the overall picture, to show him the results of previous work, and to encourage an aggressive, questioning attitude, but doing so can make a world of difference to his performance. If you put an 18 yr. old in the locker room, don’t be surprised if he develops a wage-roll attitude. From the start, treat him as you would a new employee. Getting him involved in the AIChE can help him become acquainted with a wide variety of engineers. There is nothing so meaningful as seeing how what you do fits into the big picture. Job satisfaction from worthwhile projects is the most effective way of bringing out the co-op’s dedication and energy.

Graduate Work

My last quarter at Savannah River followed two years of graduate study. During preliminary work at the University of Wisconsin on the design of failure tolerant chemical processes, it became apparent that there was a large gap between theoretical methods, and the needs of the industrial user. I recognized from my co-op work that the heavy water production facility at Savannah River provided a fairly ideal case for study.

This example provided a demonstration of the usefulness of the theory and showed what new techniques were needed by the industrial user. Industry has difficulty incorporating data from past experiences into decision methods. Meanwhile, there has been considerable work amount statisticians developing sophisticated tools for unrealistically simple models. I developed more realistic models, applied simpler Bayesian model building techniques, and derived better decision methods to bridge the gap between theory and application. This type of synthesis of industrial need and theoretical technique worked quite well. Unfortunately, it does not lend itself to as formal a program as the undergraduate programs.

In summary, the undergraduate co-op experience is an invaluable teaching tool. To be truly effective, however, the job sequence should be selected to maximize the educational value of the program. This can be done by deliberately analyzing the man and the job, using some well-defined guidelines. On the graduate level, co-operative work with industry can be a major aid in developing useful tools of powerful theoretical technique and realistic data. The co-op program should be considered as a most useful teaching tool which keeps the academic process close to its industrial roots.


C.F. King is a research engineer in the “Permasep” Products Div., DuPont Co. He received his B.S.Ch.E. from Georgia Institute of Technology and Ph.D. in chemical engineering from the University of Wisconsin. His present activities include development of commercial gaseous diffusion applications.
WACE is happy to offer CEED Members a discounted rate to our 17th World Conference on Cooperative & Work-Integrated Education, which is hosted by Drexel University and will be held on their campus from June 14-17, 2011.

CEED Members will enjoy a “Host Country Associations Registration” fee of $445 until May 1 ($545 after May 1), which is $100 less than the WACE Member Registration fee.

The Call for Abstracts and Registration are now open, so please visit the event webpage, www.waceinc.org/philly2011/index.html, for more information on submitting an abstract and to register at the discounted rate.

The theme of the 17th World Conference on Cooperative & Work-Integrated Education is “Historic Challenges. Global Solutions.” We are expecting 500 international delegates from approximately 25 countries to join us for this world event, with Pre-Conference activities and the Opening Reception on Tuesday, June 14, and the World Conference activities from Wednesday, June 15 through Friday, June 17, which include a two and a half day conference, a Closing Reception & Dinner, and much more. For the Preliminary Schedule, please visit the event webpage.

Don’t miss your chance to network with, learn from, and share with WACE colleagues from around the globe!

Questions? Contact Michelle Hansford, WACE Director, at m.hansford@neu.edu or 617-373-8885.

See you in Philly!

Would you like to be on the NEWSBRIEFS Staff? How about writing an article here and there, now and then about your institution? How about supplying news about your region? How about raising issues that members would like to address? Email gunn@egr.msu.edu
ASEE - Conference For Industry and Education Collaboration
Orlando, Florida
February 2-4, 2012
Make your plans NOW!!!!
http://www.asee.org/conferences/ciec/2012/index.cfm

Conference Theme:
Transforming the Education of Future Generations in Engineering and Engineering Technology

Lots to see!  Lots to DO!
We should all be aware of the approaching crisis identifying, encouraging, and educating students for future careers in engineering and engineering technology. It is incumbent upon all of us to look at what we are doing to entice more American born candidates to consider engineering as a viable career. Through these presentations, you will gain insight concerning what the Bill and Melinda Gates Foundation and the Samuei Foundation have done and are doing to promote engineering to K-12 students and how the Northrop Grumman Corporation has stepped up to the plate to provide knowledge about engineering through the DaVinci Project. This will be an interactive session where there will be a dialogue amongst the panel as well as the opportunity to dialogue with the audience. The goal of this session is to incite an interest in the audience to get involved in STEM education.

