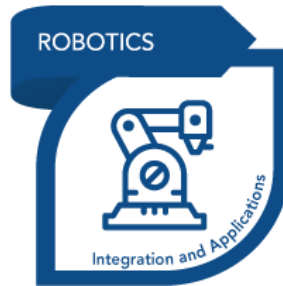# Georgian

Robotics Module 3

Badge Awarded to

Jesse Grant

In this final module, students are introduced to different types of robots found in industry, such as cooperative and pick and place robots. Students design and troubleshoot a program, examine the integration of the robot and programmable logic controller (PLC), explore the overall integration into the broader manufacturing facility, and justify the cost of automating a process.

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Issuer

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http://georgiancollege.ca/

At Georgian, we work with industry and community partners to offer relevant, cutting-edge curriculum, quality work placements and co-op experiences with top employers.

Our students graduate with the skills and the mindset to be innovative thinkers and changemakers who can transform their workplaces and communities.

Our vision is to accelerate success through exceptional teaching and learning, innovation and partnerships.

Criteria

Upon successful completion of this module, the student has reliably demonstrated the ability to:

1. discuss how co-operative robots work;
2. program a co-operative robot;
3. explain how a vision system works;
4. explain how the robot, PLC, and external devices are integrated;
5. create counters and timers in a program;
6. create multiple programs and utilize the call command;
7. describe pick and place robot design;
8. program a pick and place robot;
9. troubleshoot faults of a pick and place robot;
10. discuss how automation and robotic systems are integrated to the rest of the facility; and
11. use math to measure robot necessity and efficiency.

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