



YOUR SKILLS,
YOUR FUTURE.

ENERGY: MANUFACTURING & ROBOTICS

Thomas A. Blakelock
High School

PROGRAM OVERVIEW

Energy: Manufacturing & Robotics is an emerging and expanding sector that encompasses all aspects of energy generation, distribution, and consumption, including research and development, design, construction, installation, and maintenance. Core industries in this sector include renewable and alternative energy such as wind, solar, and biomass; power generation and distribution; fossil fuels; and energy efficiency.

Experiential Learning Opportunities

- Trips to various energy related organizations and associations
- Presentations related to different careers within the sector
- Complete 2 Cooperative Education credits.
- Trips to colleges and universities
- Complete experiences related to math, coding or the design thinking process related to the energy: manufacturing & robotics sector

Related Careers

- Architects
- Millwright & Industrial Mechanic
- Electrical & Electronics Engineer
- Environmental Assessor
- Industrial Electrician
- Gas Maintenance Workers
- Land Surveyor
- Mechanical Engineer & Technician
- Petroleum Engineer
- Power Systems & Power Station Operator
- Wind Turbine Material Controller
- Civil Engineer
- Construction Supervisors and Managers
- ...and more

Possible Certifications

- CPR Level C / AED Training & Standard First Aid / WHMIS
- Automate External Defibrillation
- Training Land Surveying
- Working at Heights
- Lock Out / Tag Out Safety
- CAD / CAM Certification
- Confined Space Awareness
- ...and more

CREDITS

Course Package

Each SHSM program offers students a bundle of 8 - 10 credits. These courses are regular Ontario secondary school courses that allow students to work towards their Ontario Secondary School Diploma, but have been bundled as the most relevant courses to prepare students for a future in the energy: manufacturing & robotics sector.

The Bundle Includes:

- **4 “major” credits** related to energy: manufacturing & robotics in grade 11 and 12
- **Supporting credits**, which include Contextualized Learning Activities (opportunities for students to learn the subject in the context of the energy sector):
 - > 1 Grade 12 English credit
 - > 1 Grade 11 Math credit
 - > 1 Grade 11 or 12 Science, Business Studies or Social Sciences credit
 - > 2 Cooperative Education credits to experience life in the energy: manufacturing & robotics sector

Applying to the Energy SHSM:

All students in Halton are able to attend the Energy: Manufacturing & Robotics SHSM at T.A. Blacklock High School in grade 11 and grade 12. Each student's goals will be assessed and course selection will be determined based on their needs.

If you want to learn more about this program:

- Check out the Energy: Manufacturing & Robotics SHSM at haltonpathways.ca
- Visit myblueprint.ca/halton
- Talk to Student Services
- Come to a Pathways Planning Information Evening (see haltonpathways.ca for dates and times)

CONTACT

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