

# Key Research Findings

This analysis was based on the pre-determined criteria and measures listed below:

| Section                     | Description  | Measures  |
|-----------------------------|--|---|
| <b>Student Demand</b>       | <p>Includes an assessment of OCAS (2007 - 2011) enrolment data at other colleges in terms of mean growth rate with a specific focus on Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)</p> <p>Trends in certificate, diploma, degree, apprenticeship and continuing education (where available).</p> <p><b>Click Below to Access Full Source Document:</b><br/> <a href="#">Fall Enrollment Trend</a></p> | <ul style="list-style-type: none"> <li>● Strong = Fleming enrolment growth is outpacing system and is equal to or greater than 3%</li> <li>● Moderate = Fleming enrolment growth is equivalent to system demand and is between 1.0 to 2.9%</li> <li>● Weak = Fleming enrolment growth is less than the system demand and is less than 1%</li> </ul> |
| <b>Labour Market</b>        | <p>Includes projected employment rate growth based on a consolidation of various Ontario, Canadian, and US sources including HRSDC, Sector Council Reports US Bureau of Labour Statistics, and the MTCU Employment Profile.</p>  | <ul style="list-style-type: none"> <li>● Strong = Between 5-6 positive labour market indicators</li> <li>● Moderate = Between 3-5 positive labour market indicators</li> <li>● Weak = Between 1-2 or no positive labour market indicators</li> </ul>  |
| <b>Competitive Analysis</b> | <p>Includes the number of actual colleges offering the program as well as the ratio of applications to acceptances at Fleming compared to other colleges and specific comment about Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)</p> <p><b>Click Below to Access Full Source Document:</b><br/> <a href="#">Fall Conversion Report</a></p>   | <ul style="list-style-type: none"> <li>● Strong = Fleming conversion ratio is greater than 2 below the system</li> <li>● Moderate = Fleming conversion ratio is 1 above, below or equal to the system</li> <li>● Weak = Fleming conversion ratio is greater than 2 above than the system</li> </ul>   |
| <b>Financial Analysis</b>   | <p>Includes a review of Contribution to Overhead (CTO) for existing programs (2010-11)</p> <p><b>Click Below to Access Full Source Document:</b><br/> <a href="#">Costing Analysis</a></p>   | <ul style="list-style-type: none"> <li>● Strong = CTO is greater than 35%</li> <li>● Moderate = CTO is between 30 - 34%</li> <li>● Weak = CTO is between 20 – 30%</li> </ul> <p><b>No Contribution = 19% or less</b></p>  |

## Key Research Findings

|                                   |  |  |
|-----------------------------------|--|--|
| <b>Key Performance Indicators</b> | <p>Includes KPI trends from the Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012.</p> <p><b>Click Below to Access Full Source Document:</b><br/><a href="#">Key Performance Indicators</a></p> | <ul style="list-style-type: none"><li>● Strong = Above system average in 6-7 indicators</li><li>● Moderate = Above system average in 3-5 indicators</li><li>● Weak = Above system average in 0-2 indicators.</li></ul> |
| <b>Resource Analysis</b>          | <p>Requires school level assessment regarding space, technology, capital equipment and human resources. Recommendations from recent Program Review Reports included here</p>   |  |

# Key Research Findings

## Electrical Power Generation Technician (56705)

### Student Demand<sup>1</sup>

• **STRONG**

The following information consists of OCAS yearly student fall registration data as well as a mean growth rate and average student registration for each program under these categories:

#### Diploma

- The Electrical Power Generation Technician data is included under the MTCU Title of Heavy Equipment Technician
- Fleming only offers its course in the Winter semester, as opposed to Cambrian, Boreal and Sault who offer their program for the Fall semester

