Key Research Findings

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

Section	Description	Measures
Student Demand	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) Trends in certificate, diploma, degree, apprenticeship and continuing education (where available). **Click Below to Access Full Source Document:** Fall Enrollment Trend	• Strong = Fleming enrolment growth is outpacing system and is equal to or greater than 3% • Moderate = Fleming enrolment growth is equivalent to system demand and is between 1.0 to 2.9% • Weak = Fleming enrolment growth is less than the system demand and is less than 1%
Labour Market	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.	• Strong = Between 5-6 positive labour market indicators • Moderate = Between 3-5 positive labour market indicators • Weak = Between 1-2 or no positive labour market indicators
Competitive Analysis	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) **Click Below to Access Full Source Document:** Fall Conversion Report	• Strong = Fleming conversion ratio is greater than 2 below the system • Moderate = Fleming conversion ratio is 1 above, below or equal to the system • Weak = Fleming conversion ratio is greater than 2 above than the system
Financial Analysis	Includes a review of Contribution to Overhead (CTO) for existing programs (2010-11) **Click Below to Access Full Source Document:** Costing Analysis	• Strong = CTO is greater than 35% • Moderate = CTO is between 30 - 34% • Weak = CTO is between 20 – 30% No Contribution = 19% or less

Key Research Findings

Key Performance Indicators	Includes KPI trends from the Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012. **Click Below to Access Full Source Document:** Key Performance Indicators	• Strong = Above system average in 6-7 indicators • Moderate = Above system average in 3-5 indicators • Weak = Above system average in 0-2 indicators.
Resource Analysis	Requires school level assessment regarding space, technology, capital equipment and human resources. Recommendations from recent Program Review Reports included here	

Key Research Findings

Geographic Information Systems – Applications/Cartographic Specialists (70303/70305)

Student Demand[1]	• 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

- Fanshawe is the only college to offer this program
- Between 2007-2008 the school had a **39%** increase in registration, and from 2008-2010 there was a total decrease of **13%,** and a slight increase in 2011 of **4%** making the mean growth rate **8%** with an average registration of **51 students**

Graduate Certificate

- Fanshawe, Sault and Algonquin offer Geographic Information Systems programs
- Sault has the highest mean growth rate **(40%)** and Fanshawe has the lowest **(-18%)**
- Algonquin has the highest average registration of **21 students** and Fanshawe has the lowest of **9 students**
- For the Geographic Information Systems – Cartographic Specialist program, only two colleges offer a graduate certificate program (the information displayed in the Cartographic Specialist application and registration chart shown below is combined with the Application Specialist data)
- Fleming's mean growth rate **(6%)** is much higher than that of the system **(3%)**
- Niagara has a slightly higher mean growth rate compared to the two schools **(7%)**
- Fleming has a higher average registration of **47 students** compared to Niagara's average of **32 students**
- Fanshawe and Sault's graduate certificate programs are 1 year long, and Niagara's Cartographic Specialist program is 3 semesters long

[1] 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: 50303 - GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN

	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
FANSHAWE	41	57	39	57	53	-7	53	50	-6	50	52	4	8	51
Total	***41***	***57***	***39***	***57***	***53***	***-7***	***53***	***50***	***-6***	***50***	***52***	***4***	***8***	***51***

Graduate Certificate

Program: 70303 - GEOGRAPHIC INFORMATION SYSTEMS

	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
FANSHAWE	13	10	-23	10	7	-30	7	7	0	7			-18	9
SAULT	5	9	80	9	15	67	15	14	-7	14	17	21	40	12
Total	***18***	***19***	***6***	***19***	***22***	***16***	***22***	***21***	***-5***	***21***	***17***	***-19***	***-1***	***19***

Program: 70301 - GEOGRAPHIC INFORMATION SYSTEMS

	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
ALGONQUIN	9	24	167	24	27	13	27	23	-15	23	20	-13	38	21
Total	***9***	***24***	***167***	***24***	***27***	***13***	***27***	***23***	***-15***	***23***	***20***	***-13***	***38***	***21***

Program: 70305 - GEOGRAPHIC INFORMATION SYSTEMS - CARTOGRAPHIC SPECIALIST

	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
FLEMING	56	29	-48	29	42	45	42	57	36	57	52	-9	6	47
NIAGARA	25	32	28	32	36	13	36	34	-6	34	31	-9	7	32
Total	***81***	***61***	***-25***	***61***	***78***	***28***	***78***	***91***	***17***	***91***	***83***	***-9***	***3***	***79***

Key Research Findings

Labour Market	• STRONG

Employment Ontario
Not Available

HRSDC[2]
Mapping and Related Technologists and Technicians (NOC – 2255)

- Job Openings (2011/2020): **20,575**
- Job Seekers(2011/2020): **25,962**
- Post-Secondary Education Graduates: **28,845 (111%)**

- "Based on projections and considering that labour supply and demand in this occupation were balanced over the 2008-2010 period, it is expected that the number of job seekers will remain sufficient to fill the job openings over the 2011-2020 period. The majority of job openings will arise from retirements, despite a retirement rate slightly below the average for all occupations. Workers in this occupation are generally younger than those in other occupations. Expansion demand will continue to grow at the rate of economic activity. In spite of a slowdown in growth, the construction sector will continue to create several jobs in this occupation. However, the difficulties that persist in the manufacturing sector will continue to slow down growth, particularly for industrial designers. With regard to labour supply, the majority of job seekers will come from the school system."

US Bureau of Labour
Surveying and Mapping Technicians (SOC – 17-3031)[3]

- Employment Growth (2010/2020): **Increase 16%**
  - **56,900** (2010) to **66,000**(2020)

- "Employment of surveying and mapping technicians is expected to grow 16 percent from 2010 to 2020, about as fast as the average for all occupations. Recent advancements in mapping technology have led to new uses for maps and a need for more of the data used to build maps. As a result, surveying and mapping technicians should have more work."

- "The digital revolution in mapmaking has created a need to harmonize property maps made the traditional way, with maps based on data fed into a GIS. Owners of private property will need to hire surveyors and surveying technicians to gather data in the field."

- "Cities, towns, and counties are finding that the data gathered by surveying and mapping technicians are crucial in implementing systems integration, the process of putting onto one map all the information about wires, pipes, and other underground infrastructure. That way, a city, town, or county can upgrade the entire infrastructure a street at the same time, resulting in savings for the local government."

[2] "Technical Occupations In Architecture, Drafting, Surveying And Mapping (225)." *Human Resources and Skills Development Canada*. N.p., n.d. Web. 21 July 2012. <http://www23.hrsdc.gc.ca/occupationsummarydetail.jsp?&tid=42>.

[3] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Surveying and Mapping Technicians,
on the Internet at http://www.bls.gov/ooh/architecture-and-engineering/surveying-and-mapping-technicians.htm (visited *July 21, 2012*).

Key Research Findings

- "The prevalence of smart phones and other mobile devices with Global Positioning System (GPS) technology has greatly increased the use of maps for finding businesses and other destinations. Surveying and mapping technicians will be needed to provide the data for these maps and to ensure that they are accurate."

Cartographers and Photogrammetrists (SOC – 17-1021)[4]

- Employment Growth (2010/2020):
  - **13,800** (2010) to **16,900** (2020) **Increase 22%**

- "Employment of cartographers and photogrammetrists is expected to grow 22 percent from 2010 to 2020, faster than the average for all occupations."

- "Increasing use of maps for national security and local government planning will fuel most of the growth. Cartographers and photogrammetrists will be needed to ensure the reliability and accuracy of maps produced and updated."

- "Cartographers are also being asked to incorporate into the maps they make the data gathered from social media and Internet technologies."

- "In addition to openings from growth, job openings will arise from the need to replace workers who retire or leave the occupation. Many cartographers are approaching retirement age."
- "Cartographers primarily will be needed to visualize spatial information and design the final presentation of information for clients."

- "Photogrammetrists should have excellent opportunities, because of the limited number of college graduates receiving degrees in this field."

[4] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Cartographers and Photogrammetrists,
on the Internet at http://www.bls.gov/ooh/architecture-and-engineering/cartographers-and-photogrammetrists.htm (visited *July 23, 2012*).

Key Research Findings

Employment Profile[5]

In 2010-2011, **52.4%** of graduates in the Geographic Information Systems – Cartographic Specialists were employed in a full time position which related to this program of study provincially

Civil

Total Graduates:	1,754	Total Graduates in Survey:	1,241	Response Rate:	71.2%

594 graduates were reported after the survey window had closed. While program information for these graduates has been included wherever possible, these graduates are not included in survey results, such as response rates.

Programs in Civil

Programs	Duration	Total Grads	Total in Survey	Total in Labour Force	Colleges
Alternative (Sustainable) Energy Engineering Technology	3 Years	24	12	7	Lambton
Architecture – Project And Facility Management – Bachelor Of Applied Technology	4 Years	29	25	25	Conestoga
Building Construction Technician	2 Years	62	46	40	Algonquin, Canadore
Building Inspection Technician	2 Years	4	3	2	Northern
Civil Engineering Technician	2 Years	104	72	52	Cambrian, Loyalist, Mohawk, Sault, Seneca
Civil Engineering Technology	3 Years	448	332	267	Algonquin, Cambrian, Conestoga, Confederation, Fanshawe, Humber, La Cité, Loyalist, Mohawk, Northern, Seneca, St. Clair, St. Lawrence
Construction And Environment – Regulations And Compliance – Bachelor Of Applied Technology	4 Years	12	7	4	George Brown
Construction Craft Worker Foundations	1 Year	11	5	5	George Brown
Construction Engineering Technician	2 Years	262	177	118	Algonquin, Borréal, Fanshawe, George Brown, La Cité, Loyalist, Mohawk, Northern, Sault, St. Clair
Construction Engineering Technology	3 Years	248	168	143	Borréal, Conestoga, Fanshawe, George Brown, Niagara
Construction Management	Post Diploma	20	17	15	George Brown
Construction Science And Management – Bachelor Of Applied Technology	4 Years	31	21	19	George Brown
Construction Techniques	1 Year	137	105	53	Conestoga, Fanshawe, George Brown, Sault
Geographic Information System	Post Diploma	25	16	14	Algonquin
Geographic Information Systems	Post Diploma	8	7	7	Fanshawe
Geographic Information Systems – Cartographic Specialist	Post Diploma	60	42	34	Niagara, Sir Sandford Fleming
Geographic Information Systems Technician	2 Years	14	9	7	Fanshawe
Geomatics Technician	2 Years	20	15	12	Sir Sandford Fleming
Green Architecture	Post Diploma	17	9	9	Algonquin

Employment Profile: 2009-2010 Graduates 219

[5] "Employment Profile." *Ontario*. N.p., 2011. Web. 19 July 2012. <http://www.tcu.gov.on.ca/pepg/audiences/colleges/serials/eprofile09-10/profile10.pdf>.

