welcome

Future dY PANTHER

#ADAYINTHELIFE @STMARGUERITEDY

WHY STEM?

Why a STEM Regional Program at St. Marguerite d'Youville?

Teens' award-winning inventions show why STEM education is so important: advocate

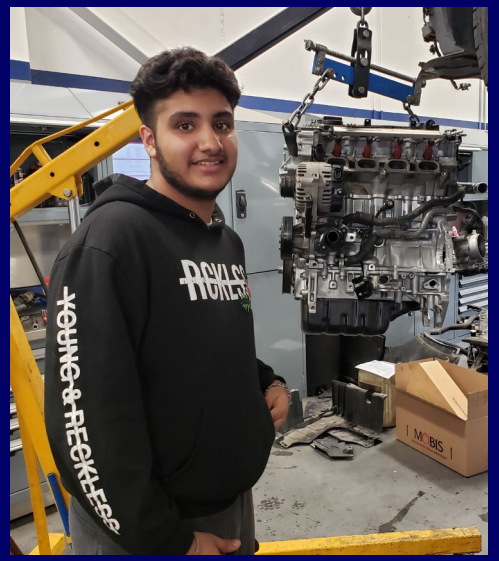
Anush Mutyala and Vinny Gu have received awards from Youth Science Canada for their work

Philip Drost · CBC Radio · Posted: Nov 28, 2023 10:57 AM EST | Last Updated: November 28, 2023

https://www.cbc.ca/radio/thecurrent/innovation-science-fair-1.7041383

COOPERATIVE EDUCATION

70+ STEM Related Work Placements



Dedicated STEM Lab

REGIONAL STEM PROGRAM – 10 GUIDING PRINCIPLES

1. Core Curriculum Integration - Balanced STEM Subjects:

The program will offer opportunities to build a strong foundation in the core STEM subjects: mathematics, biology, chemistry, physics, computer science, and engineering with a Cross-Disciplinary Approach (e.g., the use of math in engineering or technology applications in biology).

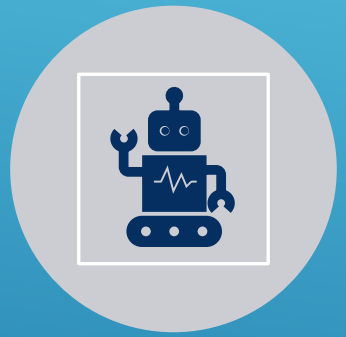
2. Project-Based Learning - Real-World Problems:

Incorporate projects that focus on solving real-world problems to engage students in practical, hands-on learning that simulate real-world engineering and science tasks, where collaboration is crucial.

3. Industry Partnerships & Work Placements:

Partner with local industries, universities, and research institutions to provide students with work placement, mentorship, and field trips to broaden their understanding of STEM careers.

GUIDING PRINCIPLES



4. Technology Integration

Ensure students have access to modern technology, such as 3D printers, robotics kits, programming software, and data analysis tools, to practice real-world applications of STEM knowledge. - Coding & Digital Skills: Emphasize the importance of coding, programming languages and digital literacy.

5. Research and Inquiry-Based Learning

Encourage students to develop and pursue independent research projects, fostering inquiry and critical thinking. Competitions & Showcases: Provide opportunities for students to participate in local, regional, and national STEM fairs and competitions (e.g., science fairs, robotics competitions).

6. STEM Enrichment Activities Clubs & Extracurriculars:

STEM clubs and extracurricular activities to further engage students outside of the classroom. Hackathons and STEM Challenges: Organize events where students can develop innovative solutions under time constraints, pushing creativity and teamwork.

7. Diversity and Inclusion

Support for Underrepresented Groups: Ensure access to resources and mentorship for students from underrepresented groups in STEM, including girls, and economically disadvantaged students.

GUIDING PRINCIPLES

8. **Teacher Professional Development** - STEM-Specific Training: Teachers should receive ongoing professional development to stay updated on the latest STEM teaching methods, technologies, and innovations. Collaborative Teaching Models: Encourage team teaching and collaborative planning among STEM educators to provide a more cohesive learning experience.

9. **Community Involvement and Support** - Parent and Community Engagement: Actively involve parents and the community in STEM activities to build a support network for students. Outreach Programs: Conduct STEM outreach to elementary schools to cultivate early interest and talent.

10. **Career Readiness and A.I. Skill Developments**- Soft Skills Development: Along with technical knowledge, programs should emphasize problem-solving, communication, and teamwork skills, which are essential in STEM careers. Exposure to Career Paths: Integrate career guidance, including information on various STEM-related career paths (engineering, technology, medicine, etc.), and the educational requirements for each.

By incorporating these components, our regional STEM program will provide students with a strong foundation in STEM education, practical experience, and an understanding of future career possibilities.

St. Marguerite d'Youville C S S

STEM

science·technology·engineering·math

- STEM Focused Courses each Year of Program
- STEM Competition(s)
- Visits to Post-Secondary Pathways and Programs
- Experiences with Community Partners and Industry Leaders
- Field Trips, Guest Speakers, and more!