#### Diploma

##### Program: 56705 - HEAVY EQUIPMENT TECHNICIAN

|              | 2008     | 2009      | % Change<br>(08-09) | 2009      | 2010      | % Change<br>(09-10) | 2010      | 2011      | % Change<br>(10-11) | 2011      | 2012      | % Change<br>(11-12) | % Mean<br>Growth<br>Rate<br>(08-12) | 5 Year<br>Average<br>Reg.<br>Students |
|--------------|----------|-----------|---------------------|-----------|-----------|---------------------|-----------|-----------|---------------------|-----------|-----------|---------------------|-------------------------------------|---------------------------------------|
| FLEMING      | 4        | 21        | 425                 | 21        | 15        | -29                 | 15        | 12        | -20                 | 12        | 16        | 33                  | 102                                 | 14                                    |
| <b>Total</b> | <b>4</b> | <b>21</b> | <b>425</b>          | <b>21</b> | <b>15</b> | <b>-29</b>          | <b>15</b> | <b>12</b> | <b>-20</b>          | <b>12</b> | <b>16</b> | <b>33</b>           | <b>102</b>                          | <b>14</b>                             |

##### Program: 56705 - HEAVY EQUIPMENT TECHNICIAN

|                | 2007      | 2008      | % Change<br>(07-08) | 2008      | 2009      | % Change<br>(08-09) | 2009      | 2010      | % Change<br>(09-10) | 2010      | 2011      | % Change<br>(10-11) | % Mean<br>Growth<br>Rate<br>(07-11) | 5 Year<br>Average<br>Reg.<br>Students |
|----------------|-----------|-----------|---------------------|-----------|-----------|---------------------|-----------|-----------|---------------------|-----------|-----------|---------------------|-------------------------------------|---------------------------------------|
| CAMBRIAN       | 1         | 1         | 0                   | 1         | 1         | 0                   | 1         | 2         | 100                 | 2         | 4         | 100                 | 50                                  | 2                                     |
| COLLÈGE BORÉAL | 15        | 22        | 47                  | 22        | 31        | 41                  | 31        | 20        | -35                 | 20        | 15        | -25                 | 7                                   | 21                                    |
| SAULT          | 17        | 16        | -6                  | 16        | 3         | -81                 | 3         |           |                     |           |           |                     | -44                                 | 12                                    |
| <b>Total</b>   | <b>33</b> | <b>39</b> | <b>18</b>           | <b>39</b> | <b>35</b> | <b>-10</b>          | <b>35</b> | <b>22</b> | <b>-37</b>          | <b>22</b> | <b>19</b> | <b>-14</b>          | <b>-11</b>                          | <b>30</b>                             |

<sup>1</sup> Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset Prepared by Fleming Data Research (07-2012)

# Key Research Findings

## Labour Market

• **STRONG**

### Employment Ontario<sup>2</sup>

#### Electrical Mechanics (NOC – 7333)

- Employment Ontario Rating (2009-2013):
  - **Average**
- Education and Training
  - “Completion of secondary school is usually required.”
  - “Completion of a four-year apprenticeship program or a combination of over four years of work experience in the trade and some college or industry courses in electrical mechanics is usually required for trade certification.”
  - “Interprovincial trade certification (Red Seal) is available to qualified electric motor system technicians.”
- Demand
  - “Opportunities for employment in this occupation are expected to be average over the period from 2009 to 2013. This is a small occupational group and the majority of job openings will result from the need to replace electrical mechanics who retire, leave the occupation or are promoted to higher positions.”
  - “Employment prospects for this occupation depend on trends affecting the manufacturing sector and on the demand for maintaining, testing and repairing electrical motors and equipment. In Ontario, the manufacturing sector has been ailing for over a decade and short term forecasts expect bleak growth.”
  - “This demand for maintaining, testing and repairing electrical motors and equipment varies according to the degree of use of these motors and equipment, and consumer habits. The use of electric motors and equipment has risen in the last years. This increase can be seen in the growing number of products and equipment on the market that are run by electric motors (small household appliances, industrial machines, professional and domestic tools, lawnmowers, etc), and in the greater use of these motors for existing equipment, such as automobiles. This growth has resulted in an increased need for the testing, maintenance and repair of this equipment by skilled personnel.”
  - “This trend is nevertheless is offset by the fact that consumers, individuals in particular, but companies as well, often prefer to replace defective motors and appliances with new ones rather than having them repaired. An increase in the number of single-person households and families in which both spouses work accents this trend.”

