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Save the Date for the 2016 ABET Symposium in Fort Lauderdale, Florida!

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97 Institute for the Development of Excellence in Assessment Leadership (IDEAL)
Welcome to the 2015 ABET Symposium!

We are very happy to have you here with us in Atlanta for what promises to be our best and most memorable Symposium yet.

This year’s Symposium theme, *Constructive Disruption*, examines some of the more dramatic changes happening around us. These fast-moving innovations are transforming our world — in some cases, turning it upside down. No sector is immune, and accreditation is no different.

In an effort to bring you something fresh and relevant, this year’s program will lead us on a journey exploring the effects of these emerging game changers. You will find two days of inspiring plenaries, thought-provoking sessions, dynamic panels, and opportunities to interact with colleagues from all over the world who share your passion and commitment to technical education.

Hundreds of us have come to Atlanta with unique backgrounds and experiences to share, but with one goal in mind: improving the quality of technical education worldwide. We are here because we believe that each and every one of us can have an impact on the educational experience of thousands of students around the globe. We are here because we believe that well-educated students become more successful professionals who will help build a better world — one that is safer, more efficient, comfortable, and sustainable.

The next few days are about coming together, learning from each other, making new friends, and meeting like-minded professionals in your field. They are about becoming part of an exciting and vibrant movement at a vital moment. From our three remarkable plenary
speakers, who will tackle some of the most pressing issues in higher education, to our pre- and post-Symposium workshops, we promise you an amazing Symposium experience.

We at ABET designed this Symposium to offer something to everyone — whether you are just starting your accreditation journey or are already an assessment pro. We invite you to dive into the sessions, soak up the speeches and panels, and bring your questions to our Accreditation Commission Town Halls. You can even be a judge at the Georgia Tech Capstone Design Expo. Over the next few days, we urge you to inspire and be inspired.

Jamie Rogers, PhD, PE
2014-15 ABET President

Michael K.J. Milligan, PhD, PE, CAE
ABET Executive Director
Chief Executive Officer
Greetings:

As Mayor of the City of Atlanta, it is my pleasure to welcome the attendees of the 2015 ABET Symposium.

The 2015 ABET Symposium gathers hundreds of leaders in academe, industry, and government, while promoting peer-to-peer and expert interaction around continuous quality improvement and ABET accreditation. An education is a gateway through which we discover our purpose in life. Thank you for your unrelenting dedication to serving young people around the globe.

While in our city, we encourage attendees to explore the many attractions Atlanta has to offer including: the Dr. Martin L. King Jr. Center, the Georgia Aquarium, the World of Coca-Cola, CNN Center, Centennial Olympic Park, Woodruff Arts Center, Atlanta Botanical Garden, Children’s Museum of Atlanta, National Center for Civil and Human Rights, College Football Hall of Fame and many more. We invite you to share in our Southern hospitality, sample cuisine at our many fine restaurants and enjoy the rich and diverse heritage of our city.

On behalf of the people of Atlanta, I extend best wishes to you for a remarkable and exciting event.

Sincerely,

Kasim Reed
Mayor, City of Atlanta
2015 ABET SYMPOSIUM
Program Committee

Steve Cramer
Creative Technical Education Track
Chair, Academic Advisory Council, ABET; Professor and Associate Dean, Academic Affairs, College of Engineering, University of Wisconsin-Madison

Daina Briedis
Accreditation Track
Adjunct Director, Programs and Events, ABET; Assistant Dean, Student Advancement and Program Assessment, College of Engineering, Michigan State University

Mike Leonard
Program Evaluator Development Track
Adjunct Director, Training, and Adjunct Accreditation Director, Engineering, ABET; Senior Associate Dean and Professor Emeritus, School of Engineering, Mercer University

James Warnock
Program Assessment Track
Adjunct Director, Programs and Events, ABET; Associate Professor, Department of Agricultural and Biological Engineering, Mississippi State University
Daniela Iacona
International Programming
Senior Manager, International Relations and Board Operations

Rochelle L. Williams
Chair
Director, Programs and Events, ABET

Charles W. Hickman
Program Chair
Managing Director, Constituent Relations, ABET

Joseph L. Sussman
Executive Sponsor
Chief Accreditation Officer, Chief Information Officer, ABET
Nancy Zimpher is a bold voice in the effort to re-envision and revitalize American higher education. As chancellor of the largest university system in the U.S., she is a leader in embracing digital-enabled learning and expanding online education. She has also worked closely with President Obama to confront crucial issues like unsustainable student debt and the educational return on investment for student and taxpayer dollars.

Biography
In June 2009, Nancy L. Zimpher became the 12th Chancellor of the State University of New York (SUNY). With nearly 463,000 students and 64 colleges and universities, SUNY is the nation’s largest comprehensive system of higher education.

Zimpher leads a diverse set of successful initiatives at SUNY in research and innovation, energy, health care, global affairs, and the education pipeline. She has advocated for groundbreaking legislative reforms that ensure SUNY can provide broad access to higher education in an environment of declining state support, while maximizing its impact as an economic revitalization engine across the state. Under Zimpher’s lead, SUNY is undertaking many innovative, system-enhancing initiatives — including shared services, dramatic expansion of online learning opportunities and cooperative education, and new partnerships with K-12 professionals — always with the goal of preparing New York’s students and communities to succeed in the 21st century.

Zimpher is a recognized leader in the areas of teacher preparation, urban education, and university-community engagement. Currently, she serves as chair of the Board of Governors of the New York Academy of Sciences and the National Association of System Heads. From 2005-2011, she led the national Coalition of Urban Serving Universities, and from 2012-2013, she was chair of CEOs for Cities. As co-founder of StriveTogether, Zimpher has been instrumental in creating a national network of innovative systemic partnerships that holistically address challenges across the education pipeline.

Prior to coming to SUNY, Zimpher served as President of the University of Cincinnati, Chancellor of the University of Wisconsin-Milwaukee, and Executive Dean of the Professional Colleges and Dean of the College of Education at The Ohio State University. She has authored or co-authored numerous books, monographs, and academic journal articles on teacher education, urban education, academic leadership, and school/university partnerships.

Zimpher holds a bachelor’s degree in English education and speech, a master’s degree in English literature, and a Ph.D. in teacher education and higher education administration, all from The Ohio State University.
FRIDAY MORNING PLENARY SPEAKER

Jason Palmer

Deputy Director of Postsecondary Success for the Bill & Melinda Gates Foundation

Jason Palmer is on a mission to discover and invest in cutting-edge innovations that have the potential to revolutionize higher education. Through his position in the Bill & Melinda Gates Foundation and his experience launching educational start-ups, he is paving the way for a new era of postsecondary success.

Biography

Jason Palmer leads the Bill & Melinda Gates Foundation’s efforts in online and blended learning solutions, digital courseware, student coaching and advising, competency-based learning, seamless credit transfer, and employer pathways.

Prior to joining the foundation in 2013, Palmer founded and grew three investor-backed technology and services companies before holding a series of executive positions at Microsoft, SchoolNet, Kaplan, and StraighterLine. At Microsoft Education, Palmer was responsible for developing and launching the world’s first learning management system for tablet-based education. At SchoolNet, Palmer was responsible for helping the fast-growing startup establish partnerships with Scantron, The Princeton Review, Kaplan, and ETS. At Kaplan, Palmer led three education businesses as general manager or president, in addition to leading the company’s venture capital effort and serving as a board member to startups like Moodlerooms and iProf India. Palmer was also one of the first employees at StraighterLine, serving as its first chief product officer, as well as an entrepreneur-in-residence at New Markets Venture Partners, a leading education-focused VC.

Palmer holds a B.A. in interdisciplinary studies from the University of Virginia and an M.B.A. from Harvard Business School. He also serves on the University of Virginia’s Curry School of Education Foundation Board.
Chris Inglis has been on the front lines of cybersecurity longer than the public has had a term for it. After eight years as the NSA’s second-in-command, he has unparalleled insight into what the rapidly growing cybersecurity profession will require of future professionals and how institutions can prepare themselves to meet those requirements.

Biography
John C. (Chris) Inglis is the U.S. Naval Academy’s Robert and Mary M. Looker Distinguished Visiting Professor for Cyber Studies. He retired from the Department of Defense in January 2014 after 41 years of federal service, including 28 years at the NSA and 7½ years as its Deputy Director.

His NSA assignments included service across information assurance, policy, time-sensitive operations, and signals intelligence organizations. Promoted to NSA’s Senior Executive Service in 1997, he subsequently served in a variety of senior leadership assignments culminating in his selection as the NSA Deputy Director. Prior to his retirement, he twice served away from NSA Headquarters, first as a visiting professor of computer science at the U.S. Military Academy (1991-1992) and later as the U.S. Special Liaison to the United Kingdom (2003-2006).

Inglis earned a bachelor of science in engineering mechanics from the U.S. Air Force Academy in 1976 and holds advanced degrees in engineering and computer science from Columbia University, Johns Hopkins University, and the George Washington University. He is a graduate of the Kellogg Business School Executive Development Program and the USAF Air War College. Mr. Inglis’ military career includes 30 years of service in the U.S. Air Force and Air National Guard, from which he retired as a Brigadier General. He holds the rating of Command Pilot and has commanded units at squadron, group, and joint force headquarters levels.

Inglis’ significant awards include the Clements Award as the U.S. Naval Academy’s Outstanding Military Faculty member (1984), three Presidential Rank Awards (2000, 2004, 2009), the USAF Distinguished Service Medal (2006), the Boy Scouts of America Distinguished Eagle Scout Award (2009), the Director of National Intelligence Distinguished Service Medal (2014), and The President’s National Security Medal (2014).
**Invited Presenters**

Invited Presenters are renowned leaders in their respective fields and/or they have received such high ratings as speakers during past ABET Symposia that we have welcomed them back to present again this year. Their presentations are indicated with an asterisk (*) throughout the schedule.