St. Marguerite d'Youville Secondary School

10815 Dixie Road West, Brampton ON

Follow us on Instagram

stmargueritedy

STEM Focus Classes – Grade 9 to 12

STEM Math

STEM Science

STEM Geography

STEM Technology

STEM Math

STEM Science

STEM Tech #1

STEM Tech #2

Health & Wellness Focus

ICT Computer Focus

Science & Math Focus

Health & Wellness SHSM Focus

Proposed ICT SHSM Computer Focus

Science & Math Focus

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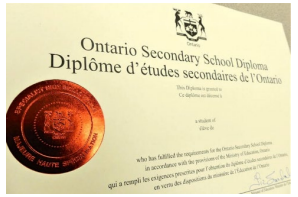

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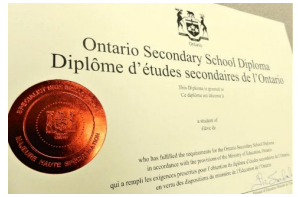

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Customize

d'Youville S.T.E.M. Club

STEM CLUB 2023-24

Post-Secondary Exploration
Learn from/with Community Partners


Field Trips,
Guest Speakers,
and MORE!

First DPCDSB Member of Ontario School Esports Association

St. Marguerite d'Youville Catholic Secondary School

"To Trust, To Risk, To Love, To Serve"

St. Marguerite d'Youville Catholic Secondary School
10815 Dixie Road
Brampton ON , L6R 2W5

Phone: 905.789.5560
Fax: 905.789.1143
Email: Contact Us

Principal: Rob Weatherbee
Vice Principal(s): Nancy Tsiobanos
Matthias Ramirez

Superintendents: Adrian Scigliano
Trustee: Shawn Xaviour (Brampton Ward 9, 10)
Darryl D'Souza (Brampton Ward 2)

Guidance / Courses

Back

Guidance / Courses

Regional STEM Program

St. Marguerite d'Youville C S S

STEM

science·technology·engineering·math

The Regional STEM program at St. Marguerite d'Youville Catholic Secondary School begins in September 2025 for incoming Grade 9 students and focuses on Science,Technology, Engineering, and Mathematics. This early start allows students to build astrong foundation in these critical areas, preparing them for future academic and emerging career opportunities. The program offers various experiential learning opportunities, including: hands onprojects, certifications, field trips, and

https://www.dpcdsb.org/DYOUV

M @ St. Marguerite d'Youville C.S.

ou for your interest in our STEM Regional Program.

ion of this supplementary application is required to be considered for the
.

Question of Choice: Your response must be written in full sentences and consist of approximately 150 words. *

Answer ONE of the following questions:

Why are you interested in our STEM Program?

OR

Describe an experience or passion that demonstrates your interest and commitment to STEM?

Your answer

Please upload a copy of your entire Grade 7 Final (June) Report Card. A screenshot or photo of each page is acceptable. Please ensure the images are clear and legible. *

Supplementary STEM Application Available NOW!

Acceptance Timelines

- Number of acceptances will be based upon the quality of applicants
- Approximately 50 to 60 students.
- **Round 1: January 2025**
- **Round 2: February 2025**
- **Round 3*: March 2025**
- **Application will close March 1st**

***If space is available**

Congratulations!

Offer of Admission

1. Offer of Admission by Email
2. Complete the Online Application Process
3. Submit STEM Course Option Sheet
4. Pay the enhancement fee

welcome TO

St. Marguerite d'Youville STEM science technology engineer

STEM GRADE 9 COURSE OPTIONS

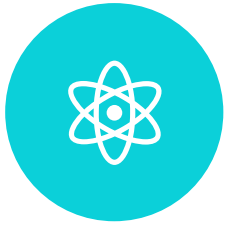
Subject	Course Code	Pathway
Geography	CGC1WS	De-streamed STEM FOCUS
English	ENL1W1	De-streamed
French	FSF1D1	Academic
Religion	HRE1O1	Open
Mathematics	MTH1WS	De-streamed STEM FOCUS
Science	SNC1WS	De-streamed STEM FOCUS
Technology	TAS1OS	Open STEM FOCUS

ONE Elective Credit: Rank your choice of electives (Example = 1st, 2nd, 3rd etc.)

Subject	Drama	Music	Visual Arts	Business	Physical Education
Course Code	ADA 1O1	AMU1O1	AVI1O1	BEM1O1	PPL1OF or M
Choice Rank					

STEM Enhancement Fee
$150 for 2025-26

Experiential Learning
Field Trip to Arcadia Earth



STEM contests including Avogadro Science, Seek Jr. and Math Waterloo Contests

Guest Speaker(s) with a focus on STEM

Trip to Post-Secondary Institutions

University of Toronto

BattleSTEM competition at the University of Guelph

Additional special excursions with STEM Focus