Civil

Programs in Civil (cont.)

Programs	Duration	Total Grads	Total in Survey	Total in Labour Force	Colleges
Masonry – Heritage And Traditional	2 Years	23	15	14	Algonquin, George Brown
Masonry Techniques	1 Year	5	2	1	Conestoga
Renovation Techniques	1 Year	159	115	97	Canadore, Georgian, Lambton, Loyalist, Niagara, Sir Sandford Fleming
Survey Technician	2 Years	6	5	3	Loyalist
Sustainable Building Design And Construction	1 Year	25	16	14	Sir Sandford Fleming

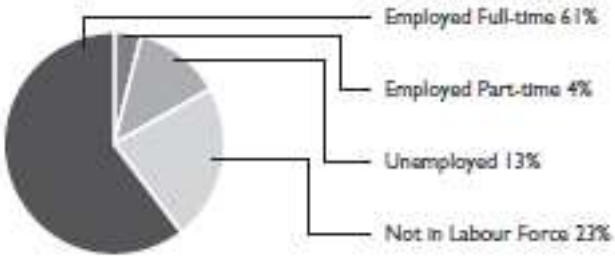
Summary of Survey Data

	Program Cluster	All Programs
Survey Population	1,241	50,622
Labour Force Participation	78%	74%
Employment Rate[a]	**84%**	**83%**
Employed Part-time[a]	5%	18%
Employed Full-time[a]	79%	65%
Average Annual Earnings – Total	**$39,800**	**$33,199**
Average Annual Earnings – Female	$38,213	$31,897
Average Annual Earnings – Male	$40,067	$34,607
Graduate Satisfaction	78%	79%
Employer Satisfaction	91%	93%

a. As a percentage of graduates in the labour force.

Civil

Graduate Outcomes for Program Cluster (as a percentage of all respondents)



Top Five Industries of Employment

	#	%
Construction of Buildings	193	24.5%
Professional, Scientific and Technical Services	176	22.3%
Specialty Trade Contractors	113	14.3%
Heavy and Civil Engineering Construction	47	6.0%
Local, Municipal and Regional Public Administration	29	3.7%

Top Five Occupational Categories

	#	%
Construction Managers	80	10.1%
Civil Engineering Technologists and Technicians	72	9.1%
Carpenters	67	8.5%
Drafting Technologists and Technicians	42	5.3%
Construction Estimators	41	5.2%

Civil

Summary of Graduate Outcomes by Program

	Full-time Employed, Program Related		Full-time Employed, Program Unrelated		Part-time Employed, Program Related		Part-time Employed, Program Unrelated		Unemployed		Not in Labour Force	
	#	%	#	%	#	%	#	%	#	%	#	%
Alternative (Sustainable) Energy Engineering Technology	4	33.3	–	–	–	–	1	8.3	2	16.7	5	41.7
Architecture – Project And Facility Management – Bachelor Of Applied Technology	20	80.0	–	–	–	–	–	–	5	20.0	–	–
Building Construction Technician	24	52.2	8	17.4	1	2.2	–	–	7	15.2	6	13.0
Civil Engineering Technician	33	45.8	9	12.5	–	–	3	4.2	7	9.7	20	27.8
Civil Engineering Technology	195	58.7	25	7.5	2	0.6	4	1.2	41	12.3	65	19.6
Construction Craft Worker Foundations	1	20.0	1	20.0	–	–	1	20.0	2	40.0	–	–
Construction Engineering Technician	77	43.5	21	11.9	2	1.1	3	1.7	15	8.5	59	33.3
Construction Engineering Technology	106	63.1	15	8.9	1	0.6	3	1.8	18	10.7	25	14.9
Construction Management	7	41.2	1	5.9	–	–	1	5.9	6	35.3	2	11.8
Construction Science And Management – Bachelor Of Applied Technology	16	76.2	2	9.5	–	–	–	–	1	4.8	2	9.5
Construction Techniques	30	28.6	14	13.3	–	–	1	1.0	8	7.6	52	49.5
Geographic Information System	8	50.0	1	6.3	1	6.3	2	12.5	2	12.5	2	12.5
Geographic Information Systems	1	14.3	3	42.9	–	–	1	14.3	2	28.6	–	–
Geographic Information Systems – Cartographic Specialist	22	52.4	2	4.8	–	–	1	2.4	9	21.4	8	19.0
Geographic Information Systems Technician	6	66.7	1	11.1	–	–	–	–	–	–	2	22.2
Geomatics Technician	7	46.7	3	20.0	1	6.7	–	–	1	6.7	3	20.0
Green Architecture	3	33.3	4	44.4	–	–	–	–	2	22.2	–	–
Masonry – Heritage And Traditional	7	46.7	1	6.7	–	–	2	13.3	4	26.7	1	6.7
Renovation Techniques	49	42.6	19	16.5	4	3.5	8	7.0	17	14.8	18	15.7
Sustainable Building Design And Construction	7	43.8	–	–	–	–	2	12.5	5	31.3	2	12.5
All Programs In Cluster*	**623**	**50.9**	**130**	**10.6**	**12**	**1.0**	**33**	**2.7**	**154**	**12.6**	**272**	**22.2**

* Does not include 4 programs with fewer than 5 graduates in the labour force.

Civil

Earnings of Full-time Employed Participants

Program	Average – Females	Average – Males	Median – Females	Median – Males	Average for Program	Median for Program
Alternative (Sustainable) Energy Engineering Technology	–	–	–	–	–	–
Architecture – Project And Facility Management – Bachelor Of Applied Technology	–	$41,555	–	$42,000	$42,059	$42,000
Building Construction Technician	–	$29,180	–	$28,679	$29,163	$28,679
Civil Engineering Technician	–	$41,885	–	$37,771	$41,064	$37,271
Civil Engineering Technology	$40,903	$43,119	$40,857	$41,714	$42,899	$41,714
Construction Craft Worker Foundations	–	–	–	–	–	–
Construction Engineering Technician	–	$39,219	–	$36,292	$38,956	$35,770
Construction Engineering Technology	$36,618	$43,000	$36,271	$41,149	$42,536	$40,679
Construction Management	–	$58,464	–	$60,000	$58,464	$60,000
Construction Science And Management – Bachelor Of Applied Technology	–	$44,106	–	$46,500	$44,165	$46,000
Construction Techniques	–	$31,985	–	$28,157	$31,587	$28,157
Geographic Information System	–	$39,081	–	$43,000	$44,926	$48,142
Geographic Information Systems	–	–	–	–	–	–
Geographic Information Systems – Cartographic Specialist	$44,659	$46,311	$46,929	$47,000	$45,733	$46,964
Geographic Information Systems Technician	–	$35,960	–	$31,286	$34,967	$31,286
Geomatics Technician	–	$36,879	–	$35,457	$36,879	$35,457
Green Architecture	–	$48,041	–	$45,000	$45,867	$43,000
Masonry – Heritage And Traditional	–	$37,081	–	$34,414	$37,081	$34,414
Renovation Techniques	$28,072	$30,790	$25,029	$29,600	$30,560	$29,200
Sustainable Building Design And Construction	–	–	–	–	$33,295	$31,286
All Programs in Cluster*	**$38,122**	**$40,099**	**$39,629**	**$40,000**	**$39,913**	**$40,000**

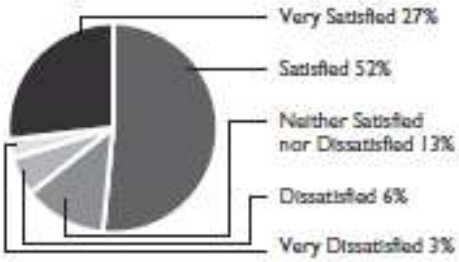
* Does not include 4 programs with fewer than 5 graduates in the labour force.

Key Research Findings

Civil

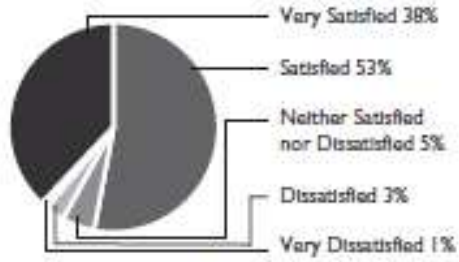
Program Cluster Satisfaction

Graduate Satisfaction with the usefulness of his/her college education in achieving his/her goals after graduation:*



* 1,187 graduates participated in this question.

Employer Satisfaction with employee overall college preparation for the type of work he/she was doing:*



* 203 employers participated in this survey.

Program Cluster Historical Data

	00-01 Grads	01-02 Grads	02-03 Grads	03-04 Grads	04-05 Grads	05-06 Grads	06-07 Grads	07-08 Grads	08-09 Grads	09-10 Grads
Percentage Employed	89.2%	87.8%	89.2%	89.7%	89.2%	91.9%	92.5%	92.0%	85.8%	83.8%
Percentage Employed Full-time	85.8%	84.1%	85.4%	86.5%	85.2%	88.3%	88.8%	87.3%	78.2%	78.9%
Percentage Employed Full-time Related Jobs	75.0%	71.5%	74.0%	72.7%	74.2%	75.3%	78.2%	76.9%	65.5%	65.1%
Average Annual Salary Full-time Related Jobs	$33,600	$33,675	$35,107	$37,379	$36,165	$37,915	$38,792	$40,824	$40,676	$41,303

Key Research Findings

Working in Canada[6]

Mapping and Related Technologists and Technicians (NOC – 2255)

- Ontario Rating: **Not Available**

- **Wage Range by Region:**

Location	Wage ($/hr)		
	Low	Median	High
Ontario	13.94	23.08	38.46
Hamilton--Niagara Peninsula Region	17.00	22.00	38.46
Kingston - Pembroke Region	13.94	23.08	38.46
Kitchener--Waterloo--Barrie Region	13.00	24.04	41.58
London Region	13.94	23.08	38.46
Muskoka-Kawarthas Region	13.94	23.08	38.46
Northeast Region	17.98	22.03	32.21
Northwest Region	N/A	N/A	N/A
Ottawa Region	13.94	23.08	38.46
Stratford--Bruce Peninsula Region	N/A	N/A	N/A
Toronto Region	13.00	22.12	38.97
Windsor-Sarnia Region	N/A	N/A	N/A

Competitive Analysis[7] • 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

- Fanshawe has had a relatively consistent conversion ratio of **3:1** throughout the past five years

Advanced Diploma

- For the Geographic Information System program, Sault had the best conversion ratio in 2011 **(2:1)** and Algonquin had the lowest **(4:1)**

- Over the five year time span, Fanshawe had the lowest conversion ratio, spanning from **5:1** to as low as **11:1**

- For the Geographic Information Systems – Cartographic Specialist program, both Fleming and Niagara had the same conversion ratio of **3:1**

[6] "Mapping and Related Technologists and Technicians (NOC 2255) ." *Working in Canada*. N.p., n.d. Web. 21 July 2012. <http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=2255&action=final®ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=geographic+information+systems+%28GIS%29+technic>.

