



THE COMPLETE ENGINEER CONFERENCE

University of Nebraska-Lincoln College of Engineering
March 2-3, 2018 | Nebraska Innovation Campus



Intercultural
Appreciation



Leadership



Teamwork



Self-Management



Service and Civic
Responsibility



Understanding of
Engineering Ethics

What is the Complete Engineer Initiative?

The Complete Engineer Initiative highlights the necessity and supports the development of many non-technical competencies needed to solve the various societal challenges we face in the 21st century and beyond.

At its core, this initiative is a conceptual framework for collegiate engineers to understand that their technical expertise must be paired with essential non-technical competencies to provide comprehensive and sustainable engineering solutions. By providing opportunities for students to develop and apply their understanding of the six core competencies through leadership classes, co-curricular programs and services, we are confident our communities will be even better served by graduates of the University of Nebraska-Lincoln College of Engineering.

The Complete Engineer Conference 2018 Conference Schedule

Friday, March 2, 2018

| Time | Session Title | Competencies | Location |
|----------|---|---|--|
| 7:30 AM | Scott Campus Only - Check-In Park in parking garage, check in at shuttle, and get on the N-E-Ride Shuttle at PKI Come dressed in business casual. | | Peter Kiewit Institute 1110 S. 67 th St Omaha, NE 68182 |
| 7:45 AM | Scott Campus Only - Shuttle Departs for Lincoln Shuttle will take Scott Campus students to Nebraska Innovation Campus | | PKI to NIC |
| 8:00 AM | Check-In Begins Continental Breakfast & Networking Arrive at Nebraska Innovation Campus, Check-In at Registration Table Continental Breakfast & Coffee upstairs in the Banquet Hall Sponsored by: TBA | | Nebraska Innovation Campus (NIC) |
| 8:45 AM | Scott Campus Shuttle Arrives & Checks In | | |
| 9:10 AM | Welcome from the Dean Dean Pérez, Interim Dean, College of Engineering | | NIC Auditorium |
| 9:15 AM | Welcome Keynote Jason Rea, Assistant Vice President Engineering Construction Union Pacific | ALL COMPETENCIES | NIC Auditorium |
| 10:00 AM | Plenary Session "Leadership and Communication: Engineering Edition (Or How to Make Your Career Cross-Platform Compatible)" Doc Chaves, Director of Corporate Communications LI-COR |  | NIC Auditorium |
| 11:00 AM | Breakout 1 Self-Management and Ethics Focus - Choose one workshop to attend |   | NIC Breakout Rooms |
| 12:00 PM | Lunch & Speaker Plenary Session: "Nuts and Bolts of Intercultural Interactions" Andres Torres, Business Director Latin America & Caribbean, 2005 Alum Valmont Industries, Inc. |  | NIC Banquet Hall |
| 1:00 PM | Breakout 2 Teamwork Focus - Choose one workshop to attend |  | NIC Breakout Rooms |
| 2:00 PM | Snack & Coffee Break Network with Sponsor: DLR Group  | | NIC Hallway |
| 2:30 PM | Breakout 3 Intercultural Appreciation Focus - Choose one workshop to attend |  | NIC Breakout Rooms |
| 3:30 PM | Complete Engineer Mixer Alumni Mixer will allow you to network with industry representatives to discuss the importance of non-technical skills. Enjoy hors d'oeuvres and refreshments. | ALL COMPETENCIES | NIC Banquet Hall |
| 5:00 PM | Scott Campus Only - Board Shuttle for Omaha | | NIC to PKI |

Saturday, March 3, 2018

| Time | Session Title | Competencies | Location |
|----------|--|---|--------------------|
| 8:15 AM | Scott Campus Only - Check-In Park in parking garage, check in at shuttle, and get on the N-E-Ride Shuttle at PKI Come dressed in business casual. | | PKI |
| 8:30 AM | Scott Campus Only - Shuttle Departs for Lincoln Shuttle will take Scott Campus students to Nebraska Innovation Campus | | PKI to NIC |
| 9:00 AM | Check In Begins Continental Breakfast & Networking Continental Breakfast & Coffee upstairs in Banquet Hall Network with Sponsor: Lamp Rynearson & Associates  LAMP RYNEARSON | | NIC Hallway |
| 10:00 AM | Plenary Session: Ethics Speaker TBA |  | NIC Auditorium |
| 11:00 AM | Breakout 4 Service & Civic Engagement, and Leadership Focus - Choose one workshop to attend |   | NIC Breakout Rooms |
| 12:00 PM | Lunch Receive Service Project Logistics & Team Up. Kickoff by Spreetail. | | NIC Banquet Hall |
| 1:15 PM | Board Buses for Service Projects | | NIC Plaza |
| 1:30 PM | Service Projects Service projects at multiple sites around Lincoln will be organized by UNL's Center for Civic Engagement. | ALL | Multiple Locations |
| 3:30 PM | Board Buses for Nebraska Innovation Campus | | |
| 4:00 PM | Snacks & Debrief Sponsored by: JEO Consulting Group, Inc.  | | NIC Banquet Hall |
| 5:00 PM | Scott Campus Only - Board Shuttle for Omaha | | NIC to PKI |