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**Kimberly Arnold**  
Senior Evaluation Consultant, University of Wisconsin-Madison  

**Invited Presentation:** Getting to Actionable Intelligence: Pushing through the Learning Analytics Hype  
> Friday, April 24, 9:10 AM – 10:00 AM  
> Hanover AB

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**Zenaida Otero Gephardt**  
Associate Professor, Chemical Engineering, Rowan University  

**Invited Presentation:** Societal Impact on Accreditation and Engineering Practice Standards Development in Latin America and the Caribbean  
> Thursday, April 23, 4:10 PM – 5:00 PM  
> Hanover E

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**David Holger**  
Associate Provost, Academic Programs, and Dean, Graduate College, Iowa State University  

**Invited Presentation:** The International Engineering Alliance Perspective on Global Engineering Competence and Graduate Attributes  
> Friday, April 24, 9:10 AM – 10:00 AM  
> Courtland  

(Continued)
Catherine Leslie  
Executive Director, Engineers Without Borders-USA  
**Invited Presentation:** Certifying the Global Professional  
> Thursday, April 23, 1:30 PM – 2:20 PM  
> Hanover FG

Maria Larrondo-Petrie  
Associate Dean, International Affairs, Florida Atlantic University  
**Invited Presentation:** Societal Impact on Accreditation and Engineering Practice Standards Development in Latin America and the Caribbean  
> Thursday, April 23, 4:10 PM – 5:00 PM  
> Hanover E

Gilles Lodolo  
**Invited Presentation:** EUR-ACE Accreditation  
> Thursday, April 23, 4:10 PM – 5:00 PM  
> Courtland  
**Invited Presentation:** CTI and the French Engineering Education System  
> Friday, April 24, 10:30 AM – 11:20 AM  
> Hanover E

Timothy McKay  
Arthur F. Thurnau Professor of Physics and Chair of the Provost’s Learning Analytics Task Force, University of Michigan  
**Invited Presentation:** Learning Analytics: Using Data to Explore Teaching and Learning, or Hail to the Data: Learning Analytics, STEM Reform, and Personalized Learning at Michigan  
> Thursday, April 23, 1:30 PM – 2:20 PM  
> Hanover AB
John Steadman
Dean of Engineering, University of South Alabama

Invited Presentation: Learn How to Use the FE Exam for Effective Outcomes Assessment in All Engineering Disciplines
> Friday, April 24, 9:10 AM – 10:00 AM
> Dunwoody

Renetta Garrison Tull
Associate Vice Provost for Graduate Student Development & Postdoctoral Affairs, University of Maryland, Baltimore County

Invited Presentation: How Global Opportunities “Strengthen the STEM Identity” of Women, Underrepresented Minorities, and People with Disabilities
> Friday, April 24, 2:10 PM – 3:00 PM
> Hanover CD

Darrell Velegol
Distinguished Professor of Chemical Engineering, Pennsylvania State University

Invited Presentation: Conversion of Penn State’s Chemical Engineering Program Assessment and Evaluation Process
> Thursday, April 23, 10:45 AM – 12:00 PM
> Hanover FG
Culminating the 2015 ABET Symposium, each of ABET’s Accreditation Commissions will have an interactive town hall session. After a brief presentation, members of the respective commission’s volunteer leadership and its Adjunct Director(s) will open the floor for accreditation questions and discussions. Symposium attendees may participate in the town hall session of their choice.

Applied Science
Hanover AB

Paul Male
Chair, Applied Science Accreditation Commission, ABET; Adjunct Faculty, Hudson Valley Community College

Neil Hutzler
Chair-Elect, Applied Science Accreditation Commission, ABET; Professor Emeritus, Civil and Environmental Engineering, Michigan Technological University
**Steve Frank**  
Past Chair, Applied Science Accreditation Commission, ABET; Professor, Surveying Engineering, New Mexico State University

**Amanda Reid**  
Adjunct Accreditation Director, Applied Science, ABET
Computing
Hanover FG

Stan Thomas
Chair, Computing Accreditation Commission, ABET; Associate Professor, Computer Science, Wake Forest University

Lois Mansfield
Chair-Elect, Computing Accreditation Commission, ABET; Raytheon Company

David Cordes
Past Chair, Computing Accreditation Commission, ABET; Professor and Department Head, Department of Computer Science, University of Alabama

Art Price
Adjunct Accreditation Director, Computing, ABET; Retired Distinguished Member of the Technical Staff, Bell Laboratories
Bill Wepfer
Chair, Engineering Accreditation Commission, ABET; Eugene C. Gwaltney, Jr., Chair and Professor, George W. Woodruff School of Mechanical Engineering, Georgia Tech

Sarah Rajala
Chair-Elect, Engineering Accreditation Commission, ABET; Dean, College of Engineering, Iowa State University

Winston Erevelles
Past Chair, Engineering Accreditation Commission, ABET; Dean, School of Science, Engineering, and Technology, and Professor, Industrial Engineering, St. Mary’s University

(Continued)
Engineering (cont.)

Hanover CD

Dayne Aldridge
Adjunct Accreditation Director, Engineering, ABET; Dean Emeritus, School of Engineering, Mercer University

Doug Bowman
Adjunct Accreditation Director, Engineering, ABET; Retired Program Director, Logistics IT Solutions, Lockheed Martin

Susan Conry
Adjunct Accreditation Director, Engineering, ABET; Distinguished Service Professor, Electrical and Computer Engineering, Clarkson University

Mike Leonard
Adjunct Director, Training, and Adjunct Accreditation Director, Engineering, ABET; Senior Associate Dean and Professor Emeritus, School of Engineering, Mercer University
Engineering Technology

Hanover E

John Sammarco
Chair, Engineering Technology Accreditation Commission, ABET; Principal Research Engineer, National Institute for Occupational Safety and Health (NIOSH)

Wilson Gautreaux
Chair-Elect, Engineering Technology Accreditation Commission, ABET; Coordinator, Environmental Technology, Trident Technical College

Steve Wendel
Past Chair, Engineering Technology Accreditation Commission, ABET; Director, National Center for Manufacturing Education, Sinclair Community College

Frank Hart
Adjunct Accreditation Director, Engineering Technology, ABET; Dean Emeritus, School of Engineering Technology and Computer Science, Bluefield State College
The 2015 ABET Symposium Self-Study Report Room is located in the Inman Room on the Atlanta Conference Center Level. Team chairs or program evaluators nominated examples of well-prepared Self-Study Reports based on the following criteria:

> Followed the Self-Study Report questionnaire guidelines.
> Addressed each criterion succinctly.
> Did not contain a lot of extraneous information.
> Made good use of graphs, tables, and charts.
> Used the appendices well.

Please note that this does NOT mean that the program was in full compliance with all criteria; it only means that the program has done a thorough job of preparing the Self-Study Report.

**Self-Study Report Room Hours:**

The room is open during the following times:

> Thursday, April 23, 9:00 AM – 12:00 PM, 1:30 PM – 5:00 PM
> Friday, April 24, 9:00 AM – 11:30 AM, 1:00 PM – 5:00 PM
> Saturday, April 25, 8:00 AM – 12:00 PM

Quiet please! Silence your phone.

If a participant leaves the Self-Study Report Room for more than 15 minutes, any Self-Study Reports that he/she has left out will be checked back in.

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**SPECIAL NOTES ABOUT THE SELF-STUDY REPORT ROOM**

> Each program has given ABET permission to display its Self-Study Report with all confidential information removed. Feel free to browse and to take notes, but **Self-Study Reports are NOT to be removed from the room.**

> **No photos or video recordings** are allowed.

> Any participant violating these guidelines will be asked to leave the ABET Symposium.
SELF-STUDY REPORTS
AVAILABLE FOR REVIEW*

Applied Science Accreditation Commission (ASAC)

Bachelor’s (4-Year) Level

> Environmental Science-Industrial Hygiene – University of Houston-Clear Lake
> Environmental Science-Safety – University of Houston-Clear Lake
> Health Physics – Idaho State University

Master’s (Post-Graduate) Level

> Occupational Safety – East Carolina University

Computing Accreditation Commission (CAC)

Bachelor’s (4-Year) Level

> Computer Science – Grove City College; University of Illinois at Chicago; The College of New Jersey; Syracuse University; U.S. Military Academy
> Computer and Information Science – University of Michigan-Dearborn
> Information Systems – Utah Valley University; Universidad Nova de Lisboa (ISEGI-NOVA)
> Information Technology – Brigham Young University; Middle Georgia State College; U.S. Military Academy

Engineering Accreditation Commission (EAC)

Bachelor’s (4-Year) Level

> Aeronautical Engineering – U.S. Air Force Academy
> Astronautical Engineering – U.S. Air Force Academy
> Chemical Engineering – University of California, Santa Barbara; University of Iowa; University of Puerto Rico, Mayaguez Campus; U.S. Military Academy; Yale University
> Civil Engineering – University of Iowa; University of Mount Union; U.S. Air Force Academy; U.S. Military Academy
> Computer Engineering – Clarkson University; U.S. Air Force Academy
> Electrical Engineering – University of Iowa; U.S. Air Force Academy; U.S. Military Academy; Yale University
> Engineering – East Carolina University

*The list of Self-Study Reports available for review is subject to change.

(Continued)
SELF-STUDY REPORTS AVAILABLE FOR REVIEW*

> Engineering Management – U.S. Military Academy
> Environmental Engineering – U.S. Military Academy
> Materials Science and Engineering – Illinois Institute of Technology
> Mechanical Engineering – University of Mount Union; Norwich University; Southern Illinois University, Carbondale; U.S. Air Force Academy; U.S. Military Academy; Yale University
> Nuclear Engineering – U.S. Military Academy
> Software Engineering – Clarkson University
> Systems Engineering – U.S. Air Force Academy; U.S. Military Academy

Engineering Technology Accreditation Commission (ETAC)

Bachelor's (4-Year) Level
> Chemical Engineering Technology – Jubail Industrial College
> Electrical Engineering Technology – Jubail Industrial College
> Electronic(s) Engineering Technology – University of Massachusetts Lowell
> Instrumentation and Control Engineering Technology – Jubail Industrial College
> Marine Engineering Technology – Maine Maritime Academy
> Mechanical Engineering Technology – Jubail Industrial College; University of Massachusetts Lowell
> Power Engineering Technology – Maine Maritime Academy

*The list of Self-Study Reports available for review is subject to change.
The Georgia Tech Capstone Design Expo has become one of the largest student design expos in the United States. It is an opportunity for student teams to present their innovative ideas to solve real-world problems to industry, investors, and the general public.

