Students in the MME graduate program also have several opportunities to participate in collaborative programs, which include,

- <u>Collaborative Specialization in Musculoskeletal Health Research (CMHR)</u>: An MoU has been signed between the graduate program in MME and Musculoskeletal Health Research, which allows graduate students in the MME program to fully participate in activities of Musculoskeletal Health Research. Research students registered in this program must successfully complete MSK9000 and MSK9100 course requirements in addition to two MME graduate courses at 9600 and 9700 level. They will attend at least 75% of monthly Bone & Joint (BJI) Seminars, BJI workshops (when applicable), 2 of 4 CMHR Ivey Health Leadership workshops, and present their research at the annual BJI retreat and/or Canadian Bone and Joint Conference. MEng students are required to take 8 half graduate courses and an MEng project, including 2 professional courses offered by Engineering, MSK9000, MSK9100 and 4 MME graduate courses at the 9500 and 9600 level. https://cmhr.uwo.ca/
- <u>Centre for Environment and Sustainability (CES)</u>: Students in the MESc and PhD programs in MME have the option to register in the collaborative Environment and Sustainability program offered through the Centre for Environment and Sustainability. Students registered in this program must take 1.5 credits of Environment and Sustainability courses. They also must participate in and present their research once per year in the Interdisciplinary Research Seminar course. Students participating in this enrichment program receive the MME degree with "Environment and Sustainability".

https://www.uwo.ca/enviro/graduate/collaborative_specialization/index.html

• <u>Collaborative Graduate Program in Scientific Computing (CGPSC)</u>: Students in MESc and PhD programs in MME have the option to register in this collaborative specialization, which is an intra-university graduate field of study that provides an additional multidisciplinary experience for students. In addition to the fulfilment of normal requirements by MME, students registered in this program must take a half-year core course in scientific computing as defined by the CGPSC, two additional half-year, non-seminar courses with a significant scientific computing aspect as deemed by the discretion of the Director of CGPSC. Students must actively participate in Scientific Computing all summers. The requirement of attending SHARCNET Summer School during all summers. The requirement of the Director of the CGPSC if participation is deemed difficult. In addition, the thesis work must involve a significant computational aspect commensurate with degree expectations.

https://grad.uwo.ca/admissions/programs/program.cfm?p=246

• <u>Collaborative Specialization in Machine Learning in Health and Biomedical</u> <u>Sciences:</u> This program enhances the education and research of MESc and PhD students by adding a module to their program. This program will help students to develop a solid foundation in modern machine learning techniques, to gain a deep understanding of the application of machine learning to genomic, physiological, imaging and behavioral data, and to conduct an independent research project in health and biomedical science using modern machine learning approaches. Additional to all requirements of the MME graduate program, all students are required to take DS9000 (or similar foundational machine learning course), DS9600A (core seminar), and at least one of the applied machine learning courses. The thesis topic needs to be in the domain of the collaborative specialization, i.e. the application of machine learning to a specific Health or Biomedical problem, or the development of a new method that is of especial interest to such problems. Before admission to the collaborative specialization, the thesis topic needs to be submitted to the program committee for approval.

https://uwo.ca/sci/datascience/graduate/collaborative-specialization-ml-healthbiomedical.html