



# CEEA Conference 2017

## Monday, June 5th Sessions

8:00-9:00

BA Lobby

Registration and Breakfast

9:00-9:30

BA1160 Greg Evans, Cheryl Regehr and Christina Amon

Opening Remarks

9:30-10:30

BA1160

Debbie Chachra

Introduced by Jason Foster

Keynote: Rethinking Engineering Education

10:30-10:45 Break

10:45-12:00 Session A

BA1200

Engineering Ecosystems and Communities: Education, Leadership, Entrepreneurship and Professional Practice

Beth-Anne Schuelke-Leech  
Annie Simpson, Doug Reeve, Mike Klassen and Greg Evans

Andrew Roncin, Ron Britton and Grant Koropatnick  
Marnie V. Jamieson and John M. Shaw

Moderated by: Marnie Jamieson

Innovation, Industry Engagement, and Entrepreneurship in Engineering Programs  
Holding the Crucible: Growing a Portfolio of Engineering Leadership Elective Courses and a Community of Educators  
Professional Practice and Engineering Interns: Three Cases for Discussion  
Applying Metacognitive Strategies to Teaching Engineering Innovation, Design, and Leadership

BA1210

Insights on Capstones from Aerospace Engineering

Ronaldo Gutierrez, Lixin Liu, Dalvir Singh, Catharine Marsden and Yong Zeng

Amirali Omni, Yong Zeng and Catharine C. Marsden  
Andrea Cartile, Catharine Marsden and Yong Zeng

Shahriar Taheri, Yong Zeng and Catharine C. Marsden

Moderated by: Cathrine Marsden

Which Design Methodologies are Effective to Support a Capstone Project in Aerospace Design Engineering?  
Design Problem Perception in Engineering Design Teams  
Aircraft Design - A Case Study on an Alternative Engineering Undergraduate Capstone Final Year Project  
Measuring the Effectiveness of Student Learning in an Aerospace Engineering Capstone Project

BA 1230

1st Year Initiatives and Innovations

Peter Ostafichuk, Carol Jaeger and Agnes d'Entremont

Igor Ivkovic, Thomas L. Willett, Matthew J. Borland and Maud Gorbet

Carol Jaeger and Peter Ostafichuk  
Vicki Komisar, Jason Foster and Robert Irish

Moderated by: Jason Foster

How First Year Engineering Students Select Their Specialization and How We Can Better Support Them  
Design Days Boot Camp: Enhancing Student Motivation to Start Thinking in Engineering Design Terms in the First Year  
A Framework for Exploring Ethical Dilemmas in a First Year Engineering Course  
Teaching Credible Verification and Validation Methods to a Large, First-year, Multidisciplinary Engineering Design Course

BA 1240

Communication, Coaching, and Mentoring in the Engineering Curriculum

Mike Murphy and Gabriel Potvin

Alexandros Dimopoulos, Kush Bubbar, Roslyn Gaetz and Peter Wild  
Andrew Milne, Mehrdad Pirnia, Rania Al-Hammoud, Jason Grove, Derek Wright, Michele Bristow and Natalie Chow

Moderated by: Deborah Tihanyi

Language as an Engineering Learning Tool: Integration of Language and Engineering Education for First-Year International Students to Improve Both Technical Learning Outcomes and Communication Skills  
Training Teaching Assistants to be Coaches  
Three Quarters of a Loop: Co-op Work Term Evaluations and Work Reports to measure the Communication Attribute

12:00-13:00 Lunch

13:00-14:15 Session B

BA1200

Education Practices and Methods: Leadership, Teamwork, and Engagement I

Peter Ostafichuk and Carol Jaeger

Grant McSorley, Amy Hsiao and David Taylor  
Minha Ha and Aleksander Czekanski  
Yoann Guntzburger, Thierry C. Pauchant and Philippe A. Tanguy

Moderated by: Marnie Jamieson

Power of Peers: Experiences Using an Online Peer Assessment Tool to Grade Student Work  
Peer Learning and Leadership in Engineering Design and Professional Practice  
Relational Leadership in Design Projects  
Empowering Engineering Students in Ethical Risk Management