The Expo is a showcase of Georgia Tech’s graduating seniors as they present their innovations designed and built during the Capstone Design Course. Students work in teams to solve an industry sponsored challenge or develop innovative tools to assist researchers for conducting cutting edge research or work on their own dream project leading to creating a start-up.

Learn more about the Expo at [http://www.capstone.gatech.edu/](http://www.capstone.gatech.edu/).

Symposium participants must have pre-registered for this event by April 2 to attend or judge at the Expo. Registration for this event is not available in Atlanta.
The 2015 ABET Symposium has more than 60 concurrent sessions in four educational tracks. Tracks are intended to guide participants who wish to concentrate on specific topics during their time at the Symposium. All sessions are open to all registrants.

Please feel free to “mix and match” the sessions as they meet your needs. If you have come with a team of faculty, this information will help you divide your efforts and select the sessions that are most appropriate for your program.

Global Competence in Technical Education
There is widespread agreement within the technical education community regarding the need to better prepare students for global practice. However, there is no global consensus on what skills and abilities define global competence, what combination and duration of international education and experiences best instill it, or what metrics should be used to judge whether students have attained it. This track will highlight sessions demonstrating how educators are pushing the envelope with creative solutions while budgets only tighten, begging to question what global competence really means for higher education and industry.

Program Assessment
Educators often ask themselves if students are learning what they are teaching them and then look for evidence to support their assumptions. This track will highlight best practices in program assessment (defining goals, collecting information, and taking appropriate action based on evidence). This year’s symposium will also highlight sessions on learning analytics as a tool in the assessment process.
Accreditation
This track will prepare Symposium attendees for the accreditation process, whether they are considering ABET accreditation for the first time or are interested in learning more about the on-site review process. Participants can attend sessions that discuss topics such as: preparing the Self-Study Report for all ABET commissions, understanding differences between single program visits and simultaneous and joint visits, and discussing accreditation at the master’s degree level.

Program Evaluator Development
Program Evaluators (PEVs) are at the heart of the accreditation process. If you are looking to develop professionally as a PEV or interested in learning what they are taught, sessions in this track cover topics such as: Being Helpful but Not Prescriptive, Writing the Exit Statement, and Managing Team Activities in Challenging Environments. This track will also feature a session titled How to Become a Program Evaluator for attendees interested in giving back to their technical field.
SCHEDULE AT-A-GLANCE

7:00 AM – 8:00 AM  Breakfast
> Regency Ballroom

8:00 AM – 9:00 AM  Welcome, Opening Session
> Regency Ballroom

9:00 AM – 12:00 PM  Self-Study Report Room Open
> Inman Room

9:10 AM – 10:25 AM  Concurrent 75-minute sessions

10:25 AM – 10:45 AM  Networking break

10:45 AM – 12:00 PM  Concurrent 75-minute sessions

12:00 PM – 1:30 PM  Lunch, Plenary Address with Nancy Zimpher
> Regency Ballroom
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>1:30 PM – 2:20 PM</td>
<td>Concurrent 50-minute sessions</td>
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<td>1:30 PM – 5:00 PM</td>
<td>Self-Study Report Room Open</td>
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<tr>
<td>2:30 PM – 3:45 PM</td>
<td>Concurrent 75-minute sessions</td>
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<td>3:45 PM – 4:10 PM</td>
<td>Networking break</td>
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<tr>
<td>4:10 PM – 5:00 PM</td>
<td>Concurrent 50-minute sessions</td>
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<tr>
<td>5:00 PM – 6:00 PM</td>
<td>Reception</td>
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<td>&gt; Regency Ballroom</td>
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<tr>
<td>5:30 PM – 8:30 PM</td>
<td>Georgia Tech Capstone Design Expo</td>
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**SCHEDULE**

**7:00 AM – 8:00 AM**

- **Breakfast**
  - Regency Ballroom

**8:00 AM – 9:00 AM**

- **Welcome, Opening Session**
  - Regency Ballroom

**9:10 AM – 10:25 AM**

- **Prog. Evaluator Development**
  - Conducting a Review of an Online/Hybrid Program: Guidelines for TCs and PEVs
  - B. Price, M. Crowley, R. Keller, D. Olwell, S. Plantz-Masters

- **Accreditation**
  - Demonstrating Compliance with Criterion 4: Assessment and Evaluation
  - Joe Turner

- **Global Competence**
  - Industry Advisory Boards — Creating Value and Excellence
  - Michael Gwyn, Ronald Hinn, Bill Wepfer

**10:25 AM – 10:45 AM**

- **Networking Break**

**10:45 AM – 12:00 PM**

- **Accreditation**
  - Preparing for a Review of an Online/Hybrid Program: Faculty and Administrators

- **Accreditation**
  - Preparing the Self-Study Report for Engineering
  - Jeffrey Fergus

- **Global Competence**
  - What Employers Say About New Technical Graduates and Where They Find Them
  - Gina Hutchins

- **Program Assessment**
  - Conversion of Penn State’s Chem. Eng. Program Assessment and Evaluation Process
  - Darrell Velegol

**12:00 PM – 1:30 PM**

- **Lunch, Plenary Address with Nancy Zimpher**
  - Regency Ballroom

*Invited Presenters*
Program Assessment
1) Toward Improving the Assessment Process Exp.
2) Evaluating Rubric-Based Data with Perf. Heuristics
3) Sustainable Assess. Processes Via Cent. Efforts

Accreditation
We Are Interested in Seeking ABET Accreditation...
Are We Ready? *Winston Erevelles*

Program Assessment
1) Adv. Personalized Learning
2) A Database of Performance Indicators and Rubrics (DPR). . .
3) Using a Course Assess. Materials Database...

Accreditation
Preparing the Self-Study Report for Applied Science
*Paul Male, Jason Racette*

Prog. Evaluator Development
Being Helpful But Not Prescriptive
*David Cordes*
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<tr>
<th>Time</th>
<th>Hanover AB</th>
<th>Hanover CD</th>
<th>Hanover E</th>
<th>Hanover FG</th>
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<tr>
<td>1:30 PM – 2:20 PM</td>
<td><strong>Program Assessment</strong>&lt;br&gt;Learning Analytics: Using Data to Explore Teaching and Learning&lt;br&gt;<em>Timothy McKay</em></td>
<td><strong>Prog. Evaluator Development</strong>&lt;br&gt;Planning for the Unexpected: When Weird Things Happen During an ABET Evaluation&lt;br&gt;<em>Ann Kenimer</em></td>
<td><strong>Prog. Evaluator Development</strong>&lt;br&gt;How to Become a Program Evaluator&lt;br&gt;<em>Charles W. Hickman, Frank Hart, Winston Erevelles</em></td>
<td><strong>Global Competence</strong>&lt;br&gt;<em>Certifying the Global Professional&lt;br&gt;Catherine Leslie</em></td>
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<td>2:30 PM – 3:45 PM</td>
<td><strong>Accreditation</strong>&lt;br&gt;Demonstrating Compliance with Criterion 4: Closing the Loop&lt;br&gt;<em>Daina Briedis</em></td>
<td><strong>Accreditation</strong>&lt;br&gt;Continuous Improvement Applied to EC 2000&lt;br&gt;<em>Bill Wepfer</em></td>
<td><strong>Global Competence</strong>&lt;br&gt;An Industry Perspective on Computing Accreditation&lt;br&gt;<em>Joe Sussman, Craig Berry, David Cordes, Ronald Doyle</em></td>
<td><strong>Accreditation</strong>&lt;br&gt;On-Site Review Logistics&lt;br&gt;<em>Harold Grossman</em></td>
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<td>3:45 PM – 4:10 PM</td>
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<td>5:00 PM – 6:00 PM</td>
<td><strong>Reception</strong>&lt;br&gt;<em>Regency Ballroom</em></td>
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*Invited Presenters*
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<th>Time</th>
<th>Event</th>
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| 1:30 PM - 2:20 PM | Global Competence  
1. Internationalizing Technical Ed. the Economic Way  
2. Internationalizing Eng. Education Strategies for Removing and Reducing Barriers to Access  
John Sammarco |
| 2:30 PM - 3:45 PM | Program Assessment  
1. Standardized, Streamlined Assessment Reporting Using Performance Vectors...  
2. Developing Key Perf. Indicators for Effective Assess. of Student Outcomes...  
John Estell, Wayne Whiteman |
| 3:45 PM - 4:10 PM | Prog. Evaluator Development  
1. Standardized, Streamlined Assessment Reporting Using Performance Vectors...  
2. Developing Key Perf. Indicators for Effective Assess. of Student Outcomes...  
Jeffrey Fergus, Patricia Brackin |
| 4:10 PM - 5:00 PM | Accreditation  
1. Preparing the Self-Study Report for Engineering Technology  
2. Strategies for Removing and Reducing Barriers to Access  
Steve Wendel |
| 5:00 PM - 6:00 PM | Program Assessment  
1. Engineering Statistics as a Benchmark Course in the Context...  
2. Developing Key Perf. Indicators for Effective Assess. of Student Outcomes...  
Gilles Lodolo |
|           | Accreditation  
1. Preparing for the 2015-16 ETAC Site Visit  
John Sammarco |

*Invited Presenters*
Program Evaluator Development

Conducting a Review of an Online/Hybrid Program: Guidelines for Team Chairs and Program Evaluators

Barbara Price – Georgia Southern University (moderator); Michael Crowley – Jensen Hughes, Inc.; Randal Keller – Murray State University; David Olwell – Naval Postgraduate School; Shari Plantz-Masters – Regis University

Session Description
A panel with representatives of the four ABET Accreditation Commissions provides guidelines to assist programs in preparing for a review and suggestions to assist the review team in preparing better for a review. Panelists come from institutions with online/hybrid programs or from ABET teams who have reviewed online/hybrid programs.