[7] 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: 50303 - GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN															
	App. 2007	Reg. 2007	Conversion Ratio	App. 2008	Reg. 2008	Conversion Ratio	App. 2009	Reg. 2009	Conversion Ratio	App. 2010	Reg. 2010	Conversion Ratio	App. 2011	Reg. 2011	Conversion Ratio
FANSHAWE	128	41	3:1	166	57	3:1	197	53	4:1	156	50	3:1	179	52	3:1
Total	***128***	***41***	***3:1***	***166***	***57***	***3:1***	***197***	***53***	***4:1***	***156***	***50***	***3:1***	***179***	***52***	***3:1***

Graduate Certificate

Program: 70303 - GEOGRAPHIC INFORMATION SYSTEMS															
	App. 2007	Reg. 2007	Conversion Ratio	App. 2008	Reg. 2008	Conversion Ratio	App. 2009	Reg. 2009	Conversion Ratio	App. 2010	Reg. 2010	Conversion Ratio	App. 2011	Reg. 2011	Conversion Ratio
FANSHAWE	68	13	5:1	66	10	7:1	79	7	11:1	64	7	9:1	56		
SAULT	32	5	6:1	27	9	3:1	42	15	3:1	50	14	4:1	40	17	2:1
Total	***100***	***18***	***6:1***	***93***	***19***	***5:1***	***121***	***22***	***6:1***	***114***	***21***	***5:1***	***96***	***17***	***6:1***

Program: 70301 - GEOGRAPHIC INFORMATION SYSTEMS															
	App. 2007	Reg. 2007	Conversion Ratio	App. 2008	Reg. 2008	Conversion Ratio	App. 2009	Reg. 2009	Conversion Ratio	App. 2010	Reg. 2010	Conversion Ratio	App. 2011	Reg. 2011	Conversion Ratio
ALGONQUIN	73	9	8:1	69	24	3:1	92	27	3:1	78	23	3:1	80	20	4:1
Total	***73***	***9***	***8:1***	***69***	***24***	***3:1***	***92***	***27***	***3:1***	***78***	***23***	***3:1***	***80***	***20***	***4:1***

Program: 70305 - GEOGRAPHIC INFORMATION SYSTEMS - CARTOGRAPHIC SPECIALIST															
	App. 2007	Reg. 2007	Conversion Ratio	App. 2008	Reg. 2008	Conversion Ratio	App. 2009	Reg. 2009	Conversion Ratio	App. 2010	Reg. 2010	Conversion Ratio	App. 2011	Reg. 2011	Conversion Ratio
FLEMING	191	56	3:1	153	29	5:1	163	42	4:1	187	57	3:1	174	52	3:1
NIAGARA	84	25	3:1	82	32	3:1	104	36	3:1	113	34	3:1	95	31	3:1
Total	***275***	***81***	***3:1***	***235***	***61***	***4:1***	***267***	***78***	***3:1***	***300***	***91***	***3:1***	***269***	***83***	***3:1***

Key Research Findings

Financial Analysis	NO CONTRIBUTION

Source: Program Costing Analysis 2010/2011

Geographical Information Systems – Applications Specialist	Contribution to Overhead: -5.2% Program Weight: 1.00 Funding Unit: 1.60
Geographical Information Systems – Cartographic Specialist	Contribution to Overhead: -8.6% Program Weight: 1.00 Funding Unit: 1.60

Key Performance Indicators	• WEAK

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

GIS Applications Specialist		
Key Performance Indicators	KPI1-Graduation Rate	Even with system
	KPI2-Working	-3% below system
	KPI3-Working Related	+10% above system
	KPI4-Grad. Satisfaction	Even with system
	KPI8-Student Satisfaction-Learning	-2% below system
	KPI9-Student Satisfaction- Teachers	-4% below system
	KPI11-Grad. Satisfaction-Program	+4% above system
GIS Cartography Specialist		
Key Performance Indicators	KPI1-Graduation Rate	-4% below system
	KPI2-Working	-4% below system
	KPI3-Working Related	-2% below system
	KPI4-Grad. Satisfaction	-5% below system
	KPI8-Student Satisfaction-Learning	-23% below system
	KPI9-Student Satisfaction- Teachers	-19% below system
	KPI11-Grad. Satisfaction-Program	-6% below system

Resource Analysis

Equipment

The following information was extracted from the 2008 program review:

- Currently, the GIS and the Geomatics programs at Fleming share equipment and physical resources and these resources are adequate

Staffing

Space

Appendix

The following is the original environmental scan conducted by the Library Researchers to form the basis of the previous summary of Key Research Findings Report.

Note: I tried to research both of these programs separately, but there was so much overlap in the information on the profession and the other educational institutes, I eventually combined them or they would have just been almost duplicate documents.

Overview of the Profession:

Did not pursue information under
2172 Database Analyst
Or
2171 Information Systems Analysts & Consultants
2255 seems to encompass both programs but could revisit these NOC codes/professions if needed.

NOC: 2255 – Mapping and Related Technologists and Technicians
Job Duties
Cartographic technologists and technicians perform some or all of the following duties:

- Plan map content, format and design and compile required data from aerial photographs, survey notes, records, reports and other maps
- Generate maps and related graphs and charts using digital mapping techniques, computer interactive graphics, computer assisted design and drafting (CAD) software, traditional drafting methods and computer or traditional scribing tools
- Inspect final compositions to ensure completeness and accuracy.

Photogrammetric technologists and technicians perform some or all of the following duties:

- Examine and interpret aerial photographs to prepare topographic maps, aerial-photograph mosaics and related charts
- Operate digitized stereoscopic plotting and computer graphics equipment to provide three-dimensional optical models of terrain, to trace maps, and to prepare charts and tables.

Aerial survey technologists and technicians perform some or all of the following duties:

- Operate airborne remote sensing equipment such as survey film or digital cameras, laser or radar sensors and scanners which produce images of large areas of the earth, coastline, or of the atmosphere
- Monitor recording quality and adjust equipment as required and inspect quality of recorded images.

Remote sensing technologists and technicians perform some or all of the following duties:

- Operate analog or computer-based remote sensing interpretive equipment to prepare images, graphic and alphanumeric reports, maps and charts from airborne or satellite data
- Develop specialized analog and computer software specific routines to customize and integrate image analysis
- Verify the integrity and accuracy of data contained in remote sensing image analysis systems.

Geographic information systems (GIS) technologists and technicians perform some or all of the following duties:

- Operate specialized computer hardware and software and peripheral equipment to model, manage, analyze and display geospatial data
- Develop specialized computer software routines, Internet based GIS, database and business applications to customize geographic information
- Work with external organizations on data transfer and systems compatibility issues

- Perform data entry and editing activities and maintenance operations to systems following pre-determined calibration procedures
- Integrate external software such as spreadsheets and statistical packages with GIS software
- Train and provide technical support for GIS users.

Included Job Titles
aerial survey technician
cartographer
cartographic technician
geographic information systems (GIS) technician
map editor
mapping technician
photogrammetric technologist
photogrammetrist
remote sensing (RS) technician
softcopy photogrammetrist

Labour Market
Working in Canada

1. Employment potential for the Kawartha Region or anywhere else in Ontario is "Not Available' (Working in Canada)

http://www.workingincanada.gc.ca/report-eng.do?lang=eng&noc=2255&area=8792&titleKeyword=cartographer&regionKeyword=Lindsay,+Ontario&source=0&action=final

HRDSC

2. National Outlook – 10-Year Projection (2011-2020)

http://www23.hrsdc.gc.ca/occupationsummarydetail.jsp?&tid=42

This occupation (Geographic Information Systems – Cartographic Specialist) is part of a larger occupational group called Technical Occupations In Architecture, Drafting, Surveying And Mapping (225)

Occupations in this group	Architectural Technologists and Technicians (2251) Industrial Designers (2252) Drafting Technologists and Technicians (2253) Survey Technologists and Technicians (2254) Mapping and Related Technologists and Technicians (2255)
Employment (non-student) in 2010	63,813
Median Age of workers in 2010	38.3 years old
Average Retirement Age in 2010	59 years old

3. For **Technical Occupations In Architecture, Drafting, Surveying And Mapping**, over the 2011-2020 period, job openings (arising from expansion demand and replacement demand) are expected to total **20,600** and **25,962** job seekers (arising from school leavers, immigration and mobility) are expected to be available to fill the job openings.

4. Over the 2008-2010 period, this occupation experienced solid employment growth, but its unemployment rate rose as well. The average hourly wage increased at the same rate as the average for all occupations. According to key labour market indicators, the number of job seekers was sufficient to fill the job openings in this occupation.

5. According to Employment Ontario the Opportunities for employment in this occupation are not available

6. What percentage of people in this occupation are self-employed?

Key Research Findings

According to the 2006 Census, 5% of people in this occupation were self-employed, while the average for all occupations was 12%.
The Labour Force Survey also gives us some information about self-employment. This occupation (**Mapping and Related Technologists and Technicians**) is part of a larger group called **Technical Occupations in Architecture, Drafting, Surveying and Mapping (NOC 225)**. According to the Labour Force Survey (2009), 13% of workers in this group were self-employed, while the average for all occupations was 16%.

