

Time	Workshop Title	Authors/ Facilitators	Track	Track Description
AM1	Addressing microaggressions to create inclusive communities in engineering education	Tinomudaishe Geraldine Gozhora	1	Leadership and Innovation in Engineering Education Equity, Diversity and Inclusion
AM2	Inclusive Innovation: Integrating Equity-Based Design Thinking in Engineering Education	Robert Fleisig, Andrea Hemmerich	1	Leadership and Innovation in Engineering Education Equity, Diversity and Inclusion
PM1	Exploring Cultural Dimensions and Change in Engineering Education	John Donald, Marnie Jamieson	1	Leadership and Innovation in Engineering Education Equity, Diversity and Inclusion
PM2	ENOWKINWIXW Discourse - Cultivating Safe Spaces for Decision Making (please see information on the next page)	Stacie Coutlee, Wanda Rockthunder, Connie Davis, Vaughn Paul	1	Leadership and Innovation in Engineering Education Equity, Diversity and Inclusion
AM1	Improving the Lecture: The Application of Cognitive Science to PowerPoint	Jeff Paul, Jillian Seniuk Cicek, Renato Rodrigues	2	Emerging Issues and Communities of Practice
AM2	Artificial Intelligence Tools for Engineering Education Applications	Susan McCahan, Tamara Kecman	2	Emerging Issues and Communities of Practice
PM1	Creating Communities of Practice for Training Modules and Engineering Courses	Taru Malhotra, Johanna Pinargote Torres, Carolyn MacGregor	2	Emerging Issues and Communities of Practice
PM2	Transformative Learning: Innovating Engineering Curriculum with Engestrom's Change Lab Theory	Lisa Romkey	2	Emerging Issues and Communities of Practice
AM1	Stakeholder analysis: How do we decide who has a voice?	Christoph Sielmann, Tamara Etmanski	3	Stakeholders and Engineering Design
AM2	Exploring problem identification in the context of capstone engineering design projects	Reem Roufail, Christine Moresoli, Richard Li	3	Stakeholders and Engineering Design
PM1	Examining sustainability in capstone projects	Chris Rennick, Christine Moresoli	3	Stakeholders and Engineering Design
PM2	SIG Working Session: Prioritizing and Drafting the Canadian Engineering Education Grand Challenges as a Guidance Document	Nadine Ibrahim, Gabriel Potvin, Renato Bezerra Rodrigues, Nathalie Frigon, Shelir Ebrahimi, Jill Seniuk Cicek	3	Stakeholders and Engineering Design
AM1	Effective and Responsible Integration of Interactive Digital Learning Tools in an Engineering Learning Environment	Emily Marasco, Milana Grozic, Brooke Kindlemann	4	Integration of hands-on experiential learning activities
AM2	Flood Resilience Challenge: Collaboration through a serious game	Evalyna Bogdan, Nadine Ibrahim	4	Integration of hands-on experiential learning activities
PM1	Case studies as storytelling	Lydia Wilkinson, Jenna Usprech, Tim Maciag, Jillian Seniuk Cicek, Renato Bezerra Rodrigues	4	Integration of hands-on experiential learning activities
PM2	Practical Ways to Bring Active Learning into Engineering Classrooms	Nancy Nelson, Richard Li	4	Integration of hands-on experiential learning activities
AM1	Mixed Methods Designs in Engineering Education Research	Qin Liu	5	EER, SoTL and Wellness Methods
AM2	The Courage to Feel Joy	Jillian Seniuk Cicek, Deborah Tihanyi	5	EER, SoTL and Wellness Methods
PM1	SIG Session: Getting started in the Scholarship of Teaching and Learning (a primer for engineers)	Janice Miller-Young, Robert Fleisig, Sean Maw, Jeff Paul	5	EER, SoTL and Wellness Methods
PM2	SIG Session: Getting started in the Scholarship of Teaching and Learning (a primer for engineers)	Janice Miller-Young, Robert Fleisig, Sean Maw, Jeff Paul	5	EER, SoTL and Wellness Methods