Accreditation

Demonstrating Compliance with Criterion 4: Assessment and Evaluation

Joe Turner – Clemson University

Session Description
Intended primarily for faculty and administrators of programs planning for an ABET accreditation review, this session focuses on program evaluation relative to Criterion 4: Continuous Improvement. The objective is to help programs understand better how to demonstrate and document a continuous improvement process to satisfy Criterion 4, and how to present evidence of a good continuous improvement process effectively to Program Evaluators. Expectations for demonstrating compliance with various aspects of Criterion 4 are discussed and demonstrated. Audience participation and questions are encouraged.
Global Competence

Industry Advisory Boards — Creating Value and Excellence

Michael Gwyn – Leidos Constructors; Ronald Hinn – PetroSkills; Bill Wepfer – Georgia Tech

Session Description
Industry Advisory Boards can serve a variety of valuable purposes beyond giving advice. This session explores linking council structure to strategy, explores the particular role of advisory boards in supporting the ABET accreditation process, and leaves plenty of time for participant questions, success stories, and problem statements.

Accreditation

Preparing the Self-Study Report for Computing

Stan Thomas – Wake Forest University; Donna Reese – Mississippi State University

Session Description
The session facilitates preparation of the Self-Study Report by computing programs preparing for an ABET readiness review or an ABET review visit. Session participants learn about the report’s structure and content, as well as the types of responses that the ABET review team expects the report to include.
Program Assessment

Three 25-Minute Presentations

> Baker

Toward Improving the Assessment Process Experience

Wael H.F. Aly, Eisa Al-Eisa – Al-Imam Muhammad ibn Saud Islamic University

Session Description
In this session, presenters share their experiences and lessons learned during the ABET accreditation process for the computer science program in the College of Computer and Information Systems at the Imam Mohammad Ibn Saud Islamic University in Riyadh, Kingdom of Saudi Arabia. The presentation focuses on developing an ongoing, sustainable assessment and evaluation process and discusses current practices during the assessment process stage. Participants work together on a mock assessing exercise that uses the three developed assessment stages so they can gain practical experience using the assessment process.

Evaluating Rubric-Based Data with Performance Heuristics

John Estell – Ohio Northern University

Session Description
When assessing student outcomes, it is helpful to have a concise, standardized approach for objectively appraising the data. This session presents a methodology successfully used as part of a sustainable evaluation process: the application of heuristics on rubric-based data reported in the form of performance vectors. Participants leave this presentation knowing how a more informative yet both sustainable and streamlined approach to student outcomes assessment can be readily implemented through the systematic use of rubrics, vectors, and heuristics.

Session participants are expected to have background knowledge of basic assessment practices, including rubric use, and of assessment terminology.
Sustainable Assessment Processes
Via Centralized Efforts

Fred DePiero – California Polytechnic State University-San Luis Obispo

Session Description
Centralized efforts at the college-level can create more sustainable processes, improve assessment practices used for ABET reviews, reduce faculty workload, and promote the sharing of best practices.

Session participants learn to:

> Select and design assessment processes appropriate for centralization.

> Identify means to leverage institution data sources for program improvement.

> Design assessment processes that can yield improvements for multiple programs.

> Define a Self-Study Report template based in ABET’s template in a way that is specific to their campus and beneficial to multiple programs.
Accreditation

We Are Interested in Seeking ABET Accreditation... Are We Ready?

Winston Erevelles – St. Mary’s University
> Courtland

Session Description
The session is an introduction for programs and institutions that are new to accreditation and a refresher for those with limited ongoing exposure to accreditation criteria, policies, and procedures. It helps participants understand how to prepare for the initial program accreditation. Using examples drawn from actual visits, the presenter familiarizes participants with:

> Where to find the needed information
> How the ABET accreditation process works
> How to apply for accreditation
> Why they create the Self-Study Report
> What to expect during the on-site visit
> What a due-process response entails
> When to expect the final decision
75-MINUTE SESSIONS
10:45 AM – 12:00 PM

Accreditation

Preparing for a Program Review of an Online/Hybrid Program: Guidelines for Program Faculty and Administrators

Barbara Price – Georgia Southern University (moderator); Hamid Fonooni – East Carolina University; David Olwell – Naval Postgraduate School; Shari Plantz-Masters – Regis University; John Sammarco – National Institute for Occupational Safety and Health (NIOSH)

Session Description
A panel with representatives of the four ABET Accreditation Commissions provides guidelines to assist team chairs and program evaluators in preparing for a review of an online/hybrid program. These include suggestions to assist the review team prepare better and tools they may use before and during the visit to overcome challenges interviewing dispersed faculty and students. Panelists come from institutions with online/hybrid programs or from ABET teams who have reviewed online/hybrid programs.

Accreditation

Preparing the Self-Study Report for Engineering

Jeffrey Fergus – Auburn University

Session Description
The session provides information that helps programs prepare an effective Self-Study Report and prepare for an ABET visit.
Global Competence

What Employers Say About New Technical Graduates and Where They Find Them

*Gina Hutchins – United Parcel Service (UPS) (moderator)*

Session Description
A panel of industry officials discuss what they expect for new technical graduates, where they find them, and how the graduates measure up. Also, the panel considers if the specific knowledge, skills, and abilities that employers need from new graduates align with those in the Engineering Accreditation Commission (EAC) student outcomes criteria.

Program Assessment

*Conversion of Penn State’s Chemical Engineering Program Assessment and Evaluation Process*

*Darrell Velegol – Pennsylvania State University*

Session Description
Before 2010, Chemical Engineering at Penn State collected extensive evaluation data to assure that, “somewhere in that pile,” it covered the components necessary to receive ABET accreditation. Then, the author attended an ABET workshop and learned a simpler, more effective process for continuous assessment and improvement. The department designed its own process, and long before it was refined, they started using it.

Now only four years later, the department has a streamlined process that works and that they use regularly. Participants who are interested in streamlining their departments’ ABET processes – and making their processes actually useful for improvement – should join this discussion and bring their hardest questions.

*Invited Presenters*
Program Assessment

Three 25-Minute Presentations

Advanced Personalized Learning: Using Outcomes Assessment to Create Coherent Curricula for Students

Don McEachron – Drexel University; Mustafa Sualp – AEFIS, LLC

Session Description
One of the National Academy of Engineering Grand Challenges is to advance personalized learning. This can be difficult when courses are functionally siloed and there is a significant disconnect between what students and faculty understand about student learning outcomes. To address these issues, a knowledge management approach and computer software were designed and implemented. The resulting “learning outcomes transcripts” provide developmentally relevant feedback to students in real time and promote significant student ownership of learning outcomes. This creates a stronger sense of purpose and curricular continuity and, in turn, should promote more effective student learning and academic performance.

A Database of Performance Indicators and Rubrics (DPR) for Sustainable Accreditation Processes

Mahadevan Ramachandran – Aassaan EduCare Private Ltd.; Nageswara Rao – Aditya Institute of Technology and Management (AITAM)

Session Description
The presentation highlights the “Database of Performance Indicators (PIs) and Rubrics (DPR),” which collects and maintains the various PIs and associated rubrics – developed by various faculty members, in different programs within the institution – to assess ABET-prescribed student outcomes. DPR helps all faculty members refer to the existing PIs and rubrics in the database, devised in different programs, toward knowledge enrichment and helps the program assessment committee members in rolling out new PIs and rubrics, in their programs, toward sustainable accreditation processes.
Using a Course Assessment Materials Database for a Multi-Program Visit and How It Assists Preparation for Accreditation

Kevin Ayers, Adam Fontecchio, Kristin Imhoff – Drexel University

Session Description
The Drexel University College of Engineering has developed a database that acts as a centralized repository, storing materials that the programs collect for course assessment and curricular improvement purposes. The database also provides easy access to course and assessment materials for accreditation purposes and was used recently during an ABET site visit. Visit team members were issued tablet computers with system access and could find answers to questions about course-related matters with the tap of a finger. This session includes a demonstration of the existing system (including an “under-the-hood” look) as well as discussion of the ABET visit team’s feedback.

Accreditation

Preparing the Self-Study Report for Applied Science

Paul Male – Hudson Valley Community College;
Jason Racette – Boundary Consulting Experts, LLC

Session Description
The session provides information that helps programs prepare an effective Self-Study Report and prepare for an ABET visit.
Program Evaluator Development

Being Helpful But Not Prescriptive

David Cordes – University of Alabama
> Dunwoody

Session Description
All program evaluators encounter the fine line between helping the program with issues it might have and being prescriptive in how a program should fix its problems. In this interactive session, participants identify situations based on the presenter’s and the audience’s past experiences, explore these situations, and then develop a set of guidelines for determining appropriate conduct for program evaluators on a site visit.
50-MINUTE SESSIONS
1:30 PM – 2:20 PM

Program Assessment

*Learning Analytics: Using Data to Explore Teaching and Learning, or Hail to the Data: Learning Analytics, STEM Reform, and Personalized Learning at Michigan

Timothy McKay – University of Michigan
> Hanover AB

Session Description
During the last decade, data reflecting educational inputs, activities, and outcomes have become vastly more extensive and accessible. Teaching and learning activities are reflected in a rich array of data gathered about each student’s experience from admission to graduation. This provides an unprecedented opportunity for examining higher education practices, building an evidence-basis for the most effective teaching, and advising methods and embedding a culture of continuous refinement into everything that faculty and administrators do. This presenter describes the evolution of learning analytics activity at the University of Michigan and shares lessons that he believes should inform national efforts.