BA1170

Insights from Across the Academy

Kush Bubbar, Alexandros Dimopoulos, Cynthia Korpan and Peter Wild

Bahar Memarian and Susan McCahan  
Kamran Behdinin, Mahi Fahimian and Remon Pop-Iliev

Sasha Gollish, Deborah Tihanyi, Stacy Costa, Behar Memarian, Kimia Moozeh, Darlee Gerrard and Kristin Newfield  
Natasha Lanziner, Hannah Smith and David Waller

Moderated by: Alan Chong

Teaching Assistant Consultant Program in Engineering at The University of Victoria  
Development and Validation of Descriptors for Universal Problem Solving Rubric  
A Tool for Systematically Accessing the Design Engineering Efforts: Design Readiness Level  
Experiencing Engineering Education: An analysis of the experience of the comprehensive doctoral examination in a unique collaborative graduate program  
Reflections from Teaching Assistants in Combined Learning Assistant and Course Grader Roles in Design Courses

Alan Chong Moving Beyond the Boundaries of Engineering Communication: Teaching Media Savviness to Engineering Students

**BA 1230** Moderated by: Gordon Stublely

Finetuning Teaching  
 Brian Dick  
 David King, Brendan Montgomery, Matt Sippert and Naraig Manjikian  
 Juan Abelló and Douglas Ruth  
 Promoting Inter-cultural Exchange through an Engineering Design Project  
 A Student-Designed Laboratory Companion Board for a Course on Microprocessor Interfacing and Embedded Systems  
 Comparison of student performance when solving a thermodynamic cycle after implementing an alternative teaching method

Mohamed Galaleldin, Hanan Anis, Patrick Dumond and David Knox  
 Ahmad Khanlari  
 Scaffolding Strategies for Teaching Product Development and Engineering Design in a Collaborative Project Based Learning Environment  
 Knowledge Building in Robotics for STEM education

**BA 1240** Moderated by: Tom Coyle

Supporting Online Learning I  
 Jonathan Verrett  
 Mohammed Taboun and Robert Brennan  
 Agnes d'Entremont, Patrick Walls and Peter Cripton  
 Eline Boghaert, Jason Grove, Marios Ioannidis, Felicia Pantazi and Mary Power  
 Angela van Barneveld  
 Open Educational Resources in Material and Energy Balances  
 Assessing the Efficacy of Online Lecture Modules in a Core Mechanical Engineering Undergraduate Course  
 Student Feedback and Problem Development for WeBWork in a Second-year Mechanical Engineering Program  
 Student and Faculty Experience with Blended Learning in a First-Year Chemistry for Engineers Course  
 Online Learning: Best Practices in Practice

**14:15-14:30 Break**

**14:30-15:45 Session C**

**BA1200** Moderated by: Marnie Jamieson

Education Practices and Methods: Leadership, Teamwork, and Engagement II  
 Hami Yousefdehi, Artur Alves and Govind Gopakumar  
 Patricia Kristine Sheridan, Adam Goodman, Todd Murphy, Doug Reeve and Greg Evans  
 Genevieve Hoffart, Katherine Gibbard, Tom O'Neill, Anders Nygren and Bill Rosehart  
 Albert Huynh and Mike Klassen  
 Reviewing a Decade of Research on Engineering Leadership  
 Behavioural Differences of High and Low Performing Teams: A Multi-institutional Study of First-year Engineering Design Teams.  
 Assessing and Developing the Individual and Team Work Attribute  
 Teaching Societal Leadership Through Design: Case Study of a Cohort-Based Engineering Leadership Program

**BA1170** Moderated by: Michelle Spence

Taking Advantage of New Teaching Spaces and Opportunities  
 Jordan Daniow and Mike Klassen  
 Glenys MacLeod  
 Agnes d'Entremont, Patrick Kirchen, Naoko Ellis, Cristian Grecu and Sheldon Green  
 Supporting Engineering Students to Influence Organizational Culture in Student Clubs  
 What Might Education Learn from Engineering?  
 The Art of the Possible: Developing a course to introduce engineering to non-engineers