The Four Chiefs Enowkinwixw Discourse - Cultivating Safe Spaces for Decision Making Sunday Workshop track 1 Session 4

Dr. Jeannette Armstrong, a member of the Penticton Indian Band and an Associate Professor, Indigenous Studies at UBC Okanagan, has provided resources to help people understand and engage in a traditional consensus-building listening process. She has successfully guided various communities in using this process, and her work, along with that of her collaborators, has been shared with the Indigenous Resources Network. This workshop was developed by Jeannette Armstrong, PhD and Marlowe Sam, PhD Candidate. A shorter version will be facilitated on Sunday, June 16 by four PhD candidates: Stacie Coutlee, Connie Davis Brown, Wanda Rockthunder and Vaugh Paul (biographies follow).

For the Syilx (Okanagan) people, and for all people practicing bio-regionally self-sufficient economies, the understanding that sustainability requires the active engagement of the entire community stems from a natural process of survival. Through practical experiences driven by necessity, the concept of willing teamwork within a holistic community framework has become evident. However, the term "cooperation" falls short in capturing the organic and enduring nature through which members consistently uphold the fundamental principles of caring for one another and all forms of life, extending far beyond mere necessity.

En'owkin serves as a structured method for organizing rules and encourages voluntary, profound collaboration. It is embraced by the community as a customary practice to ensure that sustainability principles guide decision-making. These customs stem from cultural traditions that reflect a worldview. Practicing life principles leads to the expectation that individuals will understand the importance of holistic well-being encompassing physical, emotional, intellectual, and spiritual aspects. It emphasizes that fulfilling human potential relies on external factors supporting these dimensions of existence. Everyone is seen as a part of a multi-generational family organism, with cultural transfer playing a crucial role in ensuring the well-being of each generation.

The family serves as the cornerstone of a broader living network known as the community, which spans generations and physical spaces. This network utilizes collective knowledge to make decisions that benefit both present and future well-being. Additionally, the community interacts with the interconnected patterns of the land, recognizing the importance of preserving its health to sustain life and provide nourishment for generations to come. Recognizing the family and individual as integral parts of a unified system is crucial for upholding the principles that ensure the well-being of the community.

The implicit and explicit guidelines of the "challenge" process encourage each group member to approach solution-building with consideration and empathy towards others. Participants are urged to creatively integrate the perspectives of all individuals into their own thinking, expanding their understanding to encompass the entire community. Unlike a debate where the goal is to prove oneself right, the process aims to foster individual comprehension of opposing viewpoints. It emphasizes the importance of acknowledging others' views, concerns, and rationales to make informed decisions that benefit everyone in the community. While agreement on every point may not be feasible, the process ensures that all members are well-informed and reach a mutual understanding regarding necessary actions and individual contributions.

Due to space and time constraints this workshop is limited to 40 participants. This workshop requires prework and will require travel by charter city bus to the location during the afternoon coffee break. Please register for the conference at (<https://ceea.wildapricot.org/event-5597535>)

Workshop Facilitators

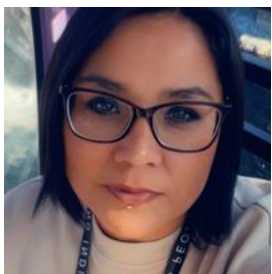


Stacie Coutlee, EMBA, PhD Student.

In 2021, Stacie graduated with an EMBA in Indigenous Business Leadership from SFU Beedie School of Business. She is currently a third-year Doctoral student at UBC Okanagan in Civil Engineering. Her life experiences influence her interpretations of PhD research and engineering education and practice. She sees her academic journey as an opportunity for continuous growth and the expansion of her current self.