Program Evaluator Development

Planning for the Unexpected: When Weird Things Happen During an ABET Evaluation

Ann Kenimer – Texas A&M University
> Hanover CD

Session Description
Program evaluators prepare thoroughly for ABET reviews: complete pre-work, send materials to the team chair, finalize on-campus schedules, and prepare for face-to-face meetings. But even the most organized program evaluator can be caught off-guard when unexpected events crop up during an ABET review. Session participants work in small groups to explore possible solutions to various problem scenarios using case studies, many of which are based on actual team experiences. This session is similar in topic and format to that presented at the 2014 ABET Symposium but features all new case studies.

*Invited Presenters
Program Evaluator Development

How to Become a Program Evaluator

Charles W. Hickman – ABET Managing Director, Constituent Relations; Frank Hart – ABET Adjunct Accreditation Director, Engineering Technology; Winston Erevelles – St. Mary’s University

Session Description
Each year, more than 2,000 faculty and academic administrators, industry professionals, and government officials serve as ABET program evaluators, making initial accreditation recommendations and working together to ensure quality in technical education worldwide. This session provides information for prospective ABET volunteers and covers the nature of program evaluator work; ABET’s need for new volunteers; the program evaluator “life-cycle”; what’s in it for potential volunteers; threshold requirements for service and the program evaluator selection process; and training requirements.

Global Competence

*Certifying the Global Professional

Catherine Leslie – Engineers Without Borders-USA

Session Description
Envision a future where 1,000 students graduate annually with a certification documenting their global engineering skills. Engineers Without Borders USA (EWB-USA) is developing a Global Curriculum for individuals who wish to do meaningful volunteer work in developing communities. The curriculum complements the traditional engineering bachelor of science degree by expanding the students’ practical knowledge and skills in leading, planning, designing, implementing, and evaluating small-scale, community-driven projects. The program was designed to incorporate recommendations from ABET and the National Academy of Engineering’s The Engineer of 2020. As such, it provides the knowledge and skills that industry expects a global engineer to show upon graduation.

*Invited Presenters
Global Competence

Two 25-Minute Presentations

Baker

Internationalizing Technical Education the Economic Way

Adnan Yahya – Birzeit University

Session Description
For an institution with limited resources, sending students abroad may not be a realistic option. Therefore, the engineering school embraced a series of cost-efficient initiatives to bring international education to local students, such as attracting prominent international scholars to teach courses jointly with local faculty. This session describes those initiatives, the restructuring introduced to integrate student and faculty participation, the challenges faced and solutions devised, the degree to which the goals were achieved, the assessment tools used, and the effort’s sustainability in the resource-limited environment of a third-world country. The model’s applicability to other environments is also addressed.

Internationalizing Engineering Education Strategies for Removing and Reducing Barriers to Access

Monica Gray – Lincoln University

Session Description
This interactive session discusses the benefits, opportunities, and challenges in sending engineers abroad; explores three strategies for internationalizing engineering education; and examines how these can be achieved to ensure affordability, broad access, retention, and program efficiency. Upon completing this session, participants can apply key strategies such as cooperation, consortia, and curriculum integration to internationalize the engineering curriculum successfully.
Program Assessment

**Standardized, Streamlined Assessment Reporting Using Performance Vectors and Faculty Course Assessment Reports**

*John Estell – Ohio Northern University*

Session Description

This presentation introduces the Faculty Course Assessment Report (FCAR), a one- to two-page document that guides instructors through a systematic course review while documenting critical portions of the “closing the loop” process. The presentation continues with a focus on performance vectors, which categorize aggregate student performance on a directly measured performance indicator and are incorporated into the FCARs. Through this presentation, participants learn both how to construct performance vectors from various forms of direct student outcomes assessment and how to implement a sustainable, streamlined approach to student outcomes assessment through the systematic use of a structured reporting document.

Program Assessment

**A Web-Based Tool for Course-Level Assessment of Student Learning Outcomes**

*Al Ferri, Wayne Whiteman – Georgia Tech*

Session Description

This session presents an online web-based tool titled the “Course Level Assessment System (CLASS),” which gives instructors an easy-to-use platform for the direct assessment of student outcomes in courses they are teaching and in compiling and archiving results. The CLASS system also allows them to evaluate the effectiveness of prior course changes and to suggest course improvements based on the assessment results. This session focuses on using the CLASS system in a mechanical engineering program, but the system has been successfully employed in a wide variety of lecture, laboratory, and studio courses and can be easily replicated at any educational institution.
Accreditation

**Demonstrating Compliance with Criterion 4: Closing the Loop**

*Daina Briedis – ABET Adjunct Director, Programs and Events*  
> Hanover AB

**Session Description**

The ABET accreditation process emphasizes the important connection between assessment and continuous improvement. The criteria require that programs use systematic, documented processes to assess and evaluate student outcomes, and to use the evaluation results for continuous improvement. The benefits of “closing the loop” reach beyond compliance with criteria and promote improvements in teaching and learning. But how useful are the assessment processes that we employ? This workshop presents the elements of an effective and sustainable assessment process that provides the foundation for robust, evidence-based improvement at the program level.

Accreditation

**Continuous Improvement Applied to EC 2000**

*Bill Wepfer – Georgia Tech*  
> Hanover CD

**Session Description**

Since 2009, the Engineering Accreditation Commission’s Criteria Committee has carefully reviewed, assessed, and evaluated Criterion 3: Student Outcomes. This activity explores opportunities for keeping the criteria current while improving the effectiveness of the accreditation process. The EAC is seeking to develop a set of student outcomes that are applicable across all engineering programs and that are necessary for professional practice. Concurrently, the EAC also wants to establish that institutions can reasonably achieve the evaluation of these outcomes within the engineering curriculum.
Global Competence

An Industry Perspective on Computing Accreditation

Joe Sussman – Chief Accreditation Officer and Chief Information Officer, ABET (moderator); Craig Berry – Siemens PLM Software; David Cordes – University of Alabama; Ronald Doyle – IBM
> Hanover E

Session Description
Are the criteria and processes that support the accreditation of computing programs serving the needs and expectations of employers? How might computing accreditation gain enhanced relevance among a broader range of institutions and play a more influential role in advancing the computing field? Industry officials offer their perspectives.

Accreditation

On-Site Review Logistics

Harold Grossman – Clemson University (moderator)
> Hanover FG

Session Description
The panel discusses planning the on-site logistics for a general or focused review, for both U.S. and non-U.S. visits. The panel features Executive Committee members from each of the four Accreditation Commissions.
Global Competence

Three 25-Minute Presentations

> Baker

An Examination of Current Practice in Balancing Engineering Credit Requirements with Program Criteria and Global Engineering Content

Gene Dixon – East Carolina University;
Beth Cudney – Missouri University of Science and Technology

Session Description
This presentation covers curricular design approaches used in engineering management programs to balance engineering credits, constituent needs, and global engineering preparation goals. These practices may be applied by other discipline oriented programs to balance curricular credits and achieve strategic instruction goals.

Engineering Design Concepts Education and Assessment as a Means of Enhancing Students’ Professional Outcomes

Muhammad Malik, Hamza Ghulman – Umm Al-Qura University

Session Description
ABET’s general criteria has student outcomes related to engineering design in (a) through (c), (e), and (k), while student outcomes related to the professional skills that employers seek are in (d) and (f) through (j). In this session, the presenters exhibit how professional outcomes may be embedded into the engineering curriculum and how assessment of technical concepts helps students enhance their professional skills in a senior-level engineering design course. The presenters share their assessment methods, student work examples, and assessment and evaluation results with the session participants.
Integrating Contemporary Issues and Life-Long Learning in a Professional Ethics Course

Muhammad Rashid – University of West Florida

Session Description
This session teaches participants to:

> Prepare a course syllabus for fully online delivery.
> List the course contents.
> Integrate discussion topics.
> Advise students applying a nine-step process on resolving and implementing an ethics issue and preparing a case study report.
> Prepare online quizzes and randomizing questions to minimize cheating.
> Integrate life-long experience through any contemporary topic.
> Conduct self-assessments of student learning outcomes at the beginning and end of the course.
Program Evaluator Development
Statement Writing
Jeffrey Fergus – Auburn University; Patricia Brackin – Rose-Hulman Institute of Technology

Session Description
The session allows participants to practice writing shortcoming statements. Small groups receive scenarios about which they can write shortcoming statements. Then, all participants discuss at least some of the written statements.

The initial scenarios are described as concerns, since these are typically the most difficult to write. After discussion of the concern statements, the groups modify the scenarios either to raise the severity to a weakness or to reduce the severity to an observation. Then, they modify their statement accordingly.

Accreditation
Preparing the Self-Study Report for Engineering Technology
Steve Wendel – Sinclair Community College

Session Description
The session provides information that helps programs prepare an effective Self-Study Report and prepare for an ABET visit.
Program Assessment

**A Model for Teaching and Assessing Professional Skills in Science and Engineering**

*Amos Olagunju – St. Cloud State University*

Session Description

Graduates from computing information sciences and engineering require formal training in professional skills. This workshop presents a model for teaching and assessing professional skills in science and engineering. The model supports the definitions of program and course professional skills, assessment rubrics, and mapping of professional skills from courses to the program’s professional skills outcomes. Also, the workshop shows an assessment tool that allows professors to examine the professional skill areas in which individual students need improvement, as each student makes progress from the freshman to senior year.

Accreditation

**Potential CAC Criterion 3 and 5 Changes**

*Allen Parrish – University of Alabama; Edward Sobiesk – U.S. Military Academy*

Session Description

In the *Criteria for Accrediting Computing Programs*, the Computing Accreditation Commission (CAC) requires both student outcomes and “enabled” characteristics. The CAC is exploring avenues to modify Criterion 3 and Criterion 5 so that the distinction between outcomes and characteristics is clearer. This session takes a lecture-discussion format, with updates on CAC’s clarification efforts followed by small breakout group discussions about the proposed criteria changes. Then, the small groups report their conclusions to the larger group. CAC representatives will note these conclusions and factor them into subsequent deliberations regarding changes to these criteria.
Global Competence

*Societal Impact on Accreditation and Engineering Practice Standards Development in Latin America and the Caribbean
Zenaida Otero Gephardt – Rowan University; Maria Larrondo-Petrie – Florida Atlantic University
> Hanover E

Session Description
This workshop immerses participants in the societal and cultural realities of Latin American and Caribbean engineering programs in a context applicable to many developing countries. Building accreditation preparation and global competence using these engineering programs’ existing strengths are discussed. Specific activities and programs to enhance familiarity with and implementation of accreditation procedures, continuous improvement, and global competence development are highlighted. Participants strengthen their understanding of opportunities and challenges in engineering education globalization, and of activities that can serve to advance engineering education throughout the world.