**BA 1230** Moderated by: Kamran Behdinan

Design from Abstract to Concrete  
 Filippo Salustri and Patrick Neumann  
 Claire Davies, Elizabeth Delarosa, Susanne Murphy and Catherine Donnelly  
 Alyona Sharunova, Mehwish Butt, Jason Carey, Suzanne Kresta, Samer Adeep, Loren Wyard-Scott, Lucienne Blessing and Ahmed Qureshi  
 Olivier St-Cyr, Andrea Jovanovic and Mark Chignell  
 Creating a Human-Centric Engineering Design Course  
 Building Better Together: Engineering Design with Occupational Therapists and End Users  
 Cognition and Transdisciplinary Design: An Educational Framework for Undergraduate Engineering Curriculum Development  
 Designing the HCI Living Curriculum

**BA 1240** Moderated by: Jeff Harris

Supporting Peer Learning  
 Zbigniew Pasek  
 Allan Mackenzie and Jan Boer  
 Ralph Buchal  
 Denard Lynch and Brad Schmid  
 Teachability of Entrepreneurial Skills: Experience from a Joint Engineering-Business Large Class Experiment  
 Co-designing Curriculum: First-hand Experiences of Undergraduates Creating Experiential Learning Activities for their Peers  
 Collaborative Digital Design Notebooks  
 Peer Evaluation: Enhancing learning Opportunities and Reducing Marking Effort

**15:45-16:00 Break**

**16:00-17:15 Session D**

**BA1200** Moderated by: Marnie Jamieson

Developing and Assessing Professional Skills: Self Efficacy Leadership and Lifelong Learning  
 Sadegh Babaii and Libby Osgood  
 Hannah M. Smith and David S. Strong  
 Marnie Jamieson  
 Learning The Life Skill: CEAB Lifelong Learning Graduate Attribute  
 Exploring Engineering Creativity and Student Extra-Curricular Activities: A Review of the Literature  
 Unconference: Education, Leadership, Entrepreneurship and Professional Practice – How do We Create and Innovate the Future?

**BA1170** Moderated by: Greg Evans

Expanding the Traditional Classroom: Novel Approaches to Engage Students  
 Andrew Roncin  
 Brenda McCabe  
 Mike Klassen, Jason Bazylak and Patricia Sheridan  
 Patrick Dumond  
 Development of the Canadian Engineering Ethics Game: feedback from professional engineers  
 Innovation in Construction Engineering Education  
 Do Carrots Make You Strong? Motivational and Teamwork Effects of Gamification of Professional Development for First Year Engineering Students  
 A Course Based Approach to Recognizing Student Efforts in Engineering Design Competitions

**BA 1230** Moderated by: Lydia Wilkinson

Becoming an Engineering Professional I  
 Allan MacKenzie and Fei Geng  
 Enhancing Co-op and Career Development Activities through a Student-driven Mentorship Program

Angela van Barneveld  
Lydia Wilkinson and Alison McGuigan  
Joshua Woods and John Gales

Engineering Faculty Perceptions about the Impact of Professional/industry Experience on their Teaching Practice  
Developing Graduate Professional Skills: A Course-based Approach for Academia-Industry Transfer

Teaching the Fundamentals of Civil Engineering Materials through Experiential Learning

BA 1240

Moderated by: Sanjeev Bedi

Discipline Specific Teaching Methods  
Peter Teertstra and Sanjeev Bedi

Naraig Manjikian  
Igor Ivkovic and Sage Franch

Christian Euler and Radhakrishnan Mahadevan

Backing Up a Trailer – An Application-based Vector Analysis Project for 2nd year Calculus  
Experience with Capstone Projects based on ColdFire Microcontrollers  
Using Augmented Reality and Holographic Technology in an Introductory Course on Data Structures and Algorithms  
Synthetic Biology for Teaching Control Engineering A Case Study in a Student-Directed, Collaborative Environment