7. Local Wage for Muskoka-Kawarthas Region

Low - $13.94 Median $23.08 High $38.46

http://www.workingincanada.gc.ca/print_report-eng.do?area=8792&area=8792&lang=eng&noc=2255&noc=2255&descrtiption=descrtiption&education_local=education_local&education_national=education_national&education_provincial=education_provincial&included_cities=included_cities&included_titles=included_titles&intro_select_all=intro_select_all&job_opps_local=job_opps_local&job_opps_national=job_opps_national&job_opps_provincial=job_opps_provincial&licence_local=licence_local&licence_national=licence_national&licence_provincial=licence_provincial&main_duties=main_duties&outlook_local=outlook_local&outlook_national=outlook_national&outlook_provincial=outlook_provincial&related_occupations=related_occupations&s=3&sections_select_all=sections_select_all&skills_local=skills_local&skills_national=skills_national&skills_provincial=skills_provincial&submit=Print+Preview&wages_local=wages_local&wages_national=wages_national&wages_provincial=wages_provincial

US Bureau of Labour
Surveying & Mapping Technicians
http://www.bls.gov/ooh/Architecture-and-Engineering/Surveying-and-mapping-technicians.htm#tab-6
Job Outlook
Surveying and Mapping Technicians
Percent change in employment, projected 2010-20
Surveying and Mapping Technicians
16%
Total, All Occupations
14%
Drafters, Engineering Technicians, and Mapping Technicians
6%

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program

Employment of surveying and mapping technicians is expected to grow 16 percent from 2010 to 2020, about as fast as the average for all occupations. Recent advancements in mapping technology have led to new uses for maps and a need for more of the data used to build maps. As a result, surveying and mapping technicians should have more work.

The digital revolution in mapmaking has created a need to harmonize property maps made the traditional way, with maps based on data fed into a GIS. Owners of private property will need to hire surveyors and surveying technicians to gather data in the field.

Cities, towns, and counties are finding that the data gathered by surveying and mapping technicians are crucial in implementing systems integration, the process of putting onto one map all the information about wires, pipes, and other underground infrastructure. That way, a city, town, or county can upgrade the entire infrastructure a street at the same time, resulting in savings for the local government.
The prevalence of smart phones and other mobile devices with Global Positioning System (GPS) technology has greatly increased the use of maps for finding businesses and other destinations. Surveying and mapping technicians will be needed to provide the data for these maps and to ensure that they are accurate.

Key Research Findings

Employment projections data for surveying and mapping technicians, 2010-20						
Occupational Title	SOC Code	Employment, 2010	Projected Employment, 2020	Change, 2010-20		Employment by Industry
				Percent	Numeric	
SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program						
Surveying and Mapping Technicians	17-3031	56,900	66,000	16	9,000	[XLS]

Job Outlook
Cartographers and Photogrammetrists
Percent change in employment, projected 2010-20
Architects, Surveyors, and Cartographers
24%
Cartographers and Photogrammetrists
22%
Total, All Occupations
14%

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program
Employment of cartographers and photogrammetrists is expected to grow 22 percent from 2010 to 2020, faster than the average for all occupations.
Increasing use of maps for national security and local government planning will fuel most of the growth. Cartographers and photogrammetrists will be needed to ensure the reliability and accuracy of maps produced and updated.
Cartographers are also being asked to incorporate into the maps they make the data gathered from social media and Internet technologies.
In addition to openings from growth, job openings will arise from the need to replace workers who retire or leave the occupation. Many cartographers are approaching retirement age.
Cartographers primarily will be needed to visualize spatial information and design the final presentation of information for clients.

Job Prospects
Photogrammetrists should have excellent opportunities, because of the limited number of college graduates receiving degrees in this field.

Employment projections data for cartographers and photogrammetrists, 2010-20						
Occupational Title	SOC Code	Employment, 2010	Projected Employment, 2020	Change, 2010-20		Employment by Industry
				Percent	Numeric	
SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program						
Cartographers and Photogrammetrists	17-1021	13,800	16,900	22	3,100	[XLS

Professional Associations:
URISA (Urban and Regional Information Systems Association) - http://www.urisa.org/

Key Research Findings

URISA – Ontario Chapter http://www.urisaoc.ca/
Canadian Cartographic Association - http://www.cca-acc.org/home.asp
North American Cartographic Information Society - http://www.nacis.org/

Employment Requirements

http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2255

- Completion of secondary school is required.
- Geomatics technologists require completion of a two- to three-year college program in cartography, photogrammetry, aerial survey, remote sensing, geographic information system or geomatics.
- Geomatics technicians require completion of a one- to two-year college program in cartography, photogrammetry, aerial survey, remote sensing, geographic information system or geomatics.
- In Quebec, membership in the regulatory body for professional technologists is required to use the title ''Professional Technologist''.
- Meteorological technicians require completion of a one-year meteorological technician program provided by the Meteorological Service of Canada.
- Further specialized training is available for meteorological technicians, and may be required by some employers.

Educational Competitors
http://www.ontariocolleges.ca/SearchResults/ENERGY-ENVIRONMENTAL-NATURAL-RESOURCES-GEOGRAPHIC-INFORMATION-SYSTEMS-GIS-/_/N-lltz
Fleming College – Geographic Information Systems - Cartographic Specialist
http://flemingcollege.ca/programs/geographic-information-systems-cartographic-specialist

Fleming College – Geographic Information Systems – Applications Specialist
http://flemingcollege.ca/programs/geographic-information-systems-applications-specialist

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Algonquin College – Geographic Information Systems (Graduate Certificate -
http://www2.algonquincollege.com/sat/program/geographic-information-systems/

Fanshawe College – Geographic Information Systems – (Graduate Certificate- 8 month)
http://www.fanshawec.ca/programs-courses/full-time-programs/gis1

Fanshawe College – Geographic Information Systems & Urban Planning
(2 year diploma)
http://www.fanshawec.ca/programs-courses/full-time-programs/urp2

Niagara College – Geographic Information Systems – Geospatial Management (1 year /3 semesters – graduate certificate)
http://www.niagaracollege.ca/content/Programs/EnvironmentalStudies/GeographicInformationSystemsGeospatialMgmt.aspx

Sault College - Geographic Information Systems – Applications Specialist
(1 year – 2 semesters – post-graduate certificate)
http://www.saultcollege.ca/Programs/Programs.asp?progcode=4018&cat=overview&groupcode=COM#bd-header
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Key Research Findings

College	APS	APS Title	MTCU	MTCU Title	WT	FU	TF
ALGO	1367	Geographic Information Systems	70301	Geographic Information System	1.00	1.50	1.50
FANS	1247	Geographic Information Systems (gis)	70303	Geographic Information Systems	1.00	0.90	1.00
FANS	1186	Gis And Urban Planning	50303	Geographic Information Systems Technician	1.00	2.20	2.00
NIAG	1199	Geograpic Information Systems - Geospacial Management	70305	Geographic Information Systems - Cartographic Specialist	1.00	1.60	1.50
SAUL	1134	Geographic Information Systems - Applications Specialist	70303	Geographic Information Systems	1.00	0.90	1.00
SSFL	1169	Geographic Information Systems - Cartographic Specialist	70305	Geographic Information Systems - Cartographic Specialist	1.00	1.60	1.50
SSFL	1216	Geographic Information Systems - Applications Specialist	70305	Geographic Information Systems - Cartographic Specialist	1.00	1.60	1.50

Employment Postings:
GIS Technician - Contract Job

-Jun-2012
Location: Mississauga, ON, CA
GIS Technician - Contract

Location: CA-ON-Mississauga
Job ID: 2012-7930
Area of Interest: Geographics - GIS
Job Type: Contract
# of Positions: 1
Education (Minimum): College Diploma
Posted Date: 6/26/2012
Experience (Years): 2
SLP: J2WN/A
Job Responsibilities:
Golder is looking for a motivated individual to join the **Mississauga**, Ontario office as a **GIS Technician** supporting

multiple internal clients. The successful candidate must have experience and be comfortable working in GIS, have a client focus and consulting approach, as well as excellent interpersonal skills as they will be working with clients and staff at all levels within our company.

This is a **6 month contract** position with the possibility of full-time employment.

Duties will include but are not limited to:
- Communicating and operating in a professional and courteous manner with team members, Project Managers, and clients;
- Managing the mapping components of various projects using GIS software including ArcGIS;
- Assist in preparing maps, drawings, figures, sketches, charts and presentation posters for use in proposals and design reports;
- GIS data analysis, file management, database management, spatial data capture, structuring and integration into GIS data themes;
- GIS data conversion between multiple file formats;
- Be responsible for product quality control with adherence to company standards;
- Responsible for assisting with print production of reports and proposals;
- Report to and review project work with Senior GIS personnel;
- Working collaboratively with staff from other Golder offices, as required, to meet project and client needs;
- Some travel to other Golder offices may be required;
- Learning about and progressing in the consulting business;
- Performing other administrative and technical project duties as required;
- Demonstrating a “Safety-First” focus and acting as a role model to other staff; and,
- Maintaining a high standard of behaviour to uphold Golder’s reputation and demonstrating a commitment to our Core Values.

Job Requirements:
To be successful in this role, you will have the following qualifications:
- Successful completion of one or more of the following: Cartography Technologist and or GIS Specialist post-secondary education;
- Minimum 2 years related GIS use and analyses experience;
- Experienced knowledge of the following software is **essential**: ESRI ArcMap, MS Excel/Access/Word;
- Experienced knowledge of the following software will be considered an **asset**: gINT Borehole Logging (or equivalent logging software), Surfer, and Grapher;
- Demonstrated ability to work simultaneously with several project managers on multiple projects;
- Possess the appropriate ethical standards to maintain the reputation of the company;
- Very strong oral and written communication skills;
- Very strong organizational skills and detail-oriented;
- Demonstrated ability to meet tight deadlines and work under pressure;
- Good time management skills;
- Strong people skills and an ability to work in a team environment;
- Willing to learn several in-house or specialty software programs;
- Ability to learn various calculation and reporting software;
- Possess a valid Ontario Driver’s License; and,
- Safety oriented attitude. In addition, to be successful at Golder you should possess the following attributes: an ownership attitude, an ability to take the initiative, enthusiasm, a passion for learning and growth, the willingness to ask questions, versatility and flexibility, a detail and quality focused outlook, good judgment, and a sound work ethic.

Additional Information:

Regularly ranked as one of the best companies to work for.

Key Research Findings

At Golder Associates we strive to be the most respected global company providing consulting, design, and construction services in our specialist areas of earth, environment, and the related areas of energy. Employee owned since our formation in 1960, our focus, unique culture and operating environment offer opportunities and the freedom to excel, which attracts the leading specialists in our fields. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth, now employing more than 8,000 people who operate from more than 180 offices located throughout Africa, Asia, Australasia, Europe, North America, and South America.