Program Evaluator Development

Pilot Study Exploring Use of Remote Access on Site Visits
Robert Soule – Indiana University of Pennsylvania; Neil Hutzler – Michigan Technological University
> Hanover FG

Session Description
This session demonstrates the feasibility of conducting on-campus review visits when some team members are not physically present but participate using virtual (remote) access.

*Invited Presenters
Program Assessment

Two 25-Minute Presentations

> Baker

*Engineering Statistics as a Benchmark Course in the Context of a Sustainable Continuous Improvement Process*

Zia Yamayee, Peter Osterberg – University of Portland

Session Description

This session focuses on the assessment and evaluation of student outcomes and how the results can be used to continuously improve engineering programs. Participants learn how to assess and evaluate student outcomes, how to select direct and indirect assessment methods for assessing student outcomes, how to use benchmark course assessment to streamline student outcomes assessment, and how to use the results to identify program improvements.

*Developing Key Performance Indicators for Effective Assessment of Student Outcomes in a Biomedical Engineering Program*

Yawen Li, Elin Jensen – Lawrence Technological University

Session Description

ABET student outcomes provide a general statement of expected learning but do not provide program-specific performance measures that students must achieve. Developing meaningful performance indicators is the most critical part in building an efficient and sustainable assessment process. Based on the program’s recent experience of developing key performance indicators (KPIs), the immediate positive impact on the assessment process, and enthusiastic faculty response, the presenter shares strategies on developing meaningful KPIs and uses examples to demonstrate the mapping of each student outcome to a set of KPIs and each KPI to the learning objectives of a specific course.
Global Competence

*EUR-ACE Accreditation*

*Gilles Lodolo*  
> Courtland

**Session Description**
The session describes the EUR-ACE accreditation system, presenting the main stakeholders in Europe, the link between the national accreditation agencies who hold EUR-ACE accreditation and the European network of Accreditation for Engineering Education. Secondly, the session focuses on the French accreditation system and points out the detailed links between CTI accreditation and EUR-ACE label.

Accreditation

**Preparing for the 2015-16 ETAC Site Visit**

*John Sammarco – National Institute for Occupational Safety and Health (NIOSH)*  
> Dunwoody

**Session Description**
This interactive session provides an overview of the Engineering Technology Accreditation Commission (ETAC) site visit, including what to expect after the visit. It is intended for those who are involved in preparing for or participating in an ETAC visit during the 2015-16 cycle. Participants interact with the presenter to learn current ETAC practices.

Discussions include:

> Visit objectives.
> The visit team.
> Planning for the visit.
> Conducting of the visit.
> Display materials.
> Recommendations for hosting a visit.
> Post-visit activities and schedules.

*Invited Presenters*
SAVE THE DATE

ABET SYMPOSIUM

Fort Lauderdale, FL • April 14-15, 2016
SCHEDULE AT-A-GLANCE

7:00 AM – 8:00 AM  Breakfast  > Regency Ballroom

8:00 AM – 9:00 AM  Plenary Address with Jason Palmer  > Regency Ballroom

9:00 AM – 12:00 PM  Self-Study Report Room Open  > Inman Room

9:10 AM – 10:00 AM  Concurrent 50-minute sessions

10:00 AM – 10:30 AM  Networking break

10:30 AM – 11:20 AM  Concurrent 50-minute sessions
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>11:30 AM - 1:00 PM</td>
<td>Lunch and Plenary Address with Chris Inglis</td>
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<td>&gt; Regency Ballroom</td>
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<td>1:00 PM - 5:00 PM</td>
<td>Self-Study Report Room Open</td>
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<td>1:10 PM - 2:00 PM</td>
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<td>2:10 PM - 3:00 PM</td>
<td>Concurrent 50-minute sessions</td>
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<td>3:00 PM - 3:30 PM</td>
<td>Networking break</td>
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<tr>
<td>3:30 PM - 5:00 PM</td>
<td>Accreditation Commission Town Halls</td>
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## Schedule

<table>
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<tr>
<th>Time</th>
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<th>Activities</th>
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<tbody>
<tr>
<td>7:00 AM – 8:00 AM</td>
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<td>Breakfast</td>
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<td>Hanover E</td>
<td>Program Assessment: *Getting to Actionable Intelligence: Pushing Through the Learning Analytics Hype Kimberly Arnold</td>
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<td>Prog. Evaluator Development: How to Effectively and Efficiently Navigate an Accreditation Team Through Display Materials Scott Dunning</td>
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<td>Hanover FG</td>
<td>Accreditation: We Are Interested in Seeking ABET Accreditation... Winston Erevelles</td>
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<td>Networking Break</td>
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<td></td>
<td>Program Assessment: Assembling and Aligning Assessment System Building Blocks... Karen Tarnoff, Dennis Depew</td>
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<td></td>
<td>Hanover AB</td>
<td>Accreditation: Proposed Changes to the CAC Computer Science Accreditation Criteria Stan Thomas, Michael Oudshoorn</td>
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<td>Hanover CD</td>
<td>Global Competence: *CTI and the French Engineering Education System Gilles Lodolo</td>
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<td>Hanover E</td>
<td>Program Assessment: No Lectures, Graded Homework, or Exams... But the Students Learn Much More Deeply Steve Yalisove</td>
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<td>Lunch, Plenary Address with Chris Inglis</td>
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*Invited Presenters*
Global Competence: Exploring the Formation of Communities of Practice
Carolyn Jacobson, George Kasper

Global Competence: *The IEA Perspective on Global Engineering Competence and Graduate Attributes
David Holger

Program Assessment: *Learn How to Use the FE Exam for Effective Outcomes
John Steadman, Grant Crawford

Program Assessment: The Quickest Way to Qualify for Initial ABET Accreditation
Ahmad Taleb, Mohammed Al-Shargabi

Global Competence: Continuous Improvement: The Care and Feeding of Industry Advisory Boards
Hamid Parsaei, Brady Creel

Global Competence: Building Global Competences: A Field Report Using a Twofold Approach
Kamilla Trubicki, Michael Rabl

SCHEDULE

7:00 AM – 8:00 AM

8:00 AM – 9:00 AM

9:10 AM – 10:00 AM

10:00 AM – 10:30 AM

10:30 AM – 11:20 AM

11:30 AM – 1:00 PM

*Invited Presenters
SCHEDULE (cont.)

1:10 PM – 2:00 PM

Hanover AB

Program Assessment
Adapting the Capability Maturity Model to Develop an Assessment Maturity Model
Karen Tarnoff, Martha Pointer

Hanover CD

Program Assessment
Beware of the *Asterisk*: Meeting the Letter But Not the Spirit of the Criteria
Gloria Rogers

Hanover E

Program Assessment
Leading the Assessment Process Through a First-Time Accreditation of an Eng. Program
John Vadnal

Hanover FG

Program Evaluator Development
Understanding How the CAC Views Criterion 3
David Cordes, Edward Sobiesk

2:10 PM – 3:00 PM

Hanover AB

Program Assessment
Creating and Managing a Sustainable Direct Assess. Process Without Overwhelming Faculty
Mette Posamentier, Mustafa Sualp

Hanover CD

Global Competence
*How Global Ops Strengthen the “STEM Identity” of Women, Underrepresented Minorities, and People with Disabilities
Renetta Garrison Tull

Hanover E

Program Assessment
A Case Study of Assessment Early in a Program for Evaluation and Improvement of Student Retention and Outcomes
Michael Misovich

Hanover FG

Program Evaluator Development
How to Become a Program Evaluator
Charles W. Hickman, Frank Hart, Winston Erevelles

3:00 PM – 3:30 PM

Networking break

3:30 PM – 5:00 PM

Hanover AB

Accreditation
Applied Science Accreditation Commission (ASAC) Town Hall

Hanover CD

Accreditation
Engineering Accreditation Commission (EAC) Town Hall

Hanover E

Accreditation
Engineering Technology Accreditation Commission (ETAC) Town Hall

Hanover FG

Accreditation
Computing Accreditation Commission (CAC) Town Hall

*Invited Presenters
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<td>Educ. and Assess. of Student Outcomes Related to Prof. Practice</td>
<td>Toward the Development of a Sustainable Semi-Automated Assessment and Cont. Improving System</td>
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**Schedule**

- **1:10 PM – 2:00 PM**
  - Program Assessment
  - Global Competence
  - Program Assessment
  - Global Competence

- **2:10 PM – 3:00 PM**
  - Program Assessment
  - Prog. Evaluator Development
  - Global Competence
  - A Multi-Pronged and Integrated-Course Approach to Conveying an Application Context for Computing Prog.

- **1:00 PM – 5:00 PM:**
  - Self-Study Report Room Open
  - > Inman

- **3:00 PM – 3:30 PM**
  - Program Assessment
  - Prog. Evaluator Development
  - Global Competence

- **3:30 PM – 5:00 PM**
  - *Invited Presenters*
Program Assessment

*Getting to Actionable Intelligence: Pushing Through the Learning Analytics Hype

Kimberly Arnold – University of Wisconsin-Madison
> Hanover AB

Session Description
Learning analytics provide new opportunities for learners and educators to make the most informed, outcomes-driven decisions to positively impact a student’s academic achievement. Learning Analytics consider the learner’s needs beyond simple grade point metrics by:

> Supplying key insight into behavioral patterns and academic proficiencies that drive learner success
> Identifying at-risk learners who need proactive intervention
> Finding under-engaged students who may benefit from new outreach strategies

This session defines learning analytics, discusses the promises of the tools, and identifies possible roadblocks to implementing learning analytics. A special focus is placed on how learning analytics can help in student success assessment efforts.

