

ELECTRICAL & COMPUTER ENGINEERING

## ECE Spring 2025 Colloquium Series



### Friday, January 31, 2025

11:15 am ITE 336 (Refreshments in ITE 301 at 11 am)

# The HTU Model Dr. Moussa Habib

#### The HTU Model: A Disruptive Approach to Education (Part 1)

This education model incorporates five basic principles that differentiate the HTU model from traditional ones and provide the foundation for all its activities and the way it functions. They are: a student-centered teaching system instead of an organization of educational tasks determined by the educational group of each course; active and collaborative education based on very flexible timelines and creating teams of students with different educational profiles and ages; direct practices; project and challenge-based learning, individual mentorship or advisory action on projects, and assessment of the incorporable or transferable competencies of what they have learned. Practices are carried out with all the technology available in the hands of each group, updating it when new technologies are discovered.

The aim is to promote new key competencies more linked to creativity and innovation, such as the capacity for critical thinking and innovation in comparison with the capacity for digital interaction, although they are also developed in a transversal way.

#### **Project Based Learning: Transforming the Classroom Experience (Part 2)**

The framework aligns closely with our beliefs on what a 21st-century education model should look like to meet the needs of students. PBL presentations are impactful because they allow a student's passion and experience to guide learning. They are "hands-on": instead of a teacher lecturing on a topic and then students doing paper-and-pencil activities, this approach to PBL incorporates hands-on activities and projects. Sitting at the convergence of these key elements is what we call project-based learning, a learning method that focuses on active and student-centered applications of problem-solving and real-world investigations.

The shift in educational circles is from a traditional teacher-centered classroom organization and pedagogy to a studentcentered one. Instead of concentrating on content, it places the student at the core: he or she is encouraged in the development of a variety of skills, namely problem solving, critical thinking, creativity, analytical capabilities, and collaboration skills. In the context of problem-based and project-based learning, the teacher is only the leader of the learning process and sets the framework for exploration

#### <u>Bio:</u>

Dr. Habib Holds the position of the Assistant to the President, Academic Affairs at Al Hussein Technical University as well as an associate professor of Electrical Engineering at the School of Engineering Technology since 2019. He is appointed by Pearson as a VQ specialist and ISV to BTEC L2/L3 Qualifications and BTEC Educator TOT trainer. He holds M.A.SC and Ph.D. in Medical Electronics from Dalhousie University, Canada. He is a senior member of IEEE and is awarded the rank of Consultant Engineer in Biomedical Engineering by JEA.

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