To join our team of leaders in **ground engineering** and **environmental sciences** go to **www.golder.ca** to apply and check out more career opportunities across Canada.
No phone calls please. We thank all the individuals who expressed interest. Only those individuals who are selected for interviews will be contacted.

Job Segments: Consulting, Data, Data Analyst, Data Conversion, Database, Engineer, Engineering, Geology, GIS, QC, Quality, Technician, Technology

SENIOR GIS and MAPPING MANAGER

THORNHILL, ON
For more than 50 years, MMM Group has offered comprehensive planning, engineering, geomatics and program / project management services across a broad range of market sectors. With strong client relationships and solid industry knowledge, we help our clients seize opportunities, understand and address challenges, identify and manage risks, and navigate relevant regulatory systems. And we provide an unparalleled team to execute the plan. This entrepreneurial and comprehensive approach benefits our clients, and positions us as industry leaders on the national and international stages.
Our integrated, multi-disciplined approach, understanding of key business and project drivers and ability to provide flexible and responsive service from offices across Canada and beyond, ensures that our clients receive innovative, practical and sustainable project development and delivery solutions that enable them to successfully address the challenges of today's complex and rapidly changing business environment.
Take the next step in your career. Join a great employer - one that is innovative, highly successful and committed to helping you realize your full potential.
Be Challenged. Be Known. Be Among Friends.
Position Description:
MMM Group requires a Senior GIS and Mapping Manager to continue the development of our firm's enterprise GIS and mapping disciplines. This position requires a broad range of business development, management and technical skills. The Senior Manager would report directly to the Executive Vice President responsible for the Geomatics Business Unit of MMM Group.
Responsibilities and Duties:
Business Development Skills

- Actively develop GIS and mapping related business within the public and private sector
- Review requests for EOIs, RFQs and RFPs to develop a clear understanding of compliance issues and client needs, and to establish the required deliverables
- Coordinate the proposal response from initial enquiry to final submission, setting timelines and deliverables and ensuring milestones are met
- Continue to develop and support existing GIS and mapping related needs within the MMM Group business units

Management Skills

- Respond to GIS and mapping related proposals
- Develop schedules and to manage complex multi-disciplined projects
- Communicate technical information in a non-technical manner

Key Research Findings

Qualifications:

- Bachelor's Degree in Geomatics, Earth Science, Geography, Computer Science or related discipline
- Six years' experience supporting GIS and mapping applications, compensation dependent on experience. All experience levels encouraged to apply.
- Excellent written and verbal English communication skills
- Superior organizational and time-management skills and the ability to multi-task, take initiative and work with minimal supervision
- Attention to detail and accuracy of work
- Personable and strong team player
- Ambitious and willing to grow within the company
- Good Project Management and Marketing skills
- Experience with ArcGIS and associated extensions
- Database management, database design and systems management
- Design geospatial modeling and to perform real analysis and data manipulation
- Remote sensing, especially photogrammetry and LiDAR.
- Geodetic datums and mapping projections
- AutoCad, Arcview, Global Mapper
- Surveying principles and practises.

Associate – GIS / Geo-Spatial Analyst (9605770)

Job Type: Internship
Location: Mississauga, ON, CANADA;
Job Category: Geosciences, Telecommunications, Engineering-Geological
Industry: Telecommunications
Number Of Positions: 2
Date Posted: Jan 11, 2012

Key Research Findings

Why Bell

At Bell we are committed to your professional development and career growth. If you are looking to make your career aspirations a reality, choose Bell. Better careers start here.

Associate – GIS / Geo-Spatial Analyst, Bell Mobility
Professional Management Program
Geo-Spatial Analysis at the PMP

Bell Mobility is seeking talented individuals to join the Geo-Spatial Analysis (GSA) team for its acclaimed unpaid internship at the Professional Management Program (PMP) in our state of the art Mississauga campus. Advance your industry knowledge and skills while being part of a major Canadian brand in an advanced GIS setting. Gain valuable experience ranging from map creation, database management and geospatial analysis in a multi-disciplinary environment equipped for those looking to build their technical and analytical skills.

Candidates from Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science and Environmental Studies are all encouraged to apply as projects may be customized to the candidate's strengths and pre-dispositions. Associates and staff come from over 20 countries and recognized institutions like Ryerson University's Masters of Spatial Analysis Program, Harvard, MIT and the Indian Institute of Technology and Beijing University of Technology.

The PMP is a holistic career transition for those with relevant experience garnered from academic, business or personal pursuits. This endorsed program can also meet requirements for co-op and practicum courses of post secondary and post graduate schools.

A PORTFOLIO OF OPPORTUNITIES

- **Apply** GIS methods and theories gained from your educational and personal experience in a highly dynamic team based setting.
- **Conduct** studies such as neighbourhood clustering, trade area analysis, hot routes selection, city strategy and cannibalization impacts to further foster your professional growth.

Key Research Findings

- **Interact** and network with other GSA Associates and receive guidance, feedback and industry tips for a well rounded personal and professional developmental experience.
- Network with other professionals and keep yourself updated with industry software, technology, methods and capabilities.
- **GIS Conferences and Webinars** hosted by companies like DMTI and ESRI, may be available subject to program offerings.

GREAT COLLABORATIVE PROJECTS

- **Research GIS Tools** in support of various GPS methods (eg. Garmin/Tom-Tom GPS Systems) field study applications in BlackBerry and iPhones.
- **Data and Map Analysis** involving the study of retail locations gathering observations for various market strategy reports.
- **Thematic Map Creation** based on a variety of datasets. Learn cartographic principles while producing maps at a retail, neighbourhood and CMA level.
- **GIS-based Workshops.** Attend and facilitate our Visual Analytics curriculum of GIS related topics such as Retail Layout, Ad Messaging and Out-of-Home Advertising.
- **Field Studies** including the collection and organization of spatial-based data such as Points of Interest (POI), ad placement and traffic for neighbourhood and retail studies.

ADVANCED GSA FUNCTIONS AND RESPONSIBILITIES

- Work on industry leading software while developing your transferable technical skills, such as ArcGIS, MapInfo, Google Earth Pro, Geo-Pinpoint, AutoCAD Map 3D, and 3D Sketch-up.
- Take part in our advanced curriculum and learn how to function through Microsoft Access, SQL Server, SPSS and ArcSDE as a platform for larger datasets.
- Maintain and develop our spatial database library through geo-processing tools for digitizing, geo-referencing and geo-coding used for further analysis and mapping.
- Experiment with different software extensions to further your technical ability such as Network Analyst, Arc2Earth and xTools Pro.
- Engage in techniques related to Market Segmentation, Trade Area Analysis while applying concepts such as Thiessen polygons, Buffering and Cross-tabulation.

HOLISTIC PROFESSIONAL ENGAGEMENT

- **Display** your work through various channels including executive-level research reports, PMP's digital signage, and visual presentations for the MAI staff.
- **Develop** a strong sense of our data policies and confidentiality through a variety of geo-database management techniques and workshops.
- **Gain experience** and knowledge through developing and facilitating GSA workshops within our advanced Learning Lab outfitted with i7 Macbooks and large multi-touch screens.
- **Make use** of our 42" and 62" wide HP Plotters capable of producing 5'x15' wide maps; employ Garmin GPS devices for accurate readings for field study data collection and leverage our 55" multi-touch screen for thematic maps and applications.

INNOVATIVE DEVELOPMENT PROGRAM

Complementing the opportunity in Geo-Spatial Analysis, the PMP provides substantial professional and personal development based on our highly acclaimed interactive workshops, media-rich events, career coaching and guest speakers in an engaging environment.

You will receive on-the-job training, real world action oriented experience, cross-functional team exposure, supportive mentorship and access to our customized reference process for career and academic pursuits. Successful associates have garnered exceptionally high placement rates within Bell and many small to large organization, as well as with various graduate programs around the globe.

Alongside understanding the dynamic telecommunications industry, you will continuously participate in projects aimed at strengthening the program, your peers, and ultimately your

own development to become a well-rounded professional.
Visit http://www.thepmp.ca for a complete brochure of our key benefits and opportunities.

QUALIFICATIONS

- Positive attitude, motivated, organized
- Great communication skills, detailed-oriented, problem solver, critical thinking abilities
- Performs well in a rapidly evolving environment with strict deadlines
- Strong knowledge of Microsoft Office (Word, Excel, PowerPoint)
- Working knowledge of ArcGIS and/or MapInfo, AutoCAD and Map3D
- Experience with Manifold, SQL and/or SPSS is an asset
- Familiarity with ArcSDE, Database Design and Management and Visual Basic is an asset
- Applicants with Retail/Sales/Advertising & Market Research experience are encouraged to apply
- Helpful qualifications include fluency in french, vehicle access and evening/weekend availability

DETAILS

To view our capabilities and more information about the GSA Department, please visit:
http://www.youtube.com/Connect2GSA
Apply now at http://www.thepmp.ca, attaching your resume and cover letter.
With our **93%** satisfaction rate and high referral levels, the PMP receives significant applications daily. Due to the thorough nature of the recruitment process, we appreciate your patience.
We thank all interested applicants; only those considered for interviews will be contacted.

Geo-Information Analyst

Air Energi

A major global operator requires a Geo-Information Analyst to join their team in Calgary.
Purpose - To manage spatial data for one or a number of business project teams. To utilize Geographic Information Systems (GIS) applications and tools for spatial manipulation and analysis of such data. To develop workflows and work with the GIS & GIM team to locate or design and utilize GIS tools in the Upstream Americas (UA) businesses.
Accountabilities - To manage spatial data specific to the project team, in accordance with corporate standards. To ensure that project data is attributed with proper metadata, that it is published appropriately to corporate or global data stores, and that it is geodetically sound.
To utilize the ArcGIS Desktop suite to analyze spatial relationships between data. This includes: gridding, contouring, and 3D visualizations; areal relations between features; statistical trend analyses; and correlations between data sets.
To present the data and the results of the analyses in the form of maps, charts, graphs, or web services which are cartographically complete, correct, clear, and concise. To create key business maps and produce ad-hoc or on-off maps.
To identify, create, and improve workflows dealing with spatial data exchanges between G&G software applications. To create scripts, tools, or models where appropriate to enhance the data flow and analysis.