Accreditation

Demonstrating Compliance with Criterion 4: Assessment and Evaluation

Joe Turner – Clemson University
> Hanover CD

Session Description
Intended primarily for faculty and administrators of programs planning for an ABET accreditation review, this session focuses on program evaluation relative to Criterion 4: Continuous Improvement. The objective is to help programs understand better how to demonstrate and document a continuous improvement process to satisfy Criterion 4, and how to present evidence of a good continuous improvement process effectively to Program Evaluators. Expectations for demonstrating compliance with various aspects of Criterion 4 are discussed and demonstrated. Audience participation and questions are encouraged.
Program Evaluator Development

How to Effectively and Efficiently Navigate an Accreditation Team Through Display Materials

Scott Dunning – University of Maine
> Hanover E

Session Description
A site visit is conducted over a compressed time period, and it is imperative that program evaluators can quickly find answers to questions while at an institution. That can make the task of assembling materials for the team to review while on site into a daunting one.

This presentation provides faculty and administrators from programs preparing for an ABET accreditation review with examples of ways to present on-site materials and discusses the pros and cons of each approach. Time for questions and answers with the presenters is allotted at the end.

Accreditation

We Are Interested in Seeking ABET Accreditation… Are We Ready?

Winston Erevelles – St. Mary’s University
> Hanover FG

Session Description
The session is an introduction for programs and institutions that are new to accreditation and a refresher for those with limited ongoing exposure to accreditation criteria, policies, and procedures. It helps participants understand how to prepare for the initial program accreditation. Using examples drawn from actual visits, the presenter familiarizes participants with:

> Where to find the needed information
> How the ABET accreditation process works
> How to apply for accreditation
> Why they create the Self-Study Report
> What to expect during the on-site visit
> What a due-process response entails
> When to expect the final decision
**Global Competence**

*Exploring the Formation of Communities of Practice*

*Carolyn Jacobson – York College of Pennsylvania; George Kasper – Virginia Commonwealth University*

> Baker

**Session Description**

This interactive session explores the concept of forming communities of practice for leaders of ABET-accredited and would-be ABET accredited programs to exchange knowledge, best practices, strategies, concerns, and questions related to ABET accreditation. Session participants engage in roundtable discussions with colleagues to provide input regarding what form such communities of practice might take. Representatives of international institutions are especially encouraged to participate.

**Global Competence**

*The International Engineering Alliance Perspective on Global Engineering Competence and Graduate Attributes*

*David Holger – Iowa State University*

> Courtland

**Session Description**

This session provides an overview of the International Engineering Alliance, its membership, its accomplishments to date, its current activities, and its goals for enhancing the global consensus on engineering graduate attributes (outcomes of the educational process). Also, it discusses best practice in engineering education and expected engineering competencies of engineering professionals. Session participants achieve a better understanding of current global expectations for engineering education, accreditation, and professional competence.

*Invited Presenters*
Program Assessment

*Learn How to Use the FE Exam for Effective Outcomes Assessment in All Engineering Disciplines

John Steadman – University of South Alabama; Grant Crawford – Quinnipiac University
> Dunwoody

Session Description
The newly revised NCEES Subject Matter Reports from the Fundamentals of Engineering (FE) exam provide statistically significant comparisons and a rich source of data for assessing student performance compared to national norms in specific engineering content areas. Faculty working on assessment plans should know how to efficiently use the resulting data from these reports. This session highlights best practices in outcomes assessment using the NCEES Subject Matter Reports to provide participants with information about the strengths and weaknesses of a program’s students. Then, participants can practice using these exam results in various outcomes assessment activities based in several engineering disciplines.
50-MINUTE SESSIONS
10:30 AM – 11:20 AM

Program Assessment

Assembling and Aligning Assessment System Building Blocks to Create a Sustainable Process
Karen Tarnoff, Dennis Depew – East Tennessee State University
> Hanover AB

Session Description
This session engages participants in discussion examining the key building blocks for a sound assessment process, alignment of process components, and integration of components with other critical processes such as curriculum management. Participants evaluate the sufficiency and alignment of components in their own systems to identify opportunities for improvement. Participants also explore states in the assessment process and the ownership of key components as factors that contribute to their system’s efficiency, effectiveness, maturity, and sustainability.

Accreditation

Proposed Changes to the CAC Computer Science Accreditation Criteria
Stan Thomas – Wake Forest University; Michael Oudshoorn – Wentworth Institute of Technology
> Hanover CD

Session Description
Changes to the Computing Accreditation Commission (CAC) program criteria for accrediting computer science and similarly named programs are being proposed. This workshop outlines the current set of proposed changes, solicits audience feedback regarding the changes’ suitability, and engages the audience for ideas for additional changes in the computer science program criteria. Small breakout groups discuss the proposed changes and then report their conclusions to the larger group. CAC and CSAB (the lead professional society for computer science) representatives will note these conclusions and factor them into subsequent deliberations regarding changes to these criteria.
Global Competence

*CTI and the French Engineering Education System
Gilles Lodolo
> Hanover E

Session Description
This session points out the differences in job descriptions of graduated engineers between France and the United States and consequently describes the French higher educational system for engineering. It also deals with the way the French accreditation system is organized, the missions and roles of the involved stakeholders, and the upcoming trends in France and Europe.

Program Assessment

No Lectures, Graded Homework, or Exams...
But the Students Learn Much More Deeply
Steve Yalisove – University of Michigan
> Hanover FG

Session Description
This session describes a highly engaged learning environment developed for a large introductory materials science and engineering course. First, students read and annotate the textbook using a tool developed at MIT (nb.mit.edu). Lectures are converted into learning activities, which are delivered to small groups of students via a bring-your-own-device clicker system (learningcatalytics.com). Homework is graded based on written reflections, and exams are converted to readiness assurance activities that borrow directly from the problem-based learning community. In addition, team projects are assigned every four weeks so students gain experience in design, ethics, teamwork, communication, and global and societal issues. Watch this short video about the course: http://youtu.be/tLaflAvkWlg.
Program Assessment

The Quickest Way to Qualify for Initial ABET Accreditation

Ahmad Taleb, Mohammed Al-Shargabi – Najran University
> Baker

Session Description
This session presents a quick way to prepare computing programs for initial ABET accreditation, based on an actual case study of computer science and information systems programs. Specifically, the session introduces and discusses practical guidelines and steps to work with the ABET accreditation criteria. In addition, it focuses mainly on how to develop and implement a continuous program improvement framework within the programs.

Global Competence

Continuous Improvement: The Care and Feeding of Industry Advisory Boards

Hamid Parsaei, Brady Creel – Texas A&M University at Qatar
> Courtland

Session Description
A program’s industry advisory board is the beginning and end of its continuous improvement cycle. But how do faculty and administrators connect with industry advisory board members to get meaningful feedback, and how do they keep them interested in the program and its success? This interactive session presents a case study of best practices for identifying and engaging a program’s industry advisory board members to get valuable input while ensuring that the program is satisfying industry demands.
Global Competence

Building Global Competences: A Field Report About Using a Twofold Approach

Kamilla Trubicki, Michael Rabl – University of Applied Sciences Upper Austria
> Dunwoody

Session Description
The workshop presents the program’s tried-and-true approach to teach global competences in higher engineering education. Participants learn about the program’s definition of global competences and receive an overview of possible methods to teach these competences to students. They gain the necessary know-how to start drafting their own definition of global competences and, subsequently, their own global competence building approach. In addition, participants are invited to discuss their experiences concerning global competences with the group. The workshop is open to educators and administrators who can share first experiences with incorporating global competences into their programs.
50-MINUTE SESSIONS
1:10 PM – 2:00 PM

Program Assessment

Adapting the Capability Maturity Model to Develop an Assessment Maturity Model

Karen Tarnoff, Martha Pointer – East Tennessee State University
> Hanover AB

Session Description
Many schools find it difficult to move beyond initial, immature assessment approaches and thus struggle to build efficient, effective, and sustainable assessment systems. This session presents a proposed Assessment Maturity Model (AMM), adapted from the Capability Maturity Model, and engages participants in discussion regarding the application of the AMM to their assessment processes. Participants evaluate their own assessment systems using an AMM metric that evaluates the assessment process and identifies opportunities for system improvement.

Program Assessment

Beware of the *Asterisk*: Meeting the Letter But Not the Spirit of the Criteria

Gloria Rogers – ABET Adjunct Director, Programs and Events
> Hanover CD

Session Description
Since the inception of outcomes-based accreditation criteria, programs have been designing processes to meet Criteria 2, 3, and 4. Not unlike students, many times this is based on the perception of “what’s going to be on the test.” This session discusses the concern that many programs are meeting the letter of the criteria, but they are failing to meet the criteria’s intent, which is to embrace true quality processes that enable programs to enhance student learning while engaging faculty in scholarly conversations about curriculum. The presenter gives specific examples of how the process can be improved while, at the same time, utilizing faculty time where it matters most.
**Program Assessment**

*Leading the Assessment Process Through a First-Time Accreditation of an Engineering Program*

*John Vadnal – Liberty University*

Session Description

This interactive session outlines how an engineering department addressed the challenges of meeting accreditation standards and what process it used to achieve ABET accreditation for three engineering programs. Participants learn about preparing for an accreditation review, identifying the personnel and annual time commitment needed for accreditation preparation, collecting and presenting data for the Self-Study Report, and explaining accreditation’s importance to engineering students and graduates. Steps to take after accreditation are also discussed. The session is valuable for administrators and engineering faculty who are seeking first-time accreditation for their programs and are preparing for an accreditation review.