## Tuesday, June 6th Sessions

8:00-8:30

BA Lobby

Registration and Breakfast

8:30-10:00

BA1160

Mary Wells and Val Davidson

Introduced by Lisa Romkey

Keynote: Creating an Inclusive Engineering Landscape to Ensure Everyone Thrives

10:00-10:15 Break

10:15-11:30 Session E

Cumberland House - Lawn

Sharing Circle on Indigenous Engineering Education in Canada

Moderated by: Elder Kim McDougall

\* All Lightning Talks followed by panel

BA1160

Improving Student Engagement and Experience

Ilyas Mattmann  
David Wang  
Grace Couper and Jennifer Long

Scott Flemming

James Smith

Moderated by: Alan Chong

Increasing System Understanding and Motivation of Students by Using Novel Interactive Learning Methods in Large Courses  
Engaging Engineering Students through a Flipped Classroom Model  
Diversifying Engineering Classrooms through Video Interviews  
Innovative Use of Media to Increase Student Engagement for a Large Second-year Core Course: "Engineering Economics"

Re-engaging Students by Teaching From the Middle and Back of a 500-seat Lecture Hall

BA2195

Learning from/with Peers

Gabriel Potvin  
Elizabeth Maggs, Carol Hulls, Chris Rennick and Mary Robinson

Jeffrey Harris, Julia Filipic, Hema Nookala, and Nicholas Petrelli

Grant Mcorley

Andrea Bradford and Julie Vale

Andrew Sowinski and David Taylor

Moderated by: Jeff Harris

Incorporating Elements of Team-based Learning and Increasing Student Independence in a 4th Year Engineering Lab course to Promote the Development of Critical Thinking, Problem-solving and Troubleshooting Skills  
How do First Year Students Form Their Project Teams?  
A Reflection on Using Face-To-Face Peer Review as a Method of Providing Formative Feedback  
Development of Peer Teaching Supported Design for X Modules for Senior Engineering Design Projects  
Shifting Responsibilities: Using Peer Assessment in Senior Engineering Design to Provide Effective Support and Meaningful Feedback Despite Large Class Size  
A Three-tier Evaluation Rubric for the Assessment of Group Projects in Chemical Engineering Design Courses

BA1200

Project-Based Teaching Strategies

Eugene Li, Chris Rennick, Carol Hulls, Michael Cooper Stachowsky, Eline Boghaert, Mary Robinson, William Melek and Sanjeev Bedi

Stacy Costa

J. Christopher Bouwmeester, Vicki Komisar and Arushri Swarup

Aurelio Stammitti Scarpone, Elodie Passeport, Greg Evans and Radhakrishnan Mahadevan  
Shalaleh Rismani, Peter Ostafichuk, Carol Jaeger and Jonathan Nakane

Moderated by: Alex Czekanski

Tron Days: Horizontal Integration and Authentic Learning  
Puzzles-Based Learning: An Approach to Creativity, Design Thinking, and Problem-Solving: Implications for Engineering Education.  
Using Role-Playing Simulations to Teach Quality Control in the Design of Medical Devices  
Experience on Implementing a Project for Educating Students on Runaway Reaction Dynamics  
Using a Project on Assistive Technology to Teach CAD and Rapid Prototyping

11:30-12:30 Lunch

12:30-13:45 Session F

BA1200

Diversity, Inclusivity, and Accessibility I

Agnes d'Entremont, Kerry Greer and Katherine Lyon

Marcia Friesen and Jillian Seniuk Ciocek

Raveet Jacob and Keely Cook

Jennifer Long, Amin Reza Rajabzadeh and Allan MacKenzie

Moderated by: Chirag Variawa

Images of the Future: Gender and Portrayals of Faculty and Industry Members in Canadian Engineering School Recruitment Materials  
Internationally-Educated Engineers' Insights into the Social Responsibilities Embedded into the Canadian Engineering Profession  
Where Language and Engineering Meet: Fostering emerging engineering identities among international English language learners  
Teaching Teamwork to Engineering Technology Students: The Importance of Self-reflection and Acknowledging Diversity in Teams

BA1220

Supporting Online Learning II

Samer Adeeb, Norma Nocente and Carol Brown

Marnie V. Jamieson and John M Shaw

Moderated by: Peter Weiss

An instructor's experience of implementing blended learning in engineering: challenges, advantages, and disadvantages  
Student Satisfaction and Engagement with Blended Learning in Chemical Engineering Process Design

Peter Eliot Weiss and Jason Bazylak  
Konstantinos Apostolou and Stephanie Bertolo

