



University
of Windsor

2020-2021 Outstanding Section/Chapter Award (Annual Report)

Executive Board:

	Name	Contact	Degree program
President	Georgiana Madar-Vani	madarg@uwindsor.ca	PhD Civil Engineering
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Treasurer	Haesung Ahn	ahn112@uwindsor.ca	PhD Civil Engineering

Number of student chapter members: 10

About the UWindsor CITE Student Chapter

The CITE student chapter at the University of Windsor began in September of 2020 with an aim to promote the field of transportation engineering to the student community, provide a platform for learning and support to prepare students for transportation engineering careers, and build connections with academic and industry partners in the ITE community. Dr Hanna Maoh of the department of Civil and Environmental Engineering is currently serving as the chapter's faculty advisor.

The University of Windsor is home to two growing transportation research groups, the *Transportation Systems Innovation (TSI) lab*, which provides training opportunities for undergraduate and graduate students in transportation engineering, and the *Cross Border Institute (CBI)*, a multidisciplinary research body specializing in cross-border logistics and security that provides an avenue for graduate students to engage in transportation research. Transportation-specific courses at the University of Windsor are offered beginning at the third-year undergraduate level, with additional required and elective offerings in the fourth year. At the graduate level, transportation topics include integrated transportation and land use modeling, advanced GIS data modeling, freight transportation analysis, traffic operations and control, road safety analysis, and intelligent transportation systems. The current student chapter members are actively pursuing research in a number of these areas of research specialization.

The goal of the chapter is to provide a platform for providing information to students on various topics of interest in on various topics of interest in transportation engineering. A seminar series has begun through the chapter, inviting guest speakers from various backgrounds in industry and academia, to speak on the projects, challenges, and opportunities they have encountered in their own experience in transportation and to engage in a discussion with the chapter's members. As the chapter grows, collaborative events with other institutions and chapters will be implemented, along with social and networking events for chapter members, and technical tours to provide hands-on experience. The undergraduate and graduate students who express an interest in transportation will be welcome and encouraged to participate in chapter events and enroll as chapter members. Our hope is to build a hub for information, education, support, and networking in order to promote the field of transportation engineering and prepare our students for successful careers in the transportation engineering profession.



Award requirements

Regular Meetings (10 points)

Since starting the University of Windsor CITE Student Chapter in September 2020, a monthly meeting schedule has been established, along with a regular seminar series. The seminar events have been open to chapter members and other undergraduate and graduate students within the faculty of Civil and Environmental Engineering at the University of Windsor. To date, the following meetings have been held/are planned to the end of the current academic semester:

No.	Meeting Date	Location	Meeting Type	Presentation/Speaker
1	Oct. 1, 2020	Virtual	Monthly chapter meeting	Chapter executive board – introductions and chapter information
2	Oct. 15, 2020	Virtual	Seminar	Jen Malzer – CITE district director/Transportation Engineer and Project Manager, City of Calgary
3	Nov. 5, 2020	Virtual	Monthly chapter meeting	Chapter executive board
4	Dec. 3, 2020	Virtual	Monthly chapter meeting	Chapter executive board
5	Jan. 7, 2021	Virtual	Monthly chapter meeting	Chapter executive board
6	Jan. 26, 2021	Virtual	Seminar	Aaron Blata/John Tofflemire – RC Spencer Associates Inc., local consulting firm
7	Feb. 4, 2021	Virtual	Monthly chapter meeting	Chapter executive board
8	Feb. 16, 2021	Virtual	Seminar	Dr Dimitris Potoglou – Reader in Transport and Applied Choice Analysis and Programme Director of the MSc Transport and Planning, Cardiff University
Upcoming events				
9	Mar. 4, 2021	Virtual	Monthly chapter meeting	Chapter executive board
10	Mar. 19, 2021	Virtual	Seminar	Dr Hanna Maoh – chapter faculty advisor and Associate Professor in the Civil and Environmental Engineering Department, University of Windsor
11	April 1, 2021	Virtual	Monthly chapter meeting	Chapter executive board
12	End of April, 2021	Virtual	Seminar	Lawrence McKeown – Chief of Analysis, Centre for Tourism and Transportation Statistics, Statistics Canada
13	May 6, 2021	Virtual	Monthly chapter meeting	Chapter executive board