Presenters: Dr. Jan Morrison, President
ties Teaching Institute for Excellence in STEM
Cleveland, Ohio
Gerald Solomon, Executive Director
Samueli Foundation
Corona Del Mar, CA

Moderator: Dr. Ray Haynes, Retired, Northrop Grumman
Volunteer, STEM Integration
DaVinci Charter Science High School
Los Angeles, CA

Dr. Ray Morrison, Retired, Lockheed Martin
President, ACETS, Ili Consulting

CIEC exhibitors will be available to talk to you during the morning break. Have a cup of coffee and visit with other conference participants and exhibitors from academia and industry.
Wednesday, February 2

11:00 AM–12:30 PM
MORNING CONCURRENT SESSIONS

CEED 321 — How Can CEED and CMC Combine Efforts to Bring About Positive Results for Future Engineers

EXECUTIVE SALON 1 11:00 AM–12:30 PM

The session will integrate best practices and areas for improving the partnership between universities and companies in order to produce better engineers. Members of CEED and CMC will discuss the following in the hopes to strengthen the corporate/university relationship:

☆ How do companies and universities develop partnerships, and what are some of the positive outcomes?
☆ How can companies and universities work together more effectively?
☆ What practices can strain the relationship between companies and universities? How can CEED and CMC combine efforts?
☆ What are the ramifications for employers who have suspended their co-op programs during these tenuous times? How have some employers successfully weathered the economic storm?
☆ Do companies incorporate volunteerism or community service in tandem with the work assignment? Is this the responsibility of the employer or should the university be involved?
☆ How do employers make use of student presentations or evaluations of their assignments?

Topics to be covered will also include reports on financial impact for companies who hire co-ops and statistics on the effects of recruitment and retention of future engineers.

Moderator: Maureen Baric, University of Pittsburgh
Presenters: Reginald McGregor, Rolls-Royce Corporation
Candee Chambers, American Electric Power
Louise Carrese, Rochester Institute of Technology

CIP 331 — Leadership Training: What Companies Really Think, Part I

EXECUTIVE SALON 2 11:00 AM–12:30 PM

Four universities will bring one of their top customers (in person or virtually) to participate in a panel discussion of how the leadership training they received from the university is working for their company. "Dos" and "Don'ts" will be candidly discussed. One case study per school will be provided; audience participation will be encouraged.

Moderator: Nelson Baker, Georgia Institute of Technology
Presenters: Edward Borbely, University of Michigan
Pat Hall, University of Tulsa
Cath Polito, University of Texas

CPD 341 — Growing Professional Development in Academia: A Non-Academic Industry-Based Model

EXECUTIVE SALON 3 11:00 AM–12:30 PM

If we want to add real value with our employee development opportunities, then we need to tie them directly to our key business pursuits or desired market niches. In this way, to eliminate a training or educational opportunity is to say we're willing to weaken our opportunity for success. This presentation will provide a model that defines a process with multiple activities and attendant products. The overall purpose of which, will be to reconcile key business pursuits and technologies with employee developmental opportunities for increased probability of future growth.

Moderator: Keith Plemmons, The Citadel
Presenter: Mitchell L. Springer, Purdue University

— 2011 CIEC EXHIBITORS —

☆ CD-Adapco
☆ North Carolina State University
☆ International Association of Continuing Engineering Education
☆ The Boeing Company
☆ Continuing Professional Development Division
☆ University of Colorado, Boulder
☆ Missouri University of Science and Technology
☆ Northrop Grumman
☆ Cooperative and Experiential Education Division
☆ Siemens PLM & Software
☆ University of Tulsa
☆ US Didactic
☆ CIEC 2012 Orlando
☆ Altium, Inc.

10 ★ February 2–4, 2011 ★ San Antonio, Texas
**Wednesday, February 2**

**12:30 AM–1:45 PM**

**CIEC 314 — Industry Day Luncheon and Awards**

**TEXAS BALLROOM B**

12:30 PM–1:45 PM

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 dialog and reflect upon the day's sessions. Lunch is included in your conference registration.

**Presenters:**
- Linda Krute, CIEC General Conference Chair
- Terri Morse, CMC Chair-Elect

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**2:00 PM–3:30 PM**

**AFTERNOON CONCURRENT SESSIONS**

**CEED 322 — Best Practices in Co-op: Something Old and Something New**

**EXECUTIVE SALON 1**

2:00 PM–3:30 PM

Join us for a panel discussion with an audience dialogue on the subject of best practices. Let's discuss new ideas or processes as well as the "tried and true methods" that are used to enhance the value of co-op for students, employers, and universities. Perspectives will be presented from each of these major constituencies to help us build and improve the best programs possible.

