# **GET READY TO...**



# ➤ GEORGIAN COLLEGE AND INDUSTRY PARTNERS WORK TOGETHER ON R&D PROJECTS

### Applied R&D need

 A tangible issue that the company needs to address (e.g., product development; process improvement; technology adoption)

### Expertise

 Industry partners have knowledge on the industry/sector, markets, and their own operations

#### Resources

•Industry partners contribute financially (cash) and *in-kind* (time; materials; equipment)

Partner\*

### **Expertise**

 A broad range of faculty and technicians with deep expertise

#### Resources

- Students who are excited to be involved
- Specialized equipment that companies might not have in house

### **Access to Funding**

 Colleges are eligible for research funding through federal, provincial granting agencies

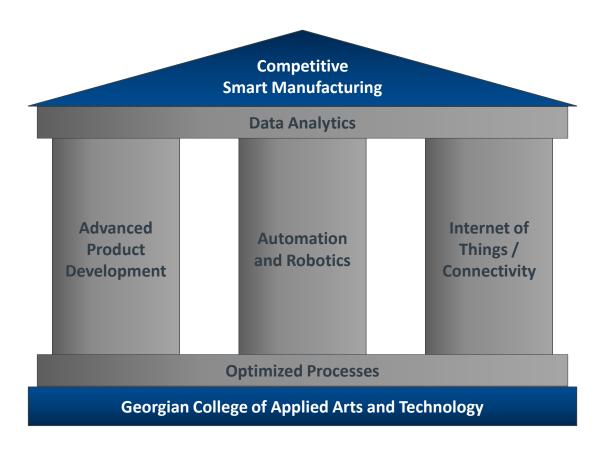
**Georgian College** 



\* Industry and/or community partners



# > COMPETITIVE SMART MANUFACTURING APPLIED R&D AT GEORGIAN COLLEGE



- Interdisciplinary approach that:
  - ✓ Starts with a strong foundation
  - Provides solutions that include technology, data collection, and analytics
- Potential for increased efficiency, productivity, and quality
- Bringing Industry 4.0 to regional manufacturers
- Digital solutions that can lead to Al applications
- Solutions will increase competitiveness and enable growth
- NSERC Build Innovation Enhancement grant provides \$2million over five years



## > WE LOOK FORWARD TO WORKING WITH YOU













**BEAVER ROCK** 

















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# Lakehead's Strategic Research Priorities

Informatics,
New Materials
and
Technologies

Cultures, Societies, and Social Justice First Nations, Métis, and Inuit Research Health and Well-Being Sustainability, Resources, and the Environment



## Research and Innovation

### Research Expertise

- Artificial Intelligence
- Machine Learning
- Computer Vision & Image Processing
- Natural Language Processing
- Wireless Communication
- Optimization
- Robotics and IoT
- Wireless Communication
- Health Informatics and Data Analytics



### **Fundings**

- Natural Sciences and Engineering Research Council (NSERC)
- Social Sciences and Humanities Research Council (SSHRC)
- MITACS
- Northern Ontario Academic Medicine Association (NOAMA)
- Vector Institute
- US and Canada based Industry partners



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## **Customized Programs**

- Industry-driven training solutions with flexible delivery options to meet your organization's needs regardless of your sector, size or budget.
- Focus on upskilling in-house talent to accommodate new and emerging technologies







# **Corporate Training Process**

Consult and Collaborate: Initial and ongoing collaboration to understand goals, challenges and desired outcomes

Needs Analysis: In depth questionnaires to identify training requirements

Design Curriculum: Experienced faculty to customize content based on goals, resources and timelines.

Training Delivery: Training program delivered at a Georgian College campus or at customers site.

Evaluate and Follow-up: Programs are evaluated and results shared with client

# Sample of customized Courses

- Industrial Automation
- Robotics
- Hydraulics / Pneumatics
- Machining /CNC
- AI / Data Analytics
- Computer Programming / Computer Networking



**Georgian College Facilities** 

### **Robots**

- > Fanuc
- Universal Robots (UR)
- Kuka

### **Software**

- Octopuz simulation software
- RoboGuide (Fanuc)
- Kuka SimPro
- > PLC Logix 500 & 5000

## **Training Equipment**

- Pneumate 200
- Fanuc Teach Pendants (for PC's)



Sample of available courses for Professional Development, *A la Carte* 

- Engineering: AutoCAD, SolidWorks
- Safety and Regulation:
   Approved Working at Heights,
   Forklift Operator, Confined
   Spaces, Ozone Depletion
   Prevention Certification
- Other: Airbrake Z
  Endorsement



Additional Questions?
Contact Melissa Marshall
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Important links
GeorgianCollege.ca/coned
GeorgianCollege.ca/ceguide