Online Evolution: Advantages and Challenges of Online Course Components  
On-line Modules for Energy Balance Courses: Effectiveness Study

**BA2195** Moderated by: Sean Maw

Supporting Student Success

Andrew Roncin, Michael Krywy, Joe Carey and Husam Elsaid  
Denard Lynch  
Andrew Sowinski, David Taylor, Gilbert Arbez and Marcel Turcotte  
  
Sean Maw and David Smith

Analysis of Student Success Following the Completion of an Engineering Technology Access  
Self Evaluation: Building Student Self-awareness and Competence  
One-minute quizzes to identify potential students at risk in engineering courses  
Supplementary Results of the CAIS-1 Survey on Cheating in Undergraduate Engineering Programs in Saskatchewan

**BA1210** Moderated by: Jake Kaupp

Best Practices for Data Acquisition and Tracking

Natalie Simper, Brian Frank, Jake Kaupp and Nerissa Mulligan  
Ajay Sivanand and Brian Frank

Jason Grove, Marios Ioannidis and Derek Wright  
Mohamed Ismail

Using the CLA+ to Track Development of Cognitive Skills from First to Third year: Accessibility, and factors for success  
Practices and Beliefs about Educational Data Usage

Describing and Measuring the Engineering Knowledge Based using Concept Domains  
OBACIS Phase II: Data Collection and Accreditation Reporting

**13:45-14:00 Break**

**14:00-15:15 Session G**

**BA1200** Moderated by: Chirag Variawa

Diversity, Inclusivity, and Accessibility II + Diversity Panel

Patricia Kristine Sheridan, Penny Kinnear, Greg Evans and Doug Reeve

Peter Eliot Weiss, Estelle Oliva-Fisher and Cori Hanson  
Chirag Variawa

Value of Language Background on Idea Generation Sessions in First Year Engineering Design Teams  
Assessing and Developing the Individual and Team Work Attribute  
Unconference: Diversity, Inclusivity, Accessibility for Everyone

**GB119** Moderated by: Jillian Seniuk Cicek

Faculty Level Graduate Attributes

Maria Orjuela-Laverde, Nasim Razavinia and Laurent Mydlarski  
Derek Wright, Jason Grove, Rania Al-Hammoud, Andrew Milne and Mehrdad Pirnia

Aneta George Traikova and Liam Peyton

Jillian Seniuk Cicek and Sandra Ingram

Enhancing Lifelong Learning Awareness in the Faculty of Engineering at (redacted) University  
Surveys for Simultaneous Direct and Indirect Assessment  
Faculty Level Support of Graduate Attribute Assessment and Continuous Improvement Process  
Investigating the Relative Importance of the CEAB Graduate Attributes: Study Design and Initial Findings

**GB120** Moderated by: Deborah Tihanyi

Creativity in Engineering Education

Kai Zhuang  
Ken Tallman and Christina Mei  
Zbigniew Pasek

Omid Mirzaei, Paul Neufeld, Jade Knoblauch, Jessica Gerbrandt, Mark Runco and Sean Maw

Engineering Renaissance: Presenting A Conceptual Scaffold for Evolving Engineering Education  
Creative Transfer in the Engineering Classroom  
Helping Engineers Develop and Exercise Creative Muscles  
Creativity in Design Engineers: Attitudes, Opinions and Potentially Influential Factors – Part II

**BA2195** Moderated by: Michelle Spence

Building Coherent Curricula Across Courses and Programs

Sima Zakani, Jake Kaupp, Roderick Turner and Brian Frank  
Sima Zakani, Jake Kaupp, Nerissa Mulligan, David Waller, Richard Hornsey, Roderick Turner and Brian Frank

William C.D. Degagne, Paul Labossiere, Douglas Ruth and Jillian Seniuk Cicek  
Michel Couturier, Guida Bendrich and Francis Lang

Outcome Comparison Framework for Engineering and Technology  
Comparing and Aligning Outcomes of Two Engineering and Technology Disciplines in Ontario  
Design of a Consistent Interdisciplinary Capstone Experience at the University of Manitoba  
Effective Coordination of Capstone Design Work using Milestones