**Moderator:** George Kent, Northeastern University

**Presenters:**
- Rob Rogers, Georgia Tech
- Louis Trent, University of Cincinnati
- Thomas Parker, Dow Chemical Company
- Bill Phillips, Duke Energy

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**CEED 323 — What You Need to Know: Proven Strategies Used to Place Deaf and Hard of Hearing College Students on Co-op**

**EXECUTIVE SALON 3**

2:00 PM–3:30 PM

A large number of associate degree students will attend colleges that offer co-operative work experiences, as part of the curriculum. Colleges and universities that offer co-operative work experiences do so with the sole purpose of preparing students to enter the labor force. This presentation will focus on co-op work experience in general and the advantages it has for deaf students. Successful strategies used to communicate with deaf students will be emphasized in the presentation.

**Moderator:** Louise Garrese

**Presenter:** Sidley McQuay

**Rochester Institute of Technology**

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**CIP 332 — Leadership Training: What Companies Really Think — Continued**

**EXECUTIVE SALON 2**

2:00 PM–3:30 PM

This session will continue the earlier discussion of the value of leadership programs to both academia and industry.

**Moderator:** Nelson Baker, Georgia Institute of Technology

**Presenters:**
- Edward Borbely, University of Michigan
- Pat Hall, University of Tulsa
- Cath Polito, University of Texas
### Thursday, February 3

#### Morning Concurrent Sessions

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<tbody>
<tr>
<td>9:00 AM—10:30 AM</td>
<td><strong>CEED 422 — Effective Use of Co-op Evaluations and Feedback I Program Assessment and New Co-op Student Preparation</strong>&lt;br&gt;Sponsored by Cooperative and Experiential Education Division</td>
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<tr>
<td>Executive Salon 1</td>
<td>9:00 AM—10:30 AM</td>
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<td>Co-op programs routinely collect information from work-sites as part of the evaluation process of the student. This session will explore how one institution uses this information for program assessment and to help inform new co-op students. Employer and student assessments of the work experience are collected through web database tools and used as part of the evaluation of ABET program outcomes. Student assignment summaries are also used to provide new co-op students with information to research and prepare for interviews and help make workplace selection decisions. Online tools that were developed will be discussed and demonstrated. Session participants will be encouraged to bring information on similar systems from their home institutions to facilitate a discussion of best practices.</td>
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<td><strong>Moderator</strong>: Alison Nogueira, Northeastern University</td>
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#### Morning Concurrent Sessions

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00 AM—10:30 AM</td>
<td><strong>CPD 442 — Challenges of Building Bedrock Programs in Professional Education</strong>&lt;br&gt;Sponsored by Continuing Professional Development Division</td>
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<tr>
<td>Executive Salon 5</td>
<td>9:00 AM—10:30 AM</td>
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<td>The Center for Professional Studies in Technology and Applied Research (ProSTAR) was approved by Purdue University under the College of Technology in February 2009. At that time, the underlying foundation for ProSTAR's professional education activities was a Master's degree with the primary focus in process improvement and quality management. This presentation will address the many challenges of growing program offerings from this simple beginning. Topics to be addressed include faculty availability, geographical difficulties in a facilitator-led premised program, departmental tensions arising from academic program ownership, balancing quality versus quantity of program offerings and the many cultural hurdles.</td>
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<td><strong>Moderator</strong>: Marty Ronning, University of Maryland</td>
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#### Division Breakfast Sessions