Stacie, a member of the Upper Nicola Band, located in the Nicola Valley, has encountered discrimination, and stereotyping from both Indigenous and non-Indigenous groups throughout her professional career and education journey. Despite her achievements, the absence of an undergraduate degree, has marginalized her, leading to unwarranted assumptions about her intelligence and capabilities. This bias stems from Canada's colonial history, which as not only alienated Indigenous people culturally but also perpetuated intergenerational trauma within their communities. Her family history adds layers to her experiences. Her mother is a survivor of residential school, while her father avoided them thanks to his father's actions. Together they resided and worked on a ranch owned by a sɛmaʔ, a non-Indigenous person.

The cultural alienation experienced by both Stacie and her parents has had a lasting effect on her, resulting in a lack of fluency in the Syilx language and culture as her parents were unable to transfer this knowledge to her. Additionally, she faced censure from an elementary school teacher who labeled her as a "Dirty Indian." Together, these multiple experiences of trauma and discrimination have made it challenging for her and her family to find and establish their cultural identity. Hegemonic perspectives stemming from racist ideologies and stereotypical perceptions of Indigenous peoples contributed to her distorted self perception and a lack of recognition of her Indigenous knowledge and capabilities as a woman. However, her renewed self-awareness helped her break free from these constraints and biases of imperialist colonialism. Her pursuit of education is shaped by her life journey, the people she has encountered, the places she has worked and visited, the questions she asks, her determination, and the meaningful knowledge she has gained along the way.



Connie Davis, BCom, 4th Class Power Engineer, PhD Student

Connie Davis, is an Indigenous woman of Cree and Dunneza descent from the West Moberly First Nations in the Treaty 8 Territory of northeastern British Columbia. With a rich cultural heritage deeply rooted in her identity, she brings a unique perspective to her academic and professional pursuits. With a Bachelor of Commerce and a 4th Class Power Engineering certification, her journey was driven by a passion for sustainability and community empowerment. Her academic endeavors

continued with the attainment of a Master of Business Administration, where she enhanced her leadership skills and strategic vision. Currently immersed in her second year of a Ph.D. program in Civil Engineering, She is dedicated to exploring innovative housing solutions for Indigenous communities, drawing upon her cultural background and firsthand experiences. Through her interdisciplinary approach and commitment to social impact, she is poised to drive positive change and empower Indigenous communities to thrive sustainably within their traditional territories.



Wanda Rockthunder, BBA, MBA, PhD Student

Wanda is a Nêhiyaw Iskwêw (Cree Woman) with Treaty Status from Treaty 4 Territory and a registered band member of Piapot Cree Nation (under the Indian Act) in Saskatchewan, Canada. Wanda has spent a lifetime learning, and her educational background is in philosophy, education, business, and Indigenous ways of knowing. She has an undergraduate degree in Business Administration (2012) from the Paul J. Hill School of Business at the University of Regina and a Master of Business Administration (2021) from the Beedie School of Business at Simon Fraser University. In addition, she is currently in her third year of study for a Ph.D. in Civil Engineering at UBCO.

For the past 25+ years, Wanda has worked in education, facilitation, government, and non-profit within the community. She is an academic, educator, facilitator, advocate, civil rights activist, and knowledge keeper. She has spent the last ten years combining contemporary and traditional knowledge to enhance education. Currently, Wanda is an Assistant Professor at Athabasca University and a Sessional Instructor at the University of Regina and Simon Fraser University while completing her studies. Her overall goal is to assist Indigenous peoples in gaining a balance in their personal and professional lives while educating the non-indigenous community on how to work successfully and respectfully with Indigenous people.



Vaughn Paul, BAsC, MBA, PhD Student

Vaughn Paul is Cree from the Alexander First Nation, Vaughn is the Chief Executive Officer of the First Nations Technical Services Advisory Group Inc. (TSAG) and has been for the past 24 years. He is also the President of Arrow Technology Group, Kisik Environmental Services and First Nations Benefits Brokers. He has a Bachelor Degree from Athabasca University and Masters of Business Administration from Simon Fraser University and is currently a PhD student in Civil Engineering at the University of British Columbia. In his role as CEO for TSAG, Vaughn has worked with Indigenous communities to advance community strategic direction and develop and deliver programs tailored to community need. He has extensive experience building relationships and identifying

opportunities for community growth.