**15:15-15:30 Break**

**15:30-17:00 Session H Poster Session and Reception**

**Bahen Atrium**

Kimia Moozeh, Deborah Tihanyi and Greg Evans  
Mohamed Ismail

Laura Patterson  
Chirag Variawa, Darlee Gerrard and Kirstin Newfield  
Brian Dick

Patricia Kristine Sheridan, Jillian Seniuk Cicek, Liz Kuley and Robyn Paul  
Julia Smith and Thomas O'Neill

Daniel Posen, Kelly Klima, Ines Azevedo, Steve Gradeck and Sabrina Larkin  
Stephen Mattucci, Jim Sibley, Jonathan Nakane and Peter Ostafichuk

Umaporn Supasithimethee, Narongrit Waraporn, Kriengkrai Porakaew, and Nipon Charoenkitkarn  
Locke Davenport Huyer, Genevieve Conant, Cindy V Bui, Ben G Kinsella, Andrea Vegh, Sherif Ramadan, Brittany Lauton, Andrey Shukalyuk and Dawn Kilkenny

Margaret Gwyn  
P. Kanthamanon, W. Chutimaskul, V. Vanijja  
Theeranuch Sirkojakorn, Jirayu Chamamahattana, Vajirasak Vanijja, Nipon Charoenkitkarn, and Jonathan H. Chan  
Kanmanus Ongvisatepaiboon and Jonathan H. Cha

J. Christopher Bouwmeester, Vicki Komisar and Arushri Swarup

Juan Abelló and Paul Labossière

Thomas Zielke, Claudia Fussenecker and Matthias Neef

Saif Abid, David Almond, and Hamid S. Timorabadi

Perceptions of Undergraduate Engineering Students About the Learning Objectives of Undergraduate Laboratories

An Excel Add-in for grade recording and accreditation

A Tale of Two Pedagogical Perspectives: A Literature Review of Writing Program

Administration within Engineering Programs

First Year Engineering Workload at the University of Toronto

First-Year Core Engineering Curriculum for the BC Post-Secondary Sector

Characterizing the Engineering Education Graduate Student Experience in Canada: Survey Results

Peer Feedback Over Time

SUCCEED: Summer Center for Climate, Energy, and Environmental Decision Making

A Model to Develop Peer Feedback Skills in First-year Engineering Students

Stakeholder Involvement in Teaching and Learning

Discovery Program: integrating biomedical engineering graduate instructors with high school STEM curriculum

Finding the GAPS: The Development of a Network for Graduate Attribute Professionals

Classroom on Demand: Fast and Fresh Video Content Generator

SIT Academy: Online Learning Using the MOOC Approach

A Framework for MOOC Content Generation

Using a Multidisciplinary Team-Based Challenge to Promote Brainstorming and Prototyping of Medical Devices

Introduction of an Active Learning Component through Research Reports in a Laboratory Course

Teaching Engineering Conferences

Structural Impediments to Learning: Investigating Learning Environment Inside the Bahen Centre

Greg Evans, Grant Allen, Tim Bender and Will Cluett

We Never Talk: Peer to Peer Observation and Formative Feedback as Steps to Evolving Academic Culture

**Wednesday, June 7th Sessions****8:00-8:30**

BA Lobby

Breakfast

**8:30-10:30**

BA1160

The Engineer of 2050

**10:30-10:45 Break****10:45-12:00 Session I**

BA2195

The Teaching Stream: An Opportunity to Learn, Connect and Strategize

Moderated by: Lisa Romkey

BA1210

Graduate Attributes

Susan Caines and Leonard Lye

Salim Ahmed

Nasim Razavinia and Laurent Mydlarski

Neil Anderson, John R. Cocchio, Ellen Watson and Lianne Lefsrud

Rania Al-Hammoud, Jason Grove, Andrew Milne, Mehrdad Pirnia and Derek Wright

Darlene Spracklin-Reid, Sherrie Myers, Susan Caines and Andy Fisher

Adapting CEAB Graduate Attributes to Promote Graduate Student Success in the Canadian Engineering Community.