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<th>Time</th>
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<tbody>
<tr>
<td>7:30 AM—8:45 AM</td>
<td><strong>CEED 421 — CEED Business Meeting Breakfast</strong>&lt;br&gt;Texas Ballroom A</td>
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<td></td>
<td>The CIP Division will conduct its regular business session, elect new officers and board members, and discuss future activities. All CIP members are encouraged to attend. First time CIEC attendees are also welcomed.</td>
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<td></td>
<td><strong>Moderator</strong>: Linda Krute, North Carolina State University</td>
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<tr>
<td>7:30 AM—8:45 AM</td>
<td><strong>CIP 431 — CIP Business Meeting Breakfast</strong>&lt;br&gt;San Antonio Ballroom</td>
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<td>The CIP Division will conduct its regular business session, elect new officers and board members, and discuss future activities. All CIP members are encouraged to attend. First time CIEC attendees are also welcomed.</td>
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<tr>
<td>7:30 AM—8:45 AM</td>
<td><strong>CIP 432 — CMC Working Business Breakfast Meeting</strong>&lt;br&gt;Executive Salon 3</td>
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<td>Formal CMC Business Meeting to review overall CMC goals and directions including an update of special Interest Group (SIG) activities: Diversity Issues in Engineering Education; K-12 Educational Pipeline; Future Workforce; Engineering, Technology, and Society Liaison; Industry/University Collaboration for Engineering Research &amp; Intellectual Property (transition to the ERC); and International Engineering Education.</td>
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<td><strong>Moderator</strong>: Terri Morse, The Boeing Company</td>
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<tr>
<td>7:30 AM—8:45 AM</td>
<td><strong>CPD 441 — CPD Business &amp; Awards Meeting Breakfast</strong>&lt;br&gt;Executive Salon 4</td>
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<td>During this breakfast session, you will meet other CPD members and receive an update on the division's activities; CPD elections will take place and the division will recognize and honor some of their members with awards. We hope you'll join us.</td>
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<td><strong>Moderator</strong>: Nancy Kruse, University of Tulsa</td>
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<tr>
<td>7:30 AM—8:45 AM</td>
<td><strong>ETD 451 — ETD Business Meeting Breakfast</strong>&lt;br&gt;Texas Ballroom C</td>
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<td><strong>Moderator</strong>: John Williams, Alfred State College</td>
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Thursday, February 3

9:00 AM—10:30 AM
MORNING CONCURRENT SESSIONS

CEED 423 — Understanding Generational Differences
Sponsored by Cooperative and Experiential Education Division, College-Industry Partnerships Division, Continuing Professional Development Division and Engineering Technology Division
EXECUTIVE SALON 2 9:00 AM—10:30 AM
Just imagine an employee who brings enthusiasm and energy to the workplace. That same employee shares fresh ideas and new approaches, displays wisdom that typically comes with years of experience, demonstrates unflagging loyalty to the organization, and refuses to take "no" for an answer when pitching an idea. The chance of finding all of these characteristics in a single employee is practically zero; however, all of these characteristics, and many more, exist in today's multigenerational workforce.
Join this interactive session where participants will be divided into teams. There will be discussions as well as a PowerPoint presentation with exercises for all participants.
Moderator: Terri Schulz
Project Lead The Way
Presenter: Candee Chambers
American Electric Power

ETD 452 — Faculty Scholarship, Research and the Advancement of Engineering Technology
Sponsored by Engineering Technology Division
EXECUTIVE SALON 4 9:00 AM—10:30 AM
Scholarship and research are foundational to educational advancements that can add collectively to the body of knowledge. This session provides the sharing of topics related to recent discoveries that can be used to transform future instruction and topics within Engineering and Technology. These themes focus both on industrial exploration and pedagogical discovery.
Moderator: Abi Aghayere, Drexel University
The Planning and Design of Photovoltaic Energy Systems: Engineering and Economic Aspects
Presenters: William Nichols and Youakim Kalaani
Georgia Southern University
Integrated Waste Management to Ensure Protection of MSW Landfills
Presenter: Albert V. Condello III,
University of Houston Downtown
Plot Scale Factor Models for ISO-Insert Views
Presenter: Edward Oskue
Texas Southern University
Integrated Solid Waste Management for Oily Debris & Sludge from the BP Oil Spills
Presenter: Albert V. Condello III
University of Houston Downtown
Educational Application of 3D Interactive, Dynamic Multimodal Visualizations in Virtual Learning Environments: The Role of Multimodal Visualization Rehearsal in Memory Recall
Presenters: Phuong T. Do, John R. Moreland and Dennis P. Korchev
Purdue University Calumet

10:30 AM—11:00 AM
CIEC 411 — Morning Refreshment Break
SAN ANTONIO BALLROOM FOYER  10:30 AM—11:00 AM
MID MORNING CONCURRENT SESSIONS

CEED 423 — What Employers Want
Sponsored by Cooperative and Experiential Education Division
EXECUTIVE SALON 1  11:00 AM—12:30 PM
Have you ever pondered this question? Come to this session and hear what Ken has learned from his experiences at Georgia Tech.

Moderator: Terry Comerford, Colorado State University
Presenter: Ken Little, Georgia Institute of Technology

CIP 433 — University Teams Challenged to Solve Real-World Problems
Sponsored by College-Industry Partnerships Division
EXECUTIVE SALON 3  11:00 AM—12:30 PM
For nearly 35 years, student programmers from universities around the world try to earn coveted spots among the information technology (IT) elite at the Association for Computing Machinery (ACM) International Collegiate Programming Contest (ICPC), sponsored by IBM and headquartered at Baylor University. This session will discuss the cooperation between academia and business, give examples of the real-world problems solved by contest participants and provide a glimpse of the excitement generated by the annual ICPC World Finals.