Breakout Workshop Descriptions

These 50-minute breakout sessions allow you to customize your conference experience. Choose one workshop to attend during each breakout time. Don't forget, you still can network with industry and sponsors during breaks and at the mixer!

Breakout 1 – Friday, 11:00 AM

Self-Management and Ethics Focus – Choose one workshop to attend

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| Room A Self-Management and the Key to Accomplishing Your Goals Success in all walks of life comes down to doing the things we know we should be doing even though we don't feel like doing them. Time-management is a misnomer; time is finite and it cannot be managed. However, you can manage how you spend your time maximizing your efforts to achieve incredible results. Students will learn techniques and teachings from several best-selling self-management books and leave with a commitment for reaching their goals. |  Jon Soneson, Senior Group Manager, 2008 Alum National Instruments |
| Room B What I Wish I'd Known... Ever wonder what it will be like to work as an engineer? Will you be ready to work on a team? With clients? On large projects? This interactive session includes small-group discussions regarding excerpts from W. J. King's, <i>The Unwritten Laws of Engineering</i> ; large-group scenario discussions, and presentations by UNL graduates about their experiences transitioning from students to professional engineers at Olsson Associates. Each workshop attendee receives a copy of King's book. |  Chris Willet, Senior Engineer, 2001 Alum Ross Barron, Technical Leader, 2007 Alum Olsson Associates |
| Room C Your OWN Board of Directors Board of Directors (BODs) play a key role in the success of any company. They oversee the main activities of a firm and provide advice to the management team. Individuals could also benefit from having their own BODs. This session will describe the benefits of having personal BODs and will provide a 4-step process in developing one. Students will have the opportunity to practice the concepts learned in this workshop to start developing their own BODs. |  Andres Torres, Business Director Latin America & Caribbean, 2005 Alum Valmont Industries, Inc. |
| Room D The Link Between Engineers and Business Ethics Engineering and ethics is commonly linked. A Complete Engineer will experience and overcome business and engineering ethical issues in a successful career. Examples of how a global organization manages unique ethical issues that conflict depending on countries involved. In addition, the discussion on conquering engineering ethical issues depending on what is presented to the customer. |  Zach Thiemann, Senior Manager, Engineer, 2007 Alum Valmont Industries, Inc. |
| Room E What does October 6, 1990, have to do with ethics? Daily life can be full of ethical dilemmas; personal, work-related, and even during college football games. What truly is "ethical behavior" and why should you care? This interactive, discussion-based session will cover the importance of ethics by using real-life examples and small-group case studies. Come join professional engineers and your fellow classmates as we watch a video, share stories, and discuss the meaning of ethics in engineering. |  Andrew Philips, Team Leader, 2002 Alum Katie Underwood, Team Leader, 2004 Alum Olsson Associates |