To promote and share the power and possibilities of GIS technologies with peers and customer groups in support of staff learning and development.
To promote the correct management/storage of project data associated with GIS

Dimensions - The GI Analyst has no budget control or direct reports. (S)He influences budget decisions through recommendations of data, software purchases, and evaluations of new hardware. (S)He must act as the GIS authority for the project team, as well as manage geodetic issues with the Geodetic Specialist. The GI Analyst has a role as informal leader of Technical Associates providing a steering role to ensure alignment and standardization of workflows within the organization to the group also supporting the project team with regards to geo-spatial data, cartographic standards, and geodetics.
The GI Analyst must be familiar with the data holdings and organization to successfully serve his/her project team. A failure in the accuracy or integrity of Geo-Information can lead to millions of dollars of exposure – access delays to the information alone can lead to lost efficiencies and decisions made without complete data. The role is critical to many aspects of the business. The potential risks are as varied as the applications and processes that use GIS and Geo-Information. Data quality, accessibility, and accuracy are all risks especially when used in such activities as survey operations, emergency response, HSE management, production reporting, reserves mapping, prospect management, or play risking.
Special Challenges - GIS technology is quickly evolving and growing, so a significant challenge is to stay current with new techniques and applications of the tools.
Data volumes and types are expanding rapidly within Shell; locating and managing data under these conditions require specialized tools, skills and knowledge.
Understanding the relationships and flow of data among the Geomatics and G&G applications and associated workflows.

EXPERIENCE & QUALIFICATIONS - Must possess, as a minimum, a Bachelor's degree from a recognized university, in Geomatics or in a directly-related subject area.
A thorough understanding of mapping and cartographic principles
An understanding of the E&P business and where GIS and Geo-Information impacts business decisions.

Status:	Contract
Required Qualifications:	Bachelors Degree
Desired Qualifications:	Bachelors Degree
Minimum Experience:	5 years
Location:	Calgary, CANADA

Advert Published:	7 Jun 2012
Expiry date:	7 Jul 2012
Air Energi Ref. No.:	Req//016256
OilCareers Ref. No.:	J743469
Work Permit Requirements:	CANADA (Applications will only be considered from people who are authorised to work in this location by being a national of that country or region, or by holding a valid work permit.)

Job Number: 6516010
Title: GIS (geographic information system) technician (ESRI (ArcGIS Server)) (NOC: 2255)

Key Research Findings

Terms of Employment: Temporary, Full Time, Day
Salary: $30,000.00 to $70,000.00 Yearly for 37.5 hours per week
Anticipated Start Date: As soon as possible
Location: Ottawa, Ontario (1 vacancy)
Skill Requirements:
Education: Not required

Credentials (certificates, licences, memberships, courses, etc.): Not required

Experience: 3 years to less than 5 years

Languages: Speak English, Read English, Write English

Area of Specialization: Geographic information systems

Specialized Equipment and Systems: Computer graphic systems

Operating Systems and Software: Geographic information system - GIS

Specific Skills: Develop specialized analogue and computer software

Security and Safety: Secret clearance

Essential Skills: Reading text, Document use, Numeracy, Writing, Oral communication, Working with others, Problem solving, Decision making, Critical thinking, Job task planning and organizing, Significant use of memory, Finding information, Computer use, Continuous learning

Employer: inRound Innovations (Placement Agency)
How to Apply:
Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: jobs@inround.com
Web Site: http://www.inRound.com/careers
Advertised until: 2012/07/17

Bell Professional Management Program
Associate - GIS Database Coordinator
About the Job
Associate – GIS Database Coordinator, Bell Mobility
Professional Management Program

Bell Mobility is seeking talented individuals to join the Geo-Spatial Analysis (GSA) team for its acclaimed full time unpaid internship at the Professional Management Program (PMP) in its state of the art Mississauga campus. Advance your GSA industry knowledge and skills while being part of a major Canadian brand in an advanced GIS setting. Gain valuable experience ranging from map creation, GIS database management and geospatial analysis in a multi-disciplinary environment equipped for those looking to build their technical and geospatial analytical skills.

Candidates from Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science and Environmental Studies are all encouraged to apply as projects may be customized to the candidate's strengths and pre-dispositions. Associates and staff come from over 40 countries

and recognized institutions like Ryerson University's Masters of Spatial Analysis Program, Harvard, MIT and the Indian Institute of Technology and Beijing University of Technology.

The PMP is a holistic career transition for those with relevant experience garnered from academic, business or personal pursuits. This endorsed program can also meet requirements for co-op and practicum courses of post secondary and post graduate schools.

A PORTFOLIO OF OPPORTUNITIES

- Apply GIS/database management skills and theories gained from your educational and personal experience in a highly dynamic team based setting.
- Manage spatial database (e.g. field intelligence data) for the GSA team.
- Interact and network with other GSA Associates and receive guidance, feedback and industry tips for a well rounded personal and professional developmental experience.
- Network with other professionals in the geospatial industry and keep yourself updated with the latest GIS industry software, technology, methods and capabilities.
- GIS Conferences and Webinars hosted by companies like DMTI and ESRI, may be available subject to program offerings.

GREAT COLLABORATIVE PROJECTS

- Participate in various studies and projects conducted by the Geo-Spatial Analysts for better understanding of their workflow.
- Examine the current workflow within the Geo-Spatial Analysis team and improve the efficiency of database management process.
- GIS based Data and Map Analysis involving the study of retail locations gathering observations for various market strategy reports.
- Field Studies including the collection and organization of spatial-based data such as Points of Interest (POI), ad placement and traffic for neighbourhood and retail studies to drive strategic GSA reports and initiatives.
- GIS-based Workshops. Attend and facilitate our Visual Analytics curriculum of GIS related topics such as Retail Layout, Ad Messaging and Out-of-Home Advertising for better understanding of the use of GIS in market analyses.

ADVANCED GIS DBA FUNCTIONS AND RESPONSIBILITIES

- Work with different datasets produced by various GIS applications such as ArcGIS, MapInfo, Google Earth Pro, Geo-Pinpoint, AutoCAD Map 3D, and 3D Sketch-up.
- Investigate a method of proper installation/configuration of ArcSDE within the existing system.
- Maintain the quality of current geodatabase and ensure the data integrity.
- Take part in our advanced curriculum and learn how to function through Microsoft Access, SQL Server, SPSS and ArcSDE as a platform for larger datasets for better understanding of advanced use of spatial database management systems in business intelligence.
- Develop various SQL queries for the team on needs.
- Understand advanced analytical processes such as Market Segmentation or Trade Area Analysis to perform advanced manipulation of the GIS user interface.

HOLISTIC PROFESSIONAL ENGAGEMENT

- Display your work through various channels including executive-level GIS research reports, PMP's digital signage, and visual presentations for the MAI staff
- Develop a strong sense of our data policies and confidentiality through a variety of geo-database management techniques and workshops
- Gain experience and knowledge through developing and facilitating GSA workshops within our advanced Learning Lab outfitted with i7 Macbooks and large multi-touch screens.

- Make use of our 42" and 62" wide HP Plotters capable of producing 5'x15' wide maps; employ Garmin GPS devices for accurate geo-coding for field study data collection and leverage our 55" multi-touch screen for thematic GIS maps and applications
- Engage in a balanced developmental experience in GIS Database Administration with complementary hands-on work within Spatial Data Creation and Quality Assurance, Field Study Engagement and GIS Map Creation

INNOVATIVE DEVELOPMENT PROGRAM

Complementing the opportunity in Geo-Spatial Analysis, the PMP provides substantial professional and personal development based on our highly acclaimed interactive workshops, media-rich events, career coaching and guest speakers in an engaging environment.
You will receive on-the-job training, real world action oriented experience, cross-functional team exposure, supportive mentorship and access to our customized reference process for career and academic pursuits.
Successful associates have garnered exceptionally high placement rates within Bell and many small to large organization, as well as with various graduate programs around the globe.
Alongside understanding the dynamic telecommunications industry, you will continuously participate in projects aimed at strengthening the program, your peers, and ultimately your own development to become a well-rounded professional.

Visit http://www.thepmp.ca for a complete brochure of our key benefits and opportunities.

QUALIFICATIONS

- Positive attitude, motivated, organized
- Great communication skills, detailed-oriented, problem solver, critical thinking abilities
- Performs well in a rapidly evolving environment with strict deadlines
- Database Design and Management using MS SQL Server 2008 R2 and MS Access
- Familiarity with ArcSDE is an asset
- Knowledge of ArcObjects and geoprocessing is an asset
- Working knowledge of ArcGIS Desktop, ArcGIS Server and/or MapInfo, AutoCAD, Manifold and Map3D is an asset
- Applicants with Retail/Sales/Advertising & Market Research experience are encouraged to apply
- Helpful qualifications include fluency in French, vehicle access and evening/weekend availability

DETAILS

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We thank all interested applicants; only those considered for interviews will be contacted.

Reference: GIS, Geo-Spatial Analyst, Geography Marketing Analysis, Technician, Modeling, Cartographic
Application Code: GSA, GIS, Geography, Geo-Spatial Analyst, Cartographic Technician, GIS Technician, Modeling Analyst, Geomatics specialist

Preference is given to applicants who possess aptitude or experience in any of the following: Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science, Environmental Studies map creation, GIS database management and geospatial analysis, geospatial analytical skills.

Bell – Professional Management Program
Associate – GIS / Cartographic Technician
About the Job
Associate – GIS / Cartographic Technician
Professional Management Program

Bell Mobility is seeking talented individuals to join the Geo-Spatial Analysis (GSA) team for its acclaimed full time unpaid developmental opportunity at the Professional Management Program (PMP) in its state of the art Mississauga campus. Advance your GSA industry knowledge and skills while being part of a major Canadian brand in an advanced GIS setting. Gain valuable experience ranging from map creation, GIS database management and geospatial analysis in a multi-disciplinary environment equipped for those looking to build their technical and geospatial analytical skills.

Candidates from Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science and Environmental Studies are all encouraged to apply as projects may be customized to the candidate's strengths and pre-dispositions. Associates and staff come from over 40 countries and recognized institutions like Ryerson University's Masters of Spatial Analysis Program, Harvard, MIT, the Indian Institute of Technology and Beijing University of Technology.

The PMP is a holistic career transition for those with relevant experience garnered from academic, business or personal pursuits. This endorsed program can also meet requirements for co-op and practicum courses of post secondary and post graduate schools.