<sup>2</sup> “7333 Electrical Mechanics.” *Employment Ontario*. N.p., n.d. Web. 21 July 2012. <[http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/7333\\_e.pdf](http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/7333_e.pdf)>.

# Key Research Findings

## HRSDC<sup>3</sup>

### Electrical Mechanics (NOC – 7333)

- Job Openings (2011/2020): **10,304**
- Job Seekers(2011/2020): **8,710**
- Post-Secondary Education Graduates: **7,658 (88%)**
- “Based on projections and considering that labour supply and demand in this occupation were balanced, it is expected that the number of job seekers will remain sufficient to fill job openings over the 2011-2020 period. The majority of job openings will arise from retirements although the retirement rate is comparable to the average. Employment growth due to economic activity will be very weak. Expansion demand will be weaker over the 2011-2020 period than over the 2001-2010 period. This occupation experienced a certain boom during the years before the last recession because of the strong growth in the construction sector and the overall strength of the economy. However, in the coming years, the slowdown in activity in the construction industry and, more generally, the real estate market, will limit the new job openings in this occupation. In terms of supply, nearly all job seekers in this occupation will come from the school system. ”

## US Bureau of Labour<sup>4</sup>

### Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (SOC – 49-2095)

- Employment Growth (2010/2020): **Increase 5%**
  - **23,400** (2010) to **24,600** (2020)
- “Overall employment of electrical and electronics installers and repairers is expected to grow 3 percent from 2010 to 2020, slower than the average for all occupations.”
- “Although privatization in utilities industries should improve productivity and hinder employment growth, the installation of newer, energy-efficient green technologies will spur some demand for employment.”
- “Overall job opportunities should be best for applicants who have an associate’s degree in electronics, certification, or related experience. In addition to employment growth, the need to replace workers who transfer to other occupations or leave the labor force will result in some job openings.”

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<sup>3</sup> "Other Mechanics (733)." *Human Resources and Skills Development Canada*. N.p., n.d. Web. 21 July 2012. <<http://www23.hrsdc.gc.ca/occupationsummarydetail.jsp?&tid=103>>.

<sup>4</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Electrical and Electronics Installers and Repairers, on the Internet at <http://www.bls.gov/ooh/installation-maintenance-and-repair/electrical-and-electronics-installers-and-repairers.htm> (visited *July 21, 2012*).

# Key Research Findings

## Working in Canada<sup>5</sup>

### Electrical Mechanics (NOC – 7333)

- Ontario Rating: **Not Available**

- **Wage Range by Region:**

| Location                           | Wage (\$/hr) |        |       |
|------------------------------------|--------------|--------|-------|
|                                    | Low          | Median | High  |
| Ontario                            | 10.25        | 25.63  | 38.00 |
| Hamilton--Niagara Peninsula Region | 10.25        | 25.63  | 38.00 |
| Kingston - Pembroke Region         | 10.25        | 25.63  | 38.00 |
| Kitchener--Waterloo--Barrie Region | 10.25        | 25.63  | 38.00 |
| London Region                      | 13.50        | 18.00  | 38.35 |
| Muskoka-Kawartha Region            | 10.25        | 25.63  | 38.00 |
| Northeast Region                   | 10.25        | 25.63  | 38.00 |
| Northwest Region                   | N/A          | N/A    | N/A   |
| Ottawa Region                      | 13.00        | 20.52  | 29.85 |
| Stratford--Bruce Peninsula Region  | N/A          | N/A    | N/A   |
| Toronto Region                     | 10.25        | 25.63  | 38.00 |
| Windsor-Sarnia Region              | 10.25        | 25.63  | 38.00 |

## Competitive Analysis<sup>6</sup>

- **MODERATE**

The following information consists of OCAS yearly fall application and registration data as well as a conversion ratio for each program under this category:

### Diploma

- Fleming's main competition in this program is Boreal with a steady conversion ratio of **2:1** from 2009-2011
- Flemings has varied dramatically from **7:1** in 2010 to **4:1** in 2012

<sup>5</sup> "Electrical Mechanics (NOC 7333)." *Working in Canada*. N.p., n.d. Web. 21 July 2012.