Breakout 2 – Friday, 1:00 PM

Teamwork Focus – Choose one workshop to attend

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| Room A Conflict Management in Project Teams Engineers are called upon to find efficient and sustainable solutions using the latest technology. With today's technology, we have amazing data analysis and modeling capabilities to examine and visualize multiple alternatives at breakneck speeds, but conflicts within a project team can bring a project's progress to a crawl. This session will examine what team conflict is, common sources of conflict, ways to reduce conflict in project teams and the benefits gained from the resolution process. |  David LaGrone, Civil Engineer, Operations Division U.S. Army Corps of Engineers, Omaha District |
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| Room B | Developing Effective Teamwork Skills As engineers, we are often required to work as part of a team. This workshop will focus on how you can develop key characteristics of an effective team member. Come ready to work and learn together! |  Carina Winters, Process Engineering, 2016 Alum Meryl Bloomfield, Chemical Engineering, 2017 Alum Black & Veatch |
| Room C | Knowing is Only Half the Battle Do you like to WIN? Would you do it at all costs? Are you smarter than your peers? You may say “yes” to all these statements and your experiences may have proven that you were right. Things will change though once you enter industry and begin your career. In this session you learn about how engineers can put themselves in a position to win within a team environment where there isn’t always an answer key available. |  Aaron May, Director of Operations Lincoln Industries |
| Room D | Agile Engineering Collaboration Teamwork is important in any profession, but it has become increasingly more so in Engineering. As recognized problem solvers, Engineers are relied on to drive projects and find solutions. The purpose of this session is to provide a general understanding of the increasingly popular Agile project management and how to operate in matrixed organizations. |  Zach Thiemann, Senior Manager, Engineer, 2007 Alum Valmont Industries, Inc. |

Breakout 3 – Friday, 2:30 PM

Intercultural Appreciation Focus – Choose one workshop to attend

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| Room A | Diversity: In and Out of the Workplace Come out and visit Moe and Joel to learn about Diversity In and Out of the Workplace. You will perform 2 different activities. One activity will highlight the value of trust and who you let into your life. The other activity will help you understand the importance of age and gender in your life. Maximizing your experiences and opening your mind can lead to new relationships and new opportunities in your life and career. |  Maurice Kimsey II, Account Executive, 2012 Alum Joel Robles, Senior Energy Coordinator Nerc Compliance & Training, 2009 Alum Omaha Public Power District |
| Room B | On Embracing Global Citizenship: Applying Hofstede’s 6 Cultural Dimensions We live in a globalized world, where diverse cultures constantly interact. Embracing global citizenship comes with understanding the value in diversity. This interactive session will use Hofstede’s 6 Cultural Dimensions as a framework for understanding differences across countries. We can then apply this macro-level understanding to organizational culture. Alongside your peers, join a P.E. in discussing how culture influences your own goals, values, interactions, and communications. |  César A. Garcia, Engineer – Energy and Engineering Sector Leader, 2004 Alum DLR Group |
| Room C | Managing Conflict & Appreciating Differences Is it possible to work together with people you disagree with? As an engineer, some of your most challenging projects will include working with varied teams and diverse stakeholders, often with different cultural backgrounds or opinions. Sometimes conflicts arise in these situations. This hands-on session will use real world examples and conflict management techniques to creatively address challenging problems. Participants will learn ways to ensure people feel appreciated, investigate ways to find common ground, and develop tools to reframe challenges. |  Sonja Michelsen, Hydraulic Engineer U.S. Army Corps of Engineers |

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| Room D | Cultivating Intercultural Competencies Engineering is an internationally recognized career with many companies working on global projects. Understanding cultural norms is important but knowing how to effectively communicate and interact within a global company would set you apart. Learn from a group who have experienced these little mis- |  Zach Thiemann, Senior Manager, Engineer, 2007 Alum Valmont Industries, Inc. |
|---------------|---|--|

steps and how you can be prepared for global opportunities in the future, as a complete Engineer.

Room E **The Strength in our Differences: Appreciating Intercultural Variation in Engineering**
 Due to the expansive connections of global economics, engineering as a profession requires a great deal of both insight and outward-focus: insight into what differences exist between groups and outward focus to accept and leverage those differences in order to better serve the targeted demographic. Companies that fail to appreciate cultural differences often fail in their target markets, but those that adapt to the customer's needs can bring huge innovations to the intercultural table.



Danielle Rozmus, Proecss Engineer, 2012 Alum
 Paul Kast IV, Lead Process Engineer
 Erica Sladky, Process Engineer
Novozymes Inc.

Breakout 4 – Saturday, 11:00 AM

Service & Civic Engagement, and Leadership Focus – Choose one workshop to attend

Room A **The Power of Networking**
 Proper networking goes beyond just giving business cards and mingling at an event. Effective networking could open the doors to meet prospective employers, discover job opportunities, find a mentor, or meet a new friend! This session will describe the benefits of proper networking, include some tips and provide some training that could be used to make networking more enjoyable. Students will also have the opportunity to practice the skills learned during the session.



Andres Torres, Business Director
 Latin America & Caribbean,
 2005 Alum
Valmont Industries, Inc.