A PORTFOLIO OF OPPORTUNITIES

- Apply GIS methods and geographic marketing theories gained from your educational and personal experience in a highly dynamic team based setting.
- Conduct cartographic and master planning studies such as neighbourhood clustering, trade area analysis, hot routes selection, city strategy and cannibalization impacts to further foster your professional and GIS knowledge growth.
- Interact and network with other GSA Associates and receive guidance, feedback and industry tips for a well rounded personal and professional developmental experience.
- Network with other professionals in the geospatial industry and keep yourself updated with the latest GIS industry software, technology, methods and capabilities.
- GIS Conferences and Webinars hosted by companies like DMTI and ESRI, may be available subject to program offerings.

Key Research Findings

GREAT COLLABORATIVE PROJECTS

- Thematic Map Creation based on a variety of datasets. Learn cartographic principles while producing maps at a retail, neighbourhood and CMA level.
- GIS based Data and Map Analysis involving the study of retail locations gathering observations for various market strategy reports.
- Field Studies including the collection and organization of spatial-based data such as Points of Interest (POI), ad placement and traffic for neighbourhood and retail studies to drive strategic GSA reports and initiatives.
- Research GIS Tools in support of various GPS methods (eg. Garmin/Tom-Tom GPS Systems) field study applications in BlackBerry and iPhones.
- GIS-based Workshops. Attend and facilitate our Visual Analytics curriculum of GIS related topics such as Retail Layout, Ad Messaging and Out-of-Home Advertising.

ADVANCED GSA FUNCTIONS AND RESPONSIBILITIES

- Work on industry leading GIS software while developing your transferable technical skills, such as ArcGIS, MapInfo, Google Earth Pro, Geo-Pinpoint, AutoCAD Map 3D, and Google 3D Sketch-up.
- Enhance your knowledge of cartographic design principles to effectively explain large and complex data trends by using simple, easy to understand maps that focus the attention of the viewer.
- Take part in our advanced curriculum and learn how to function through Microsoft Access, SQL Server, SPSS and ArcSDE as a platform for larger geospatial datasets.
- Experiment with different ArcGIS Extensions to further your technical ability such as Arc2Earth, Maplex and Data Interoperability.
- Engage in techniques related to Market Segmentation and Trade Area Analysis while applying concepts such as Thiessen polygons, Buffer and Cross-tabulation.
- Maintain and develop our spatial database library through geo-processing tools for digitizing, geo-referencing and geo-coding used for further analysis and mapping.

HOLISTIC PROFESSIONAL ENGAGEMENT

- Display your work through various channels including executive-level GIS research reports, PMP’s digital signage, and visual presentations for the MAI staff
- Develop a strong sense of our data policies and confidentiality through a variety of geo-database management techniques and workshops
- Gain experience and knowledge through developing and facilitating GSA workshops within our advanced Learning Lab outfitted with i7 Macbooks and large multi-touch screens.
- Make use of our 42" and 62" wide HP Plotters capable of producing 5’x15’ wide maps; employ Garmin GPS devices for accurate geo-coding for field study data collection and leverage our 55" multi-touch screen for thematic GIS maps and applications
- Engage in a balanced developmental experience in Cartographic Design with complementary hands-on work within Spatial Data Creation and Quality Assurance, Field Study Engagement and GIS Database Administration

INNOVATIVE DEVELOPMENT PROGRAM

Complementing the opportunity in Geo-Spatial Analysis, the PMP provides substantial

professional and personal development based on our highly acclaimed interactive workshops, media-rich events, career coaching and guest speakers in an engaging environment.
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Alongside understanding the dynamic telecommunications industry, you will continuously participate in projects aimed at strengthening the program, your peers, and ultimately your own development to become a well-rounded professional.

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QUALIFICATIONS

- Positive attitude, motivated, organized
- Great communication skills, detailed-oriented, problem solver, critical thinking abilities
- Performs well in a rapidly evolving environment with strict deadlines
- Strong knowledge of Microsoft Office (Word, Excel, PowerPoint)
- Working knowledge of ArcGIS and/or MapInfo, AutoCAD and Map3D
- Experience with Manifold, SQL and/or SPSS is an asset
- A thorough knowledge of mapping and cartographic concepts/principles
- Familiarity with ArcSDE, Database Design and Management and Visual Basic is an asset
- Applicants with Retail/Sales/Advertising & Market Research experience are encouraged to apply
- Helpful qualifications include fluency in French, vehicle access and evening/weekend availability

DETAILS

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Reference: GIS, Geo-Spatial Analyst, Geography Marketing Analysis, Technician, Modeling, Cartographic

Key Research Findings

Application Code: GSA, GIS, Geography, Geo-Spatial Analyst, Cartographic Technician, GIS Technician, Modeling Analyst, Geomatics specialist
Preference is given to applicants who possess aptitude or experience in any of the following: Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science, Environmental Studies map creation, GIS database management and geospatial analysis, geospatial analytical skills.

Key Research Findings

Bell – Professional Management Program
Associate - GIS Data and Analysis
About the Job
Associate – GIS / Geo-Spatial Analyst, Bell Mobility
Professional Management Program

Geo-Spatial Analysis at the PMP

Bell Mobility is seeking talented individuals to join the Geo-Spatial Analysis (GSA) team for its acclaimed unpaid internship at the Professional Management Program (PMP) in its state of the art Mississauga campus. Advance your (GSA) industry knowledge and skills while being part of a major Canadian brand in an advanced GIS setting. Gain valuable experience ranging from map creation, GIS database management and geospatial analysis in a multi-disciplinary environment equipped for those looking to build their technical and geospatial analytical skills.

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A PORTFOLIO OF OPPORTUNITIES

- Apply GIS methods and geographic marketing theories gained from your educational and personal experience in a highly dynamic team based setting.
- Conduct geospatial studies such as neighbourhood clustering, trade area analysis, hot routes selection, city strategy and cannibalization impacts to further foster your professional and GIS growth.
- Interact and network with other GSA Associates and receive guidance, feedback and industry tips for a well rounded personal and professional developmental experience.
- Network with other professionals from the geospatial industry and keep yourself updated with the latest GIS software, technology, methods and capabilities.
- GIS Conferences and Webinars hosted by companies like DMTI and ESRI, may be available subject to program offerings.

GREAT COLLABORATIVE PROJECTS

- Research GIS Tools in support of various GPS methods (eg. Garmin/Tom-Tom GPS Systems) field study/geospatial applications in BlackBerry and iPhones.
- GIS Data and Map Analysis involving the study of retail locations gathering observations for various market strategy reports and GIS map creation
- Thematic Map Creation based on a variety of datasets. Learn cartographic principles while producing maps at a retail, neighbourhood and CMA level.
- GIS-based Workshops. Attend and facilitate our Visual Analytics curriculum of GIS related topics such as Retail Layout, Ad Messaging and Out-of-Home Advertising.
- Field Studies including the collection and organization of spatial-based data such as Points of Interest (POI), ad placement and traffic for neighbourhood and retail studies to drive strategic GSA reports and initiative.

ADVANCED GSA FUNCTIONS AND RESPONSIBILITIES

Key Research Findings

- Work on industry leading GIS software while developing your transferable technical skills, such as ArcGIS, MapInfo, Google Earth Pro, Geo-Pinpoint, AutoCAD Map 3D, and 3D Sketch-up.
- Take part in our advanced curriculum and learn how to function through Microsoft Access, SQL Server, SPSS and ArcSDE as a platform for larger geospatial datasets.
- Maintain and develop our spatial database library through geo-processing tools for digitizing, geo-referencing and geo-coding used for further analysis and mapping.
- Experiment with different software extensions to further your technical ability such as Network Analyst, Arc2Earth and xTools Pro.
- Engage in techniques related to Market Segmentation, Trade Area Analysis while applying concepts such as Thiessen polygons, Buffering and Cross-tabulation.

HOLISTIC PROFESSIONAL ENGAGEMENT

- Display your work through various channels including executive-level GIS research reports, PMP's digital signage, and visual presentations for the MAI staff.
- Develop a strong sense of our data policies and confidentiality through a variety of geo-database management techniques and workshops.
- Gain experience and knowledge through developing and facilitating GSA workshops within our advanced Learning Lab outfitted with i7 Macbooks and large multi-touch screens.
- Make use of our 42" and 62" wide HP Plotters capable of producing 5'x15' wide maps; employ Garmin GPS devices for accurate readings for field study data collection and leverage our 55" multi-touch screen for thematic GIS maps and applications.

INNOVATIVE DEVELOPMENT PROGRAM

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QUALIFICATIONS

- Positive attitude, motivated, organized
- Great communication skills, detailed-oriented, problem solver, critical thinking abilities
- Performs well in a rapidly evolving environment with strict deadlines
- Strong knowledge of Microsoft Office (Word, Excel, PowerPoint)
- Working knowledge of ArcGIS and/or MapInfo, AutoCAD and Map3D
- Experience with Manifold, SQL and/or SPSS is an asset
- Familiarity with ArcSDE, Database Design and Management and Visual Basic is an asset
- Applicants with Retail/Sales/Advertising & Market Research experience are encouraged to apply
- Helpful qualifications include fluency in french, vehicle access and evening/weekend availability

DETAILS

Key Research Findings

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Reference: GIS, Geo-Spatial Analysis
Application Code: GSA, GIS Associate, Geography, Junior Geo-Spatial Analyst
Preference is given to applicants who possess aptitude or experience in any of the following: Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science, Environmental Studies map creation, GIS database management and geospatial analysis, geospatial analytical skills.
Bell Professional Management Program
Associate – GIS Application Developer
About the Job
Associate – GIS Application Developer, Bell Mobility
Professional Management Program

Bell Mobility is seeking talented individuals to join the Geo-Spatial Analysis (GSA) team for its acclaimed full time unpaid developmental opportunity at the Professional Management Program (PMP) in its state of the art Mississauga campus. Advance your GSA industry knowledge and skills while being part of a major Canadian brand in an advanced GIS setting. Gain valuable experience ranging from map creation, GIS database management and geospatial analysis in a multi-disciplinary environment equipped for those looking to build their technical and geospatial analytical skills.

Candidates from Geography, Urban Planning, Geomatics, Civil Engineering, Geographic Information Systems, Spatial Analysis, Computer Science and Environmental Studies are all encouraged to apply as projects may be customized to the candidate's strengths and pre-dispositions. Associates and staff come from over 40 countries and recognized institutions like Ryerson University's Masters of Spatial Analysis Program, Harvard, MIT and the Indian Institute of Technology and Beijing University of Technology.

The PMP is a holistic career transition for those with relevant experience garnered from academic, business or personal pursuits. This endorsed program can also meet requirements for co-op and practicum courses of post secondary and post graduate schools.

