

**Manufacturing: Robotics and Control Systems, Grade 12 – University/College Preparation
TMR 4M0**

This course focuses on design principles which allow for robotic advancement in society. Students will solve problems and make critical decisions necessary to design and fabricate a robot. This unique program will provide a solid base for those students planning to enroll in various Engineering programs at university such as Mechatronics.

Students will:

- Utilize the design process to create a complete robotic system.
- Understand robotic; structure, design, mechanics and control systems.
- Apply project management skills to meet deadlines.
- Recognize post-secondary careers related to robotics.
- Design, build, program and compete with a Ontario skills robot at various competitions.

Prerequisite: Manufacturing Technology: Mechanical Engineering, Grade 11, University/College Preparation (TMM 3M0) **OR** Manufacturing Technology: Robotics and Control Systems, Grade 11, University/College Preparation (TMR 3M0)