

**SYSC 4907 – Fall 2026/Winter 2027**

Supervisor	Rose Gomar
Co-supervisor	
Course section	SYSC 4907 E
<b>Project ID</b>	E4
Project title	Radar-Assisted Vision Tracking System
Project description	<p>The idea is that the project builds a system real-time object detection and tracking system that combines radar signal processing and camera-based image processing. The FPGA is used to accelerate radar DSP, while in parallel a camera performs image capture / detection or tracking of objects. By combining both sensors, the system can detect moving objects more reliably than using either radar or vision alone.</p> <p>The goal is to present how hardware acceleration via an FPGA and multi-sensor usage can improve real-time perception systems used in applications such as robotics, automotive or even surveillance.</p> <p><b>Note:</b> This project has already been assigned to a group of students.</p>
Program(s)	Computer Systems Software
Maximum number of students	Minimum 3 students -maximum 5 students
Meeting time with supervisor (optional)	Will be set later
Do you want the student to contact you before the office assign this project to them ? (Yes/No)	yes