Moderator: Ranji Vaidyanathan
Oklahoma State University
Presenter: Leigh Ann Marshall, Baylor University

CPD 443 — Using University Distance Learning Programs in Professional Education Across Multiple Generations of Engineers
Sponsored by Continuing Professional Development Division
EXECUTIVE SALON 5  11:00 AM—12:30 PM
Engineers in professional practice, ranging multiple generations, have an ongoing need for lifelong learning and transformation of their engineering education. How can you leverage existing resources at your institution to provide professional development to various experience levels of the engineering workforce? This presentation examines offerings of a university based engineering distance learning program that provides training to professionals at various stages of their careers. Certifications, graduate degrees, and non-credit courses developed around existing university strengths and industry ties are presented. Interactive portion will enable audience to examine avenues for similar program development based on their university strengths and industry relationships.

Moderator: Wanda Lambert, Auburn University
Presenter: Pam Dickrell, University of Florida

ETD 453 — Preparing Engineering Technologist for a Global Marketplace
Sponsored by Engineering Technology Division
EXECUTIVE SALON 4  11:00 AM—12:30 PM
The global economy has produced an interconnected marketplace which is unharmed by time zones and national boundaries. Providing the proper background and awareness to this diverse work environment is vital to Engineers entering the workplace. Diversity, ethics, study abroad activities, general education concepts, and the significance of an Engineering Technology degree within an Engineering title are discussed in this session.

Moderator: Ramesh Narang, IPFW

Technology Degree, Engineering Career—Completing the Picture
Presenters: Richard W. Kelnhofer and Owen G. Petersen
Milwaukee School of Engineering Milwaukee

Academic Dishonesty and Ethics—Bridging the Gap between Students and Industry
Presenters: Thomas J. Dobrowski and Lisa Dobrowski, Purdue University North Central

Contemporary Issues of Diversity in ET Programs
Presenters: Ramesh Narang and Jihad Albayyari, IPFW

Preparing Future Professionals for Integrating Global Topics into the Workplace through Study Abroad Activities
Presenters: Edie Schmidt and Cyndi Lynch, Purdue University

Fostering a Systems Perspective by Integrating General Education Concepts into Engineering and Engineering Technology Courses
Presenter: Verna M. Fitzsimmons, Kent State University
Thursday, February 3

11:00 AM—12:30 PM

MID MORNING CONCURRENT SESSIONS

CIP 434 — CMC Excellence in Engineering Collaboration Award Presentations
Sponsored by College-Industry Partnerships Division

SAN ANTONIO BALLROOM 11:00 AM—12:30 PM

The 2010 Excellence in Engineering Education Collaboration Award Winners will be presenting in detail their programs, industry partnerships, and elements of success. Award winners demonstrate best practices in their collaborative efforts to enhance engineering education covering both the pre-college (K-12), as well as, collegiate level areas.

Moderator: Terri Morse, The Boeing Company

ETD 454 — Project-Based Approaches in Engineering Technology Education
Sponsored by Engineering Technology Division

EXECUTIVE SALON 2 11:00 AM—12:30 PM

Project-based learning can provide challenging real world tasks for the student. Often facilitated by the instructor this can involve problem solving, decision making, analytical skills, communication proficiency and reflection. This session offers insight on successful project-based and case-study course development in Engineering Technology programs.

Moderator: Rasoul Sanelfardi, Texas Southern University

Project Based Learning: A Students’ Perspective
Presenter: Edward Osakue
Texas Southern University

C8051F020 Utilization in an Embedded Digital Design Project Course
Presenter: Daren Wilcox
Southern Polytechnic State University

Project-based Course of Applied Dynamics with Computer Simulation Tools—Working Model 2D
Presenter: Ti-Lin Liu, Rochester Institute of Technology

Bringing Engineering Technology education to new heights: High Altitude Balloon Programs for Student Engagement
Presenter: Albert Lozano-Nieto
Pennsylvania State University Wilkes-Barre

Implementing BIM Strategies for MEP Conflict Resolution in a CM Course Curriculum
Presenter: Pardis Pishdad, Virginia Tech
Chris Soelberg, Weber State University

12:30 PM—1:45 PM

CIEC 412 — CIEC Awards Luncheon
TEXAS BALLROOM 12:30 PM—1:45 PM

Join your friends and colleagues as we honor the 2010 CIEC Award Recipients. Outstanding sessions, presenters, and moderators will be recognized from each Division.

