

SYSC 4907 – Fall 2026/Winter 2027

Supervisor	Abdullah Kadri
Co-supervisor	
Course section	SYSC 4907 I
Project ID	I2
Project title	SMART-FLOW: Secure Multi-Hockey-Player Aggregation and Real-Time Data FLOW
Project description	<p>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.</p> <p>The project is structured into two interdependent teams:</p> <ul style="list-style-type: none"> • <i>Team A – SMART-ICE (Wearable Hardware & Edge Computing):</i> Responsible for the wearable device, embedded firmware, and edge analytics. • <i>Team B – SMART-FLOW (IoT Backend & Data Pipeline):</i> Responsible for wireless data transmission, aggregation, storage, and visualization. <p>The two subsystems are tightly integrated, delivering a complete end-to-end solution from on-body sensing to backend analytics.</p>
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