The first seminar was held on October 15, 2020 and Ms. Jen Malzer graciously agreed to participate as the guest speaker and present on some of the work ongoing to implement the Neighbourhood Streets Pilot Policy in the city of Calgary, as well as give the group some information about becoming involved in the ITE/CITE community and making the most of our student chapter experience. Student members were eager to learn more about the benefits of participating in the CITE chapter and the opportunities for involvement and networking, as well as brainstorm ideas for the ways in which our student chapter can grow.

The second seminar, held at the beginning of this calendar year, featured guest speakers from a local consulting firm. Aaron Blata is a graduate from the University of Windsor with a Master of Engineering degree specializing in transportation, who has been heavily invested in local transportation projects in his professional career. John Tofflemire has been involved in transportation for the past several decades, including as the Commissioner of Traffic Engineering, City Engineer, and General Manager of Public Works for the City of Windsor, and more recently in consulting engineering. Their combined experience and enthusiasm for the work they undertake made for a very engaging presentation on local projects involving the implementation of “complete streets” initiatives. It was of great value to the chapter members to see first-hand evidence of the results of dedicated transportation professionals, while having direct access to the fruits of this work in our own “back yard.”

Student/Younger Member Support (15 points)

As a new chapter, the group is working diligently to ensure that a strong basis is set up for student support through the chapter. To date, due to the chapter’s novelty and the limitations imposed by the current pandemic situation, chapter activities have been constrained to virtual events. Since the launch of the seminar series, however, other interested engineering students have been invited and welcomed to participate. The purpose of the seminars is to educate students on different issues and opportunities in the field of transportation, as well as to bring awareness to the vast array of specialty areas tied to transportation research and practice. For each seminar since January 2021 (and for all future seminars) an informational poster is prepared and made available to the current chapter members, as well as distributed to the Civil Engineering graduate and undergraduate student body. Students at any level are encouraged to reach out for the virtual meeting details, where they are welcome to participate in the discussion.

The seminar series is meant to invite discussion on a variety of transportation-related topics, which will not only be relevant to the research activities of the students, but also aim to ignite an interest in areas of transportation that students may be less familiar with. Inviting seminar speakers from both academic and industry backgrounds will also aid students in building connections and provide insights into the types of career opportunities available. The chapter aims to provide a platform for student learning and support, in preparation for a career in transportation. The chapter executives keep an open line of communication to answer inquiries from students, accept suggestions, and provide resources. Chapter alumni will be welcome to remain in contact with the chapter, participate in chapter events, network, and provide insights and guidance to current chapter members.

Application of Technical Knowledge (10 points)

As a new chapter, and due to the current pandemic situation, it was not possible for the chapter to be directly involved with any industry partners during this academic year. The first seminar hosted by the chapter in 2021, however, invited speakers from a local consulting firm to present some of their recent projects. The discussion was centred on the implementation of “complete streets” initiatives to a local municipality adjacent to Windsor. Student members and seminar participants had the opportunity to learn about the process involved in planning for, designing, and implementing such work, including considerations for pedestrians and cycling, accounting for parking, and maintaining access to the central business and historic districts of the community. The guest speakers provided a thorough presentation explaining all of the facets of such municipal projects from beginning to end, valuable tools that the student chapter members could apply to their own professional experiences. As the chapter grows, the goal is to build relationships with local transportation professionals and industry partners with an eye to opportunities for hands-on training experiences and collaborations.