A PORTFOLIO OF OPPORTUNITIES

- Apply GIS/programming skills and geographic marketing theories gained from your education and personal experience in a highly dynamic team based setting.
- Develop solutions on GIS software such as ESRI ArcGIS Platform.
- Interact and network with other GSA Associates and receive guidance, feedback and industry tips for a well rounded personal and professional developmental experience.
- Network with other professionals in the geospatial industry and keep yourself updated with the latest GIS industry software, technology, methods and capabilities.
- GIS Conferences and Webinars hosted by companies like DMTI and ESRI, may be available subject to program offerings.

Key Research Findings

GREAT COLLABORATIVE PROJECTS

- Participate in various studies and projects conducted by the Geo-Spatial Analysts for better understanding of type of the work.
- Examine the workflow within the Geo-Spatial Analysis team and improve the efficiency with customized tools.
- Research/Development of geospatial mobile apps for BlackBerry, iPhones and Android-powered phones for field intelligence.
- Investigation of Web cartographic (mapping) for possible internal/external use.
- GIS-based Workshops. Attend and facilitate our Visual Analytics curriculum of GIS related topics such as Retail Layout, Ad Messaging and Out-of-Home Advertising for better understanding of the use of GIS in market analyses.
- Field Studies including the collection and organization of spatial-based data such as Points of Interest (POI), ad placement and traffic for neighbourhood and retail studies drive strategic GSA reports and initiatives.

ADVANCED GIS DEVELOPER FUNCTIONS AND RESPONSIBILITIES

- Work on customization of GIS-related software such as ArcGIS, MapInfo, Google Earth Pro, Geo-Pinpoint, AutoCAD Map 3D, and 3D Sketch-up.
- Investigate a method of automating spatial processing algorithms.
- Take part in our advanced curriculum and learn how to function through Microsoft Access, SQL Server, SPSS and ArcSDE as a platform for larger geospatial datasets for better understanding of advanced use of spatial database management systems in business intelligence.
- Experiment with different GIS software extensions to provide more powerful method of spatial analysis such as Maplex, Arc2Earth and Data Interoperability.
- Understand advanced analytical processes such as Market Segmentation or Trade Area Analysis to perform advanced manipulation of the GIS user interface.

HOLISTIC PROFESSIONAL ENGAGEMENT

- Display your work through various channels including executive-level GIS research reports, PMP's digital signage, and visual presentations for the MAI staff.
- Develop a strong sense of our data policies and confidentiality through a variety of geo-database management techniques and workshops.
- Gain experience and knowledge through developing and facilitating GSA workshops within our advanced Learning Lab outfitted with i7 Macbooks and large multi-touch screens.
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- Engage in a balanced developmental experience in GIS Application Development with complementary hands-on work within Spatial Data Creation and Quality Assurance, Field Study Engagement and GIS Map Creation

INNOVATIVE DEVELOPMENT PROGRAM

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QUALIFICATIONS

- Positive attitude, motivated, organized
- Great communication skills, detailed-oriented, problem solver, critical thinking abilities
- Performs well in a rapidly evolving environment with strict deadlines
- Experience in .NET, Visual Basic 6 or C++
- Knowledge of ArcObjects and geoprocessing is an asset
- Working knowledge of ArcGIS Desktop, ArcGIS Server, ArcSDE and/or MapInfo, AutoCAD and Map3D is an asset
- Working knowledge of JavaScript, HTML, KML, Silverlight, Flex, Web Services is an asset
- Applicants with Retail/Sales/Advertising & Market Research experience are encouraged to apply
- Helpful qualifications include fluency in French, vehicle access and evening/weekend availability

DETAILS

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GIS Developer – The Weather Network – Oakville
Posted onby tmackinnon in GIS jobs, Job Seekers
Nature is full of surprises, but your future doesn't have to be. Plan a fulfilling career today.
About Us: Named one of Canada's 50 Best Managed Companies for the 6th consecutive year and recognized as one of Greater Toronto's Top Employers for 2010, 2011 and 2012…
The Weather Network and its French counterpart, MétéoMédia, are both owned by Pelmorex Media Inc., and are among the top media brands in Canada devoted to Canadians' favourite topic of conversation – the weather! The Weather Network and MétéoMédia are the most frequently watched specialty networks, the number one visited News and Information websites and the most comprehensive mobile weather source in Canada.

About The Role: GIS Developer
Location: ***Oakville, Ontario***
Reporting to the Director, GIS Services and Profiling, the GIS Developer is responsible for designing, developing and maintaining enterprise-scale GIS applications in accordance with agreed standards and procedures. The incumbent will support and maintain GIS systems architecture, helping to ensure service levels are maintained and solutions meet user requirements.

Responsibilities:

- Undertake development work on new and existing GIS applications.
- Assist with formal analysis of user requirements with regard to new and existing systems, and provide appropriate design documentation.
- Ensure developed software is robust, performs as expected and meets the user's functional requirements.
- Ensure developed software has undergone unit and system testing prior to handover to the production team.
- Assist in estimating the effort and time involved in the tasks that have been delegated to the team.
- Working with non-GIS developers to integrate GIS functionality into customized standalone and web-based solutions
- Operate proactively within an environment of closely managed projects, providing regular task updates and supporting project management processes.
- Participate in quality reviews, constantly striving to improve working practices.
- Assist with the development and management of geospatial data within an enterprise environment.
- Integrate and design functionality to help automate processes where appropriate.
- Work with Operations to ensure all systems function as intended and without impediment to existing products or processes.
- Assist in quality assurance testing, including the development and execution of test plans.
- Liaise with partners and vendors to ensure successful integration of content and/or systems.
- Act as a project leader when required.
- Perform other development activities as determined by the Director.

Roles, responsibilities and duties may evolve and change over time.

Qualifications:

- University degree or College diploma in Computer Science, Information Technology or a related discipline.
- Minimum 3 years related job experience.
- Technical experience with GIS applications, specifically ESRI ArcGIS 9.x/10.x (or more recent version) products including ArcGIS Desktop, ArcGIS Server and ArcSDE on SQL Server.
- Experience with relational database management systems, including MS SQL 2005/2008, with strong proficiency in SQL.
- Application development or programming including ArcObjects, .NET or JavaScript, VBA in ArcMap, ESRI JavaScript/Flex/Silverlight APIs, Python (optional).
- Experience of one or more of the following: VB, VB.NET, JavaScript, C#.NET, ASP.NET, Flex/ActionScript (optional), Silverlight Framework (asset).
- Developing and consuming web services.
- A good working knowledge of geographic information management and spatial data standards.
- Experience with FME workbench and server technologies (optional).
- Experience with data modeling and system design methodologies.
- Experience with application development using ESRI's ArcObjects, APIs and ArcGIS add-in.
- Experience in geodatabase design and administration.
- Experience in advanced geo-processing techniques.

Competencies:

- Sound technical knowledge of Geographic Information Systems
- Ability to work under pressure, meet deadlines and quickly analyze a problem.
- Excellent analytical, problem-solving and decision-making skills.
- Works well as a member of a team.

- Critical thinker and analytical problem solver.
- Attention to detail and accuracy.
- Strong written and verbal communication skills.
- Well-developed organization and documentation skills.
- Ambition and interest to contribute to new process improvement.

*Qualified applicants should submit their resume to: Human Resources, Fax: 905-829-1332 or email:hr@pelmorex.com. Please quote: "**GIS Developer**" in the subject line. Pelmorex is committed to equity in the workplace. We thank all applicants for their interest, but only those selected for an interview will be contacted. As a condition of employment, this position is subject to the successful completion of pre-employment reference checks.*

Benefits:

Our comprehensive benefits plan includes health, dental, Group RSP, vision care and educational assistance and fitness allowance.

Our Beliefs:

- Respect for all individuals
- Meet and exceed client expectations
- Exercise integrity and responsibility in the performance of all business activities
- Work as a team and help each other
- Have a winning attitude – there is always a solution
- Display initiative and creativity – continually look for new and better ways
- Challenge yourself – learn and develop new skills
- Pursue excellence

For more information on Pelmorex Media Inc. and its affiliated businesses, please visit TheWeatherNetwork.com

STANTEC

Survey Party Chief

Job ID:	2012-13774	# of Openings Remaining:	1
Location:	CA-ON-North Bay	Experience (Years):	5
Posted Date:	6/22/2012	Category:	Geomatics

Submit your Resume for this job:

- Submit your Resume for this job online
- Refer a friend to this job

More information about this job:

Overview:

Stantec's Geomatics team consists of a large and diverse group with capabilities across North America. Using conventional GPS, robotic, and 3D laser scanning techniques, Stantec offers both public and private sector clients the full range of services including boundary surveying, topographic mapping, construction layout, geodetic and control surveys, aerial photogrammetry, GIS services, route surveys, as-builts, and more. Our professional and technical staff provide services for transportation, land development, buildings, environmental, and industrial projects throughout the US and Canada. Stantec is a place where we measure project and career success in some of the most rewarding ways possible, and offer career opportunities as unique as you are.

Responsibilities:

Our Geomatics group in North Bay, Ontario has a new opportunity for a **Survey Party Chief**, as a result of our growing business. *This is a great opportunity for those who are looking to grow and advance their careers in an expanding, multidisciplinary environment.* Working as a strong member of a multi-disciplinary team, the successful candidate must be experienced with all levels of surveying and geomatics procedures, project management, and client relations. Our clients/project base includes residential, commercial and industrial development, utilities, roadways, bridges, environmental, and institutional works.

Additional responsibilities include, but are not limited to:

- Working closely with engineers and contractors to layout infrastructure
- Mentoring junior and intermediate staff in construction surveys
- Maintaining a complete set of modern survey equipment as well as a survey vehicle

Develop and implement procedures to improve efficiency and accuracy

Qualifications:

The successful candidate will possess the following:

- Survey Technology or Engineering Technology Diploma from a recognized post- secondary institution
- 5 to 10 years of survey experience in boundary surveys, topographic surveys, control surveys, monitoring surveys and construction layout services
- Excellent communication and leadership ability; strong attention to detail and expertise in building client relationships are also essential
- Experience and proficiency with the latest Trimble GNSS, Total Station, AutoCAD and Civil 3D
- Clean driving record is required, driver's abstract will be requested prior to starting

We offer all candidates the opportunity to challenge their abilities in a dynamic work environment and your efforts will be recognized through a competitive compensation program.