Computer Science, Computer Engineering & Robotics & Control Systems

Develop foundational 21st century skills as you learn computer science and engineering principles in a collaborative, project-based environment using industry-standard languages and the latest tools. Advance your skills with senior courses in algorithmic problem-solving, object-oriented software design, digital logic, interfacing, robotics, and game programming fundamentals. Get hands-on experience designing, building and coding microcontroller and robotics projects in computer engineering courses.

Course Offerings

Taken in Gr. 9

TEJ 20S
Computer Technology

- Discover the joy of coding & interfacing while you develop problem-solving skills in this project-based intro course
- Develop games, animations and interface with hardware
- No experience required!

Taken in Gr. 10 - 12

ICS3U & ICS4U
Computer Science

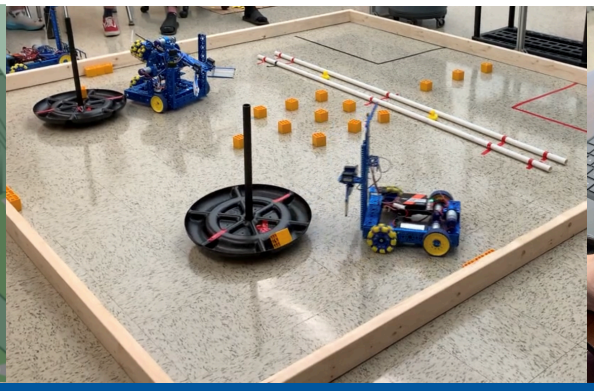
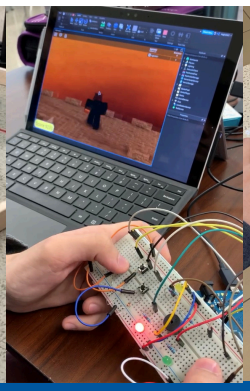
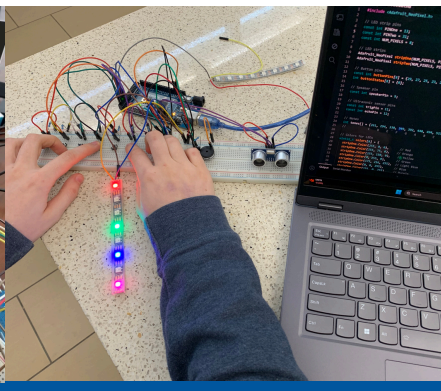
- Learn software development and game coding basics
- Develop object-oriented software projects while developing skills in algorithmic problem-solving and project management

TEJ3M & TEJ4M
Computer Engineering

- Design, build, and code microcontroller interfacing projects
- Apply digital logic knowledge to build circuits
- Work with computer hardware
- Learn networking basics

TER 3M & TER4M
Robotics & Control Systems

- Apply the engineering design process to collabortatively solve mechanical challengess
- Design, build, and program robots and robotic control systems
- CAD and 3D print system parts

Related Opportunities

- Involvement in hackathons
- Coding competitions including provincial Skills Ontario contest
- Math club & contest preparation
- Chess club
- SHSM & cooperative education

Related Careers

- Software development & software engineering
- Computer, electrical, mechanical, & mechatronics engineering & related engineering technology programs
- Networking & network administration
- Cybersecurity
- Data science ...and many more!

Medical Science

Our Science department's teaching philosophy emphasizes a balance between theoretical and hands-on learning approaches. This involves a strong focus on laboratory experiments in every course, which help to reinforce key concepts and ensure student learning. In grade 9 and 10 Science courses, all the domains, including Biology, Chemistry, Physics and Earth and Space Science are covered.
Our e-STEAM program builds on these ideals, offering enhanced science courses focusing on 21st century competencies to build skills for the future and prepare our students for senior level courses.

Course Offerings

SNC1WS

Grade 9 Science-Enhanced

SNC2DS
Gr.10 Science-Enhanced

SNC21S
Enhanced Robotics

SNC4MS
Medical Science

SBI3U
Gr.11 Biology

SCH3U
Gr.11 Chemistry

SPH3U
Gr.11 Physics

SBI4U
Gr.12 Biology

SCH4U
Gr.12 Chemistry

SPH4U
Gr.12 Physics

The Medical Sciences e-STEAM pathway helps students with a goal of pursuing a career in the medical sciences field, to develop the knowledge and skills they will require to excel in top university programs, as well to discover and explore the wide variety of opportunities available within this sector.





UWin Science Olympiad- Overall Winners





UWin Forensics Challenge Champs

Related Opportunities

- Science Olympiad
- Specialist High Skills Major (SHSM) in Health & Wellness
- Avogardo - chemistry competition
- Sir Isaac Newton- physics & astronomy contest

Post-Secondary Opportunities

Biology, Biomedical Engineering, Medical Physics, Health Sciences, Life Sciences, Medical Sciences, Medical Radiation Sciences, Nursing, General Science, Kinesiology, Medical Technology...and many more!