**Program Evaluator Development**

*Understanding How the CAC Views Criterion 3*

*David Cordes – University of Alabama; Edward Sobiesk – U.S. Military Academy*

Session Description

Items (a) through (i) in the Computing Accreditation Commission’s Criterion 3 are “characteristics” that must be “enabled.” They are not required outcomes, but programs can select them as their outcomes. This presentation looks at what the CAC expects regarding Criterion 3.
**Program Assessment**

*Building a Sustainable Continuous Quality Improvement Framework*

*Ahmad Taleb, Mohammed Al-Shargabi – Najran University*

> Baker

**Session Description**

This session shows practical steps to build a sustainable continuous quality improvement framework using multi-method, direct and indirect assessment. This framework combines the assessment of course learning outcomes and performance indicators for each student outcome. This continuous quality improvement framework is an actual case study of a computer science program.

**Global Competence**

*Education and Assessment of Student Outcomes Related to Professional Practice*

*Muhammad Malik, Mohammed Simsim, Abdel-Monem Abbas – Umm Al-Qura University*

> Courtland

**Session Description**

Student outcomes (f) and (h) of ABET’s general criteria encompass skills and behaviors related to professional and ethical responsibility and the broad knowledge to appreciate engineering’s impact on human life. In the workshop, the presenters compare and contrast different modes of teaching career-related professional skills and show the effectiveness of a stand-alone, one-credit-hour course to teach Engineering Standards & Professional Ethics. Participants gather ideas and experiences regarding teaching and assessment of the outcomes related to professional practice in the context of students’ culture. They also experience some assessment techniques from examples of assessment methods used and results.
Program Assessment

Toward the Development of a Sustainable Semi-Automated Assessment and Continuous Improving System

Abdul Rauf, Eisa Al-Eisa – Al-Imam Muhammad ibn Saud Islamic University
> Dunwoody

Session Description
This interactive workshop presents and highlights the applications of software systems for data collection, assessment, and continuous process improvement with a particular emphasis on academic environments. The workshop trains the participants in using the software applications to automate data collection, modeling, and analysis, and it demonstrates how the application of these systems can be extended over the complete accreditation process. With these applications’ help, evaluation and assessment activities can be more transparent, efficient, and result-oriented while being cost effective at the same time.
Global Competence

*How Global Opportunities Strengthen the “STEM Identity” of Women, Underrepresented Minorities, and People with Disabilities*

Renetta Garrison Tull – University of Maryland, Baltimore County

Session Description

ABET’s General Criterion 3(h) has as a student outcome: “the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.” However, many students, particularly those from underrepresented minority backgrounds, do not fully grasp the global context of their disciplines. This session discusses perceived barriers, challenges, lessons learned, and case studies from international engagement projects involving underrepresented, minority graduate students and women faculty, and students with disabilities. The session includes recommendations for introducing global opportunities as a means of increasing minority retention and interest in research, and solidifying STEM identity.

Program Assessment

Creating and Managing a Sustainable Direct Assessment Process Without Overwhelming Faculty

Mette Posamentier – The University of Texas at Dallas; Mustafa Sualp – AEFIS, LLC

Session Description

In today’s competitive landscape, a top priority for accredited programs is proving student competency as a result of teaching and learning. The critical process that helps ensure the effectiveness of teaching and learning is direct assessment of student learning outcomes. While this process yields success through accreditation cycles, academic programs do not always use this data routinely for continuous improvement without overwhelming their faculty. Using automated knowledge management systems to manage the direct assessment process can help programs close the loop on a real-time basis and create a sustainable continuous improvement process that helps faculty rather than overwhelming them.

50-MINUTE SESSIONS

2:10 PM – 3:00 PM

*Invited Presenters
**Program Assessment**

*A Case Study of Assessment Early in a Program for Evaluation and Improvement of Student Retention and Outcomes*

*Michael Misovich – Hope College*

**Session Description**
The session describes the assessment strategies, developed and refined during the past ten years, that a general engineering program uses to improve student retention and outcomes. Recently, the data set has expanded to allow evaluation of first-year curricular changes and the effects of student gender as well.

Session participants learn:

- Simple but useful assessment data measured prior to or during a student’s first year of an engineering program.
- The advantages of organizing data longitudinally in an assessment plan.
- Means to use diverse measurements from such a plan for programs to improve student advising and retention.

**Program Evaluator Development**

*How to Become a Program Evaluator*

*Charles W. Hickman – ABET Managing Director, Constituent Relations; Frank Hart – ABET Adjunct Accreditation Director, Engineering Technology; Winston Erevelles – St. Mary’s University*

**Session Description**
Each year, more than 2,000 faculty and academic administrators, industry professionals, and government officials serve as ABET program evaluators, making initial accreditation recommendations and working together to ensure quality in technical education worldwide. This session provides information for prospective ABET volunteers and covers the nature of program evaluator work; ABET’s need for new volunteers; the program evaluator “life-cycle”; what’s in it for potential volunteers; threshold requirements for service and the program evaluator selection process; and training requirements.
Program Assessment

*Developing an Efficient Process to Assess the Professional Competencies*

*Tammie Cumming, A.S.M. Delowar Hossain – New York City College of Technology-City University of New York*

Session Description
The session demonstrates how to develop and implement an efficient and sustainable continuous improvement model. The session emphasizes the coordination to assess the ABET professional skills with the assessment of general education competencies. Participants are encouraged to bring a list of their general education and ABET student outcomes for this interactive session.

Program Evaluator Development

*Managing Team Activities in Challenging Environments*

*Wilson Gautreaux – Trident Technical College*

Session Description
This interactive session provides an overview of the types of challenging environments that can occur for an ABET accreditation team. These include changes in institutional and program leadership, program evaluator (PEV) approval issues, PEV availability and substitution cases, team chair and PEV performance issues, team cohesion and consensus problems, cooperation and communication concerns, and professional and ethical issues. This presentation is based on audience participation to provide examples of how their teams were challenged in previous visits and how they managed to overcome those challenges. Lessons learned during the presentation might be put to use in a future visit!
Global Competence

A Multi-Pronged and Integrated-Course Approach to Conveying an Application Context for Computing Programs

Kerry Henson, Linda Lynam – University of Central Missouri
> Dunwoody

Session Description
This workshop explores four steps that an information systems program followed to expose students to the application context, i.e., the field(s) in which technical theory and skills are intended to be used. It also emphasizes a unique “integrative experience” course structure that has student teams create and manage a real business. Session participants from like disciplines can apply the four steps to establish for their academic programs an application context or environment. Following a description of the course structure, participants work in groups and share the perceived opportunities and challenges of implementing a similar “integrative experience” in their discipline.
POST-SYMPOSIUM WORKSHOPS
9:00 AM – 12:00 PM

Using Project Management to Create Your Self-Study & Prepare for the Visit
Jim Conrad – University of North Carolina-Charlotte
> International North

Session Description
The ABET evaluation visit is one of your department’s most important activities - why leave the preparation to chance? Make the most of the limited time between submitting the Self-Study Report and the review visit to fully document your department’s commitment to undergraduate education. By using established project management principles such as planning, risk assessment, communications, and reporting, you can accurately represent your program beyond what you included in your self-study. This session will highlight the steps you can take to prepare for the visit, including developing a project plan for preparing the display room and materials. This session will also describe how to engage your faculty in materials preparation.

Preparing for the Visit:
Accreditation Outside the U.S.
Sherri Hersh – Manager, International Accreditation, ABET
> International South

Session Description
Before accepting assignments for visits outside of the U.S., program evaluators must be willing to commit time and effort needed for the visit. Additionally, they must review the ABET International Travel Policy and Travel Accident and Excess Medical Plan, be familiar with the culture and traditions of the country they are visiting, and have all travel documentation in place.

Using real-life examples, this workshop will focus on common challenges ABET teams encounter during pre-visit preparation and on-site reviews. Scenarios will be used to highlight key topics on logistics, security and health issues, communications, and local requirements.

This workshop is open to ABET Program Evaluators and Commissioners only.
Re-Engineering the Engineering Classroom: Flipped, Blended, and Problem-Based Learning

Wendy Newstetter, Joseph Le Doux – Georgia Tech
> Georgia Tech Campus (transportation provided)

Session Description
With the ascendency of MOOCs to a national obsession in 2012, many engineering educators have begun to experiment with a variety of technology-enabled models for engineering learning and success. A major thrust of these models has been to replace the typical lecture-driven classroom with more interactive activities that are supported by online videos. But do we have evidence that this flipped set-up is the best for student learning? In this interactive workshop, we will:

> Present findings from educational research conducted at Georgia Tech on flipped classrooms.
> Simulate the problem-solving studio used at Georgia Tech.
> Provide examples of blending from biomedical, civil, mechanical, and electrical engineering.
> Offer a framework for use in re-engineering your classroom.
> Discuss the pros and cons of various software packages.
> Give you time to work with others in the development of a model appropriate to your situation.

EXCEL – A Tool for Assessment

James Warnock – Adjunct Director, Programs and Events, ABET
> International North

Session Description
There are many commercial products available for the collection and analysis of assessment data. ABET does not require the use of technology in program assessment, nor does it endorse commercial software products.

This module has been designed to show you how Microsoft Excel can be used to build a relatively foolproof data entry system that can be used for assessment and/or grading. It is also possible to use this template for instant analysis and visualization of the collected data.
Check out ABET’s sessions at ASEE!

ASEE’s 122nd Annual Conference & Exposition
June 14-17, 2015 • www.asee.org

ABET Fundamentals of Program Assessment Workshop
Sun. June 14, 2015 9:00 AM to 4:00 PM
Washington State Convention Center, Room 303

What You Need to Know About ABET Accreditation
Mon. June 15, 2015 7:00 AM to 8:30 AM
Washington State Convention Center, Room 304

What’s New in ABET Accreditation?
Mon. June 15, 2015 2:15 PM to 3:45 PM
Washington State Convention Center, Room 304

How to Become an ABET Program Evaluator
Tue. June 16, 2015 2:15 PM to 3:45 PM
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Keep Calm and Carry On! Making Preparations for the Site Visit
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