SYSC 4907 – Fall 2026/Winter 2027

Supervisor	Abdullah Kadri
Co-supervisor	
Course section	SYSC 4907 I
Project ID	I1
Project title	**SMART-ICE: S**ensing and **M**otion **A**nalysis in **R**eal-**T**ime for **ICE** Hockey
Project description	This capstone is part of the development of **SMART-ICE / SMART-FLOW: IoT Wearable System for Hockey Player Performance and Safety**. The system captures on-ice motion and impact data, processes it in real time, and delivers actionable insights for performance optimization and safety awareness. The project is structured into two interdependent teams: • *Team A – SMART-ICE (Wearable Hardware & Edge Computing):* Responsible for the wearable device, embedded firmware, and edge analytics. • *Team B – SMART-FLOW (IoT Backend & Data Pipeline):* Responsible for wireless data transmission, aggregation, storage, and visualization. The two subsystems are tightly integrated, delivering a complete end-to-end solution from on-body sensing to backend analytics.
Program(s)	Computer Systems
Maximum number of students	4
Meeting time with supervisor (optional)	One hour/week
Do you want the student to contact you before the office assign this project to them ? (Yes/No)	Yes