Moderators: Scott Dunning, University of Maine
CIEC Executive Board Chair
Julayne Moser, Purdue University
CIEC Assistant General Conference Chair

2:00 PM—3:30 PM

AFTERNOON CONCURRENT SESSIONS

CEED 424 — Co-op Education
On-Line Community Development
Sponsored by Cooperative and Experiential Education Division

EXECUTIVE SALON 1 2:00 PM—3:30 PM

This session will discuss the initial phase of research on the design and utilization of an online community for at-work students. The purpose of the community is to provide a venue for students to connect with each other, divisional faculty, departmental faculty, and field experts to enhance the student’s overall learning experience while at work.

The community is designed to affect learning in several ways: explicit resources and information shared in the community creates a knowledge base from which students can pull information and opportunities for discourse where students can more deeply share and discuss experiences and collaboratively develop content about jobs and employers. The community is based on the “Community Based Online Learning Model” and is designed to enhance social interaction, collaboration, and reflection, which have been shown to increase student learning through work. The community will be demonstrated and further discussion of the research to assess the learning community will be discussed.

Moderator: Susan Matney, North Carolina State University
Presenter: Anita Todd, University of Cincinnati

Sonic Foundry—2011 CIEC Sponsor

SonicFoundry
Thursday, February 3

2:00 PM–3:30 PM  
**AFTERNOON CONCURRENT SESSIONS**

**ETD 456 — Methods for Recruiting and Retaining STEM Students**  
Sponsored by Engineering Technology Division

**EXECUTIVE SALON 4  2:00 PM–3:30 PM**

Today's students are given a vast choice of different fields to study, ways to study, and places to study. Engaging students to major in the areas of Science, Technology, Engineering and Mathematics (STEM) can be difficult. Keeping them in such a program can be even more difficult. This session will emphasize new and innovative initiatives to recruit and retain students in STEM related programs.

**Moderators:** Joseph Morgan, Texas A & M University  
Jay Porter, Texas A & M University

**KRSYS: A Novel Tool for Recruiting High School Students**  
**Presenters:** Joseph Morgan and Jay Porter  
Texas A&M University

**Program for Promoting STEM Education Through Undergraduate Research, Internships, and Other Activities**  
**Presenters:** Ray Bachnak, Texas A&M International University

**Role Models to Influence Early Career Choice**  
**Presenters:** Daphne Cyr Koch, Mary Johnson, and Todd Kelley  
Purdue University

**How to Increase the Number of Science, Technology, Engineering and Mathematics (STEM) Baccalaureate and Associate Degrees? An Evolution of Thought at Northwestern State University of Louisiana**  
**Presenters:** Phil G. Brown  
Northwestern State University of Louisiana

**Prior Learning Assessment/Portfolio Development–Earning a College for What You Know**  
**Presenters:** Richard P. Coe and Marcus Tillery  
Thomas Edison State College

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3:45 PM–5:15 PM  
**AFTERNOON CONCURRENT SESSIONS**

**CEED 425 — Enhanced Development of Career Portfolios Using E-Tools**  
Sponsored by Cooperative and Experiential Education Division

**EXECUTIVE SALON 1  3:45 PM–5:15 PM**

This session will highlight our “Professional Issues in Engineering” course for Mechanical and Industrial Engineering majors at Northeastern University. Over the past two years, we enhanced our curriculum by offering students an opportunity to create an electronic portfolio (ePortfolio) showcasing a professional and personalized collection of their work. The objective of this ePortfolio was to help students prepare to seek full-time work opportunities by having samples of work to show future employers. In class, students shared these presentation portfolios with their instructor, classmates and professionals from industry. Our presentation will include a summary of this course, our use of ePortfolios and the challenges we faced using this new media. We will also include our findings in our discussions with employers and the changes this will make to our future curriculum.

**Moderator:** Ilka Balk, University of Kentucky  
**Presenters:** Karen Kelley, Northeastern University  
Lorraine A. Mountain, Northeastern University

**CIP 436 — Creating Effective Partnerships for Building the K-20 STEM Pipeline**  
Sponsored by College-Industry Partnerships Division

**SAN ANTONIO BALLROOM  3:45 PM–5:15 PM**

Creating effective partnerships between K-12, postsecondary and businesses is critical to filling the pipeline for a diverse STEM workforce. This interactive session will focus on a model that includes Project Lead The Way (PLTW) programs in Indianapolis, IUPUI and Rolls-Royce Corporation. A panel will share their best practices at all three levels as well as lessons learned. The participants will be encouraged to discuss their best practices and then we will divide into facilitated groups for further discussion.