Networking Events (10 points)

The University of Windsor Chapter was established in Fall 2020; thus, the chapter has not yet held an official networking event. However, the chapter makes sure to share the contact information of its members among each other to maintain constant communication regarding upcoming chapter events. During the chapter's monthly meetings, we take the time to share not only on the trajectory of chapter, but also information regarding current events (e.g., conferences) related to the industry in order to keep the chapter members informed and up to date with all opportunities available to them. In addition, the chapter strives to promote meaningful experiences to its members by conducting transportation-related seminars from speakers of various transportation backgrounds. To date, we had three seminars led by (1) a transportation engineer and project manager from Calgary, Alberta, (2) senior and junior traffic engineers from a consulting firm in the Windsor-Essex, Ontario region, and (3) a professor at the School of Geography and Planning at Cardiff University in UK. By the end of each seminar, each speaker shares their contact information to the students to encourage further discussion. Building these connections is very valuable to the student chapter members, as they are connected to individuals with a wealth of experience in the field who can provide specific guidance and advice, as well as potentially serve as contacts for future career opportunities.

K-12 STEM Outreach (10 points)

As the chapter is still quite new, we have not had the opportunity to host any outreach events yet. Additionally, it was not possible to conduct a STEM outreach event to K-12 students due to the current pandemic. However, such outreach will certainly be part of the future work of the chapter once everything settles down. We believe that there is great value in inspiring the next generation of transportation engineers and outreach events at the K-12 level are an excellent opportunity to spark an interest early. The chapter will endeavour to collaborate with local schools to organize engaging events for their students, such as setting up competitions centering around transportation topics.

New Member Recruitment (10 points)

The chapter is currently developing a recruitment strategy for the coming Spring 2021 semester. In the meantime, we invite non-member engineering students to the seminars and regular chapter meetings. To date, the chapter's events have been well-received by both undergraduate and graduate students. Chapter membership will be open to both undergraduate and graduate students with an interest in transportation. Information about the chapter will be made available to all undergraduate years, with an informational meeting planned for the beginning of the academic year to provide information about the chapter and invite students to join. At the graduate level, the University of Windsor offers areas of specialization in several branches of transportation research, and all three of the University's transportation faculty are involved with the student chapter. Graduate students researching under our faculty members will be offered the opportunity to join the chapter, and information will also be forwarded to the graduate cohort with an invitation to the informational meeting.

As the chapter grows, the long-term vision includes expanding outreach efforts to other departments and faculties within the University with an interest in transportation. For example, the Mechanical Engineering Department is heavily invested in automotive research and the Electrical Engineering Department conducts ongoing research into connected and autonomous vehicle technologies. Students in both of these departments could benefit from the chapter's seminars and discussions and could offer unique insights. Students in the Computer Science and Kinesiology Faculties, similarly, may have transportation-related research interests, dealing with big data analytics or human-machine interactions. As connections are made

across departments and faculties, expanding the scope of the seminars and events that the chapter can host, the aim is to attract interest from students in a wide range of domains, each with a unique perspective.

Diversity and Inclusion (5 points)

The chapter's executive committee is comprised of a diverse group which includes two male and two female members, all from different ethnic backgrounds. The current student membership also belongs to various backgrounds. The focus of the chapter is to engage in discussion and share information on transportation, and our aim is to empower any students with an interest in this field to pursue it. We believe that inclusivity and diversity are key components to creating a platform for building up transportation professionals. Chapter membership is open to students at the undergraduate and graduate level, regardless of background or gender, and the chapter's recruitment policies, which are currently being developed, and campaigns will reflect this. Concerning the events that have already taken place through the chapter, which are open to chapter members and any interested non-members, a diverse range of guest speakers have been, and will continue to be invited. These events have all been very well-received and generated excellent discussion among the group.