Teaching and Assessing Lifelong Learning in Laboratory Courses

Centralized Outcome-based Assessment Process at McGill University

Employing Multifaceted Teaching and Learning Components to Foster CEAB Graduate

Attribute Development

Building Indicators by Consensus for Common Attributes

Integrating Assessment of Graduate Attributes into Cooperative Engineering Education

BA 1230

Becoming an Engineering Professional II

Sean O'Brien and Carolyn Geddert

Anne Parker

Vicki Komisar, Robert Irish and Jason Foster

Deborah Rolfes and Julie Hunchak

Moderated by: Deborah Tihanyi

Designing your Engineering Career: The Application of the Design Process to Career Development

The Engineering Portfolio

How Fine are the Emperor's Clothes? – Motivating Critical and Ethical Design Practices

by Deconstructing Engineering Codes and Standards

Integrating Mentorship in a Communication Capstone Class to Support the Development

of a Community of Practice in the College of Engineering

BA 1220

Integration and Curriculum Design

Sanjeev Bedi, Carol Hulls, Chris Rennick, Mary Robinson and William Melek

Bryan Karney, Sasha Gollish and Anne Mather

Ahmad Khanlari and Stacy Costa

Naraig Manjikian

Saloome Motavas, Liet Hellwig and Vladan Prodanovic

Roger Carrick and Alex Czekanski

Moderated by: Chris Rennick

Design of an Introductory Engineering Design and Communication Course Which Integrates First Semester Courses

A Decision-Making Framework for Engineering Mathematics Education

Criss-Crossing STEM Fields through Knowledge Building Discourse; An Explanatory

Study

Reflections on Five Years of Coherent Teaching across Three Courses on Digital Logic

and Computer Systems

Integration of English Language Modules into the Introduction to Engineering Design

Course in the Vantage College 1st Year Engineering Program at the University of British

Columbia

Preparing Students for Success through Implementation of a Unified Curriculum Design

Spine

**12:00-12:30 Lunch****12:30-1:30 CEEA AGM**

BA1160

**1:45-3:00 Session J**

BA2195

Student Unconference

Moderated by: Jillian Seniuk Cicek

BA1200

Course and Curricular Improvement

Marcus Ivey, Steven Dew, Don Raboud, John Nychka, Yasser Mohamed, Mirnal Mandal and Jason

Carey

Igor Ivkovic

Jen Rathlin, Eugene Li and Andy Trivett

Deena Salem and Brian Frank

Moderated by: Gordon Stublely

Using Post Course Assessments to Involve Instructors in the Continual Improvement

Process

Incremental Improvement of Course Outcomes through Interim Course Evaluations

Towards Scalable and Sustainable Active Learning in a Large Engineering Department

The Role of Engineering Teaching and Learning Fellows in the Transformation Process

of ECE Courses

BA1220

Teaching Sustainability

Antoine Despres-Bedward

Susan Nesbit, Naoko Ellis and Peter Ostafichuk

Natasha Lanziner and David S. Strong

Moderated by: Greg Evans

Engineering Education for Sustainable Cities in Africa: A Case for Rwanda

Working with "Others": Developing Sustainability Skills in the First Year Classroom

Measuring Student's Motivation to Engage in Sustainable Engineering Practice

BA 1240

Understanding Team Performance

Katherine Gibbard, Yannick Griep, Genevieve Hoffart and Denis Onen

Ada Hurst, Andrea Prier, Mehrnaz Mostafapour, Chris Rennick, Carol Hulls, Erin Jobidon, Rania Al-

Hammoud, Eugene Li, Jason Grove and Sanjeev Bedi

Moderated by: Lydia Wilkinson

One Big Happy Engineering Family? The Influence of Psychological Contracts on Team

Outcomes and the Mediating Role of Person-Team Fit.

Teamwork for Engineering Students: Improving Skills through Experiential Teaching

Modules

Radhika Kartha, Dr Michael Fowler and Dr Roydon Fraser

Carolyn Macgregor, Stacey Scott and Matthew Borland

Comparative Study of Organizational Structures of Engineering Student Teams and their Team Effectiveness

Using Accountability Logs to Assess Individual Student Contributions to Capstone Projects: What happens when one student on a team fails?