**Moderator:** Joules Webb  
Transformation 2013 T-STEM Center  
**Presenters:** Terri Talbert-Hatch, Purdue University  
Charles Feldhaus, Purdue University  
Reginald McGregor, Rolls Royce  
Terri Schulz, PLTW
### MORNING CONCURRENT SESSIONS

**CEED 521 — Bridging Co-op and Experiential Education: An Employer Panel Explores These Models**

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<th>Executive Salon 1</th>
<th>8:00 AM—9:15 AM</th>
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Experiential and cooperative education professionals are doing similar work by preparing students for the future as practicing engineers and employers are meeting their needs for new talent. However, each university adheres to its own model of how this is implemented. Some universities have mandatory co-op programs, with little focus on other experiential education, while some universities offer an internship only program.

Co-op and internship programs are administered differently at different institutions: some are organized within Career Services, and some within the Engineering colleges.

The panel will explore differences, as well as advantages and disadvantages of the different models. How do these differences affect employers, and how can existing systems be streamlined in order to better serve employers and students?

**Moderator:** Angie Chestman, Mississippi State University  
**Presenters:** Ilka Balk, University of Kentucky  
Megan Boone, Morehead State University  
Terence Muldrow, National Security Agency

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**CIEC 511 — Early Bird Walk/Run**

**Hotel Lobby**  
6:30 AM—7:30 AM

Join your colleagues for a morning walk/run. Meet in the hotel lobby. Coffee and hot tea will be waiting for you when you return.

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**CIEC 512 — Getting Started in the Morning—A Caffeinated Experience**

**San Antonio Ballroom foyer**  
7:30 AM—8:00 AM

Coffee and hot tea will be provided to help get you started for today’s activities.

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**CIEC Registration**

**BlueBarnett Room**  
8:00 AM—11:00 AM

**Registrar:** Mike Mathews

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**CPD 541 — SIG Planning Session for 2012**

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<th>Executive Salon 2</th>
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This Special Interest Group (SIG) planning session will focus on the needs of the individual members and identify opportunities to collaborate with others to develop solutions to those needs. We will also generate ideas for future conference topics.

**Moderator:** Mark Schuver, Purdue University

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**ETD 551 — Tools for Enhancing Education in the Classroom**

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<th>Executive Salon 4</th>
<th>8:00 AM—9:15 AM</th>
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Tools may come in many shapes and forms but when a “classroom tool” is used properly it can enhance dissemination to the learner and provide powerful feedback to the instructor. This session employs some of these educational tools and shows their effectiveness when used correctly. These tools come in the shape of on-line services, software applications, hardware based systems and more.

**Moderator:** Marilyn A. Drynd, Oregon Institute of Technology

**On-line Tools Best Practices Exploration for Use in Industry and Education**

**Presenters:** Kim Deranek, Edie Schmidt and Cyndi Lynch, Purdue University

**Enabling Collaboration between Engineering Technology Students and Industry Mentors Using Social Media Tools**

**Presenter:** Sandra Feola, Sinclair Community College

**Avoiding Death by PowerPoint**

**Presenter:** Marilyn A. Drynd, Oregon Institute of Technology

**The iCollaborate MSE Project**

**Presenter:** Kathleen L. Kitts, Western Washington University
9:30 AM—11:00 AM

**MID-MORNING CONCURRENT SESSIONS**

**CEED 522 — Providing Help to Students With a Focus on Communication**
*Sponsored by Cooperative and Experiential Education Division*

**EXECUTIVE SALON 1**

9:30 AM—11:00 AM

There appears to be a never ending discussion on why students do not perform at the levels needed for the many careers to which they aspire, especially in communication activities. Individuals can blame others for the discouraging lack of communication skills in our students or we can help provide service to these students with sessions connecting co-op, internships, and experiential learning to the communication activities that these students will encounter in the real world. This session will provide a number of possibilities for session ideas than can be easily utilized during a quarter or semester.

**Moderator:** Catherine Rooney, Stevens Institute of Technology

**Presenter:** Craig Gunn, Michigan State University

**CIP 532 — Engaging Regional Industry Leaders in Business Curriculum Development**
*Sponsored by College-Industry Partnerships Division*

**EXECUTIVE SALON 3**

9:30 AM—11:00 AM

At a round-table discussion in Houston, business leaders from the maritime, shipping and transportation industries were asked for the workforce education requirements necessary to remain competitive. Their response: the workforce needs a thorough understanding of supply chain management. This session will be a discussion of the importance of engaging regional industry leaders in curriculum development.