Training/Professional Development (5 points)

The next seminar in which the chapter will participate is on the use of GIS software for transportation applications, planned for mid-March in cooperation with the University's School of Environment. While some of the chapter's members have experience in GIS, this type of event provides a learning opportunity for students at all levels. GIS is a very practical tool for transportation modeling, analysis, and visualization and gaining this skill will be an asset to our chapter members as they prepare for their professional careers.

The chapter has also communicated with ESRI Canada, the provider of ArcGIS products, to inquire about a sponsorship opportunity, where chapter members who are experienced software users will put on seminar/webinar demonstrations of various functions available through the GIS software. These training sessions would also invite participation from other chapters. The Windsor chapter has also communicated with other chapters to begin planning some joint software demonstration events. This would provide a platform for our students to showcase technical aspects of the software packages with which we have experience and to learn additional technical skills from other chapters.

Also, the chapter plans to provide a platform for student members to practice giving conference presentations. Since not all chapter members may be able to attend conferences during their academic training, we believe that it is important to provide an opportunity to develop professional presentation skills. This would be done in a supportive environment, where valuable feedback could be gleaned from fellow student members familiar with the topics at hand.

Field Trips/Technical Tours (5 points)

The chapter was created during the COVID times and hence we have not had the opportunity to conduct any field trips or technical tours. Field trips and technical tours will certainly be a part of the chapter's future planned events, as these types of activities allow students primary and hands-on experience with the transportation topics we study. As the home to Canada's busiest border crossing, Windsor offers a unique location for first-hand study of transportation issues with tangible results. The construction of the new

international bridge crossing presents a real opportunity for such a field trip event, where student members can learn about the planning and implementation process of such a massive undertaking. Additional opportunities for technical tours include partnerships with local consulting firms, such as presented through our January seminar. The consultants with whom the chapter can network would be eager to showcase their projects and invite our chapter members to learn about their activities.

Service Projects (5 points)

Interaction with the community has not been possible due to the pandemic situation. However, community service projects will be a part of the chapter's future work. It is important for our chapter members to be engaged in their community. We believe that participating in service projects will lead the student chapter members toward developing a compassionate and well-rounded character as they head toward their professional careers.

Funding Support (5 points)

The chapter has reached out to outside sponsors to find valuable chances of funding for members of this chapter. Thanks to the *Transportation Association of Canada Foundation (TAC)*, the *Norman Esch Foundation*, and the *Cross Border Institute (CBI)*, the *RC Spencer Associates Graduate Scholarship* has supported several students every year from 2015 to the present. As mentioned above, the chapter has also been in contact with ESRI Canada for sponsorship of a technical webinar event where chapter members can showcase transportation applications with GIS software. Additionally, we have a plan to reach out to other local consulting firms or institutions to find additional avenues of support for our members and develop a robust relationship between the chapter and local neighbors.

Leadership ITE (5 points)

As the chapter is still quite new, we have not had the opportunity to support members for the Leadership ITE events. The chapter is currently developing a database of alumni contact information to ensure that member graduates are still able to network through the student chapter and engage with chapter events. The executive board continues to forward CITE leadership events and scholarship information to members, ensuring that chapter members are aware of the opportunities for involvement with CITE at large. The guest speakers that have been invited through the chapter's seminar series also encourage and advise our members on improving their leadership skills and becoming successful transportation professionals and leaders.

Advocacy (5 points)

With the previous seminars, transportation specialists and professors have given insights to our chapter members into very practical processes from their experience in the field. For instance, Aaron and John, members of RC Spencer Associates Inc., shared their recent industry experience in reshaping the form and function of the uptown district of the municipality of Leamington, Ontario. Similarly, Dr Potoglou of Cardiff University presented the latest research topics regarding the role of manufacturing materials and autonomous driving. He pointed to very important and practical considerations that must be kept in mind when designing solutions to such transportation problems. Each speaker is able to offer valuable insights and advice to our chapter members. The chapter plans to continue hosting seminars to keep developing the members' knowledge and capability as professional transportation engineers and researchers.