Room B **Can a Software Engineer become the CEO?**
 What if an entire company, from the top down, was run by engineers? Now more than ever, soft skills have become an integral part of being a complete engineer and an expectation of your future employers. Come learn how an engineering company fosters a culture of growing future leaders, such as yourself, and how you can prepare for a role in engineering leadership.



Brandon Pfeifer, Software Engineer,
 2015 Alum
Garmin

Room C **Living Companies & Community Service**
 “Living companies,” companies who have thrived for generations, understand their higher purpose beyond generating profit. At Lamp Rynearson, our higher purpose is captured in our Purpose Statement, “To leave a legacy of enduring improvements in our community while perpetuating the company for future generations.” In this session, students will develop an understanding of how “living companies” approach their role in their communities and in society. Students will learn that the stakeholders of businesses include government, communities and the environment.



Mike McMeekin, Chairman of the Board,
 1974 Alum
Lamp Rynearson

Room D **Engineers Serving the World**
 Engineering is a profession that focuses on providing solutions to issues facing our communities on regular basis. Naturally, an Engineer holds service and civic responsibility as we solve the problems. Finding ways to preserve the precious resources, such as water, or support volunteerism to improve life across the globe is a regular action seen with Engineering. Come learn how Engineers get involved.



Zach Thiemann, Senior Manager,
 Engineer, 2007 Alum
Valmont Industries, Inc.

Keynote and Plenary Speakers

Listed in order of appearance.

Welcome Keynote, Friday, March 2, 9:15 AM

Jason Rea, Assistant Vice President Engineering Construction
Union Pacific



Jason Rea is Assistant Vice President Engineering Construction. In this role, he leads three teams responsible for delivering all new track construction, bridge construction, and bridge inspections across Union Pacific's 32,000 mile network.

Previously, Rea held the position of Chief Engineer Western Region where he was responsible for railroad maintenance across 11 Western states including all track, signal, and bridge infrastructure. Subsequently, he held engineering leadership positions on the Livonia, Houston, Ft. Worth, and Chicago Service Units.

He began his career in 1998 as a trackman and held various agreement positions before joining the management team in 2004.

Rea earned a bachelor's degree in Management from University of Phoenix while working as a manager for Union Pacific. He is also a graduate of Union Pacific's Leadership Development Program where he was awarded the Leadership Award by his peers.

He and his wife Stephanie have two children, Connor and Addison.

"Leadership & Communication: Engineering Edition (Or How to Make Your Career Cross-Platform Compatible)"

Friday, March 2, 10:00 PM

Doc Chaves, Director of Corporate Communications
LI-COR Biosciences



Doc Chaves is director of corporate communications for LI-COR Biosciences. He represents the right-brained minority in a company of high-powered, left brain professionals working together to create ground breaking technologies for scientists. Doc has more than 40 years of experience in translating English to English for companies and their target audiences. He also helps with LI-COR's recruiting efforts and brand management.

Doc's presentation will help students entering the job market ensure that they are cross-platform compatible, showing students how to communicate "their story" across the multiple generational channels students encounter.

“Nuts and Bolts of Intercultural Interactions” Friday, March 2, 12:00 PM

Andres Torres, Business Director Latin America & Caribbean, 2005 Alum
Valmont Industries, Inc.



Andres Torres works as a Business Director for the Global Utility Division at Valmont Industries. He is responsible for sales, project management, and engineering of tubular steel structures that are used to support transmission lines, highway lighting, and traffic lights for customers in Latin America and the Caribbean. Andres was born and raised in Bogota, Colombia where he earned his bachelor’s degree in Engineering from the National University of Colombia. He then earned a Masters Degree in Civil Engineering from the University of Nebraska-Lincoln (2005) and most recently an MBA from the University of Nebraska-Omaha (2013). He is also a licensed Professional Civil Engineer in Nebraska.

Andres is actively involved with the American Society of Civil Engineers and has held different roles, including President of the Nebraska Section and Co-Chair of the Younger Members Group. Andres also served as Council Member for the Greater Omaha Young Professionals (2013 to 2016) and is one of the founders of the Valmont Professional Network. Currently, Andres also serves as a Board Member for the UNL’s College of Engineering Advisory Board.

Andres received the Greater Omaha 40 under 40 Award in 2012, was one of the recipients of the Early Achiever Award by the Nebraska Alumni Association in 2016, and was honored as one of the Ten Outstanding Young Omahans in 2016. Andres, his wife, and two sons live in Omaha.

Thank you to all our sponsors who made the 2018 Complete Engineer Conference possible.

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