**Moderator:** Timothy W. Ziegler, Southern Polytechnic State University

**Presenter:** Regena Scott, University of Houston

**CPD 542 — Continuing Professional Development Programs: Best Practices From Around the Globe**
*Sponsored by Continuing Professional Development Division*

**EXECUTIVE SALON 2**

9:30 AM—11:00 AM

Leaders from the International Association for Continuing Engineering Education (IACEE) will highlight successful programs in Europe, the US, South America, discussing lessons learned and critical success factors in offering programs across borders and international collaboration.

**Moderator:** Frank Burris, IACEE Secretariat

**Presenters:**
- Edward G. Borebly, University of Michigan
- Kim Scalzo, State University of New York

**ETD 552 — ABET 2011-2012: The Harmonizing of Criteria**
*Sponsored by Engineering Technology Division*

**EXECUTIVE SALON 4**

9:30 AM—11:00 AM

ABET has an ongoing process called harmonization. This is an attempt to make the criteria for accreditation as similar as possible between the four different commissions (ACAS, CAC, EAC, & TAC). One reason for this harmonization is to help institutions who may have programs accredited by more than one of the commissions. Additionally, the Technology Accreditation Commission (TAC) has developed differentiated criteria for two year programs as similar, but separate from four year programs. Coupled with this effort to revise the criteria there is ongoing work to improve and update the Self-Study Guide. This is to ensure that programs seeking accreditation are being asked for correct information without being redundant or irrelevant. This panel will discuss where both of these efforts stand and what is will mean for programs seeking accreditation in the future.

**Moderator:** Warren R. Hill, Weber State University

**Panel Members:**
- Walter W. Buchanan, Texas A&M University
- Scott C. Dunning, University of Maine
- Thomas Hall, Northwestern State University
Friday, February 4

11:00 AM—12:30 PM

FINAL SESSIONS

CEED 523 — Planning Session for 2012
Sponsored by Cooperative and Experiential Education Division

EXECUTIVE SALON 1 11:00 AM—12:30 PM

Come participate in the discussion and share your ideas for CEED session topics at the 2012 CIEC.

Moderators: Bryan Dansberry, NASA
Allison Nogueira
Northeastern University
2012 CIEC CEED Program Chair

ETD 553 — Curriculum Engagement: Meeting Educational, Community and Industrial Needs
Sponsored by Engineering Technology Division

EXECUTIVE SALON 5 11:00 AM—12:30 PM

Engaging in new and existing Engineering Technology curriculum is imperative, yet demanding, to all stakeholders that are involved. This session reflects innovative thoughts, requirements, investigations, planning and lessons-learned that can go into curriculum expansion and improvement.

Moderator: Ken Rennels, IUPUI

Introducing Hydrogen and Fuel Cell Education into Engineering Technology
Presenter: Ahmad K. Sleiti
University of North Carolina Charlotte

A New Construction Related Degree at Texas State University—San Marcos
Presenters: Vedaraman Sriraman and Jiong Hu
Texas State University—San Marcos

Online Graduate Program in Engineering Technology: Lessons Learned
Presenter: Ken Rennels, IUPUI

CPD 543 — Comparing Tools for On-Line and Blended Programs
Sponsored by Continuing Professional Development Division

EXECUTIVE SALON 2 11:00 AM—12:30 PM

A panel of presenters will each speak very briefly about the asynchronous and synchronous tools that are used in their respective on-line, blended, and face-to-face courses. They will address: why the tool was chosen, favorite features, challenges of the tool and how they've been met and improvements they would like to see in the tool. The audience will then be invited to contribute their own experiences and to describe any tools they use which have not been mentioned.

Moderator: Pat Patterson, Texas Tech University
Presenters: Marty Ronning, University of Maryland
Scott Mahler, University of Michigan
George Wright, Georgia Tech
Wayne Pferdehirt
University of Wisconsin
Candace House
University of Southern California
Ellen Elliott, Johns Hopkins University

12:30 PM—2:00 PM

CIEC 512 — 2011 and 2012 CIEC Management Team Luncheon Meeting

Management teams will evaluate this year's conference and make plans for next year's conference in Orlando. All management team members are encouraged to attend.

2:00 PM—5:00 PM

CIP 533 — CIP Executive Board Meeting

Governor's Suite 2:00 PM—5:00 PM