<[http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=7333&action=final@ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=electrical+mechanic#report\\_tabs\\_container2](http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=7333&action=final@ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=electrical+mechanic#report_tabs_container2)>.

<sup>6</sup> Application data obtained from OCAS College Count Cube October 19, 2011 Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset Prepared by Fleming Data Research (07-2012)

# Key Research Findings

## Diploma

### Program: 56705 - HEAVY EQUIPMENT TECHNICIAN

|              | App.<br>2009 | Reg.<br>2009 | Conversion<br>Ratio | App.<br>2010 | Reg.<br>2010 | Conversion<br>Ratio | App.<br>2011 | Reg.<br>2011 | Conversion<br>Ratio | App.<br>2012 | Reg.<br>2012 | Conversion<br>Ratio |
|--------------|--------------|--------------|---------------------|--------------|--------------|---------------------|--------------|--------------|---------------------|--------------|--------------|---------------------|
| FLEMING      | 102          | 21           | 5:1                 | 106          | 15           | 7:1                 | 63           | 12           | 5:1                 | 62           | 16           | 4:1                 |
| <b>Total</b> | <b>102</b>   | <b>21</b>    | <b>5:1</b>          | <b>106</b>   | <b>15</b>    | <b>7:1</b>          | <b>63</b>    | <b>12</b>    | <b>5:1</b>          | <b>62</b>    | <b>16</b>    | <b>4:1</b>          |

### Program: 56705 - HEAVY EQUIPMENT TECHNICIAN

|                | App.<br>2007 | Reg.<br>2007 | Conversion<br>Ratio | App.<br>2008 | Reg.<br>2008 | Conversion<br>Ratio | App.<br>2009 | Reg.<br>2009 | Conversion<br>Ratio | App.<br>2010 | Reg.<br>2010 | Conversion<br>Ratio | App.<br>2011 | Reg.<br>2011 | Conversion<br>Ratio |
|----------------|--------------|--------------|---------------------|--------------|--------------|---------------------|--------------|--------------|---------------------|--------------|--------------|---------------------|--------------|--------------|---------------------|
| CAMBRIAN       | 40           | 1            | 40:1                | 56           | 1            | 56:1                | 43           | 1            | 43:1                | 35           | 2            | 18:1                | 46           | 4            | 12:1                |
| COLLÈGE BORÉAL | 67           | 15           | 4:1                 | 42           | 22           | 2:1                 | 67           | 31           | 2:1                 | 40           | 20           | 2:1                 | 36           | 15           | 2:1                 |
| SAULT          | 70           | 17           | 4:1                 | 61           | 16           | 4:1                 | 46           | 3            | 15:1                | 25           |              |                     | 3            |              |                     |
| <b>Total</b>   | <b>177</b>   | <b>33</b>    | <b>5:1</b>          | <b>159</b>   | <b>39</b>    | <b>4:1</b>          | <b>156</b>   | <b>35</b>    | <b>4:1</b>          | <b>100</b>   | <b>22</b>    | <b>5:1</b>          | <b>85</b>    | <b>19</b>    | <b>4:1</b>          |

## Financial Analysis

**NO CONTRIBUTION**

Source: Program Costing Analysis 2010/2011

- Contribution to Overhead: 17.2%
- Program Weight: 1.80
- Funding Unit: 2.10

## Key Performance Indicators

**• STRONG**

Source: Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012

|                                     |                   |
|-------------------------------------|-------------------|
| KPI1-Graduation Rate                | +18% above system |
| KPI2-Working                        | +5% above system  |
| KPI3-Working Related                | -1% below system  |
| KPI4-Grad. Satisfaction             | +10% above system |
| KPI8-Student Satisfaction-Learning  | +17% above system |
| KPI9-Student Satisfaction- Teachers | +15% above system |
| KPI11-Grad. Satisfaction-Program    | +12% above system |

# Key Research Findings

Resource Analysis  
Equipment

Staffing

Space