

# 2012 APEGS Salary Survey Summary Results



The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted via email a total of 4,270 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Licensees living in Saskatchewan. A total of 1,486 members completed the survey representing a 34.8 per cent response rate. Of those, 1,444 were employed full time and used in the analysis. Surveys were completed from mid February to mid March 2012 and salaries reported were as at December 31, 2011. Insightrix Research Inc. compiled and tabulated all results. The detailed report from Insightrix can be found on the APEGS web site at [www.apegs.sk.ca](http://www.apegs.sk.ca)

## The main goals of the survey are:

- to provide information to all members regarding monetary compensation for different levels of responsibility and advanced degrees;
- to provide information to employers to assist them in establishing appropriate pay levels for recent graduates and ensuring competitive compensation packages for experienced professionals; and
- to give students, career counsellors and other interested persons information on employment, including salaries, in the engineering and geoscience professions in Saskatchewan.

## Annual Salary by Designation

DESIGNATION	COUNT	MEAN	5	25	MEDIAN	75	95	%
P.Eng.	845	\$111,053	\$70,000	\$88,000	\$104,000	\$126,000	\$178,500	58.5%
P.Geo.	56	\$117,573	\$84,000	\$100,000	\$110,000	\$131,742	\$180,000	3.9%
P.Eng. and P.Geo	9	NA	NA	NA	NA	NA	NA	.6%
Engineering License	7	NA	NA	NA	NA	NA	NA	.5%
Engineer-in-Training	493	\$68,382	\$51,480	\$59,000	\$66,000	\$75,000	\$90,000	34.1%
Geoscientist-in-Training	33	\$83,834	\$53,000	\$75,000	\$81,000	\$90,000	\$127,000	2.3%
	<b>1443</b>							<b>100%</b>

\*NA = Not available due to reporting rules

## Annual Salary by Discipline

DISCIPLINE	COUNT	MEAN	5	25	MEDIAN	75	95	%
Agriculture and Forestry	30	\$82,751	\$51,480	\$64,500	\$79,500	\$92,130	\$130,000	2.1%
Chemical, Ceramic and Metallurgical	69	\$106,149	\$63,000	\$78,800	\$100,000	\$125,000	\$175,000	4.8%
Civil	285	\$90,046	\$55,000	\$67,500	\$81,163	\$105,000	\$153,000	19.7%
Electrical and Engineering Physics	226	\$93,247	\$53,250	\$70,000	\$90,000	\$108,000	\$155,000	15.7%
Environmental	89	\$89,842	\$57,000	\$70,000	\$83,482	\$101,125	\$146,500	6.2%
Geological, Mining, Petro. Engineering	134	\$109,811	\$65,000	\$80,636	\$103,250	\$130,000	\$180,000	9.3%
Geosciences, Geology	88	\$100,171	\$59,000	\$80,000	\$90,925	\$122,500	\$150,000	6.1%
Mechanical and Industrial	360	\$94,655	\$55,000	\$69,300	\$88,000	\$112,504	\$150,500	24.9%
Software Engineering	23	\$86,636	\$54,300	\$61,000	\$70,000	\$92,400	\$160,000	1.6%
Other	140	\$105,731	\$57,247	\$76,500	\$97,719	\$126,000	\$193,500	9.7%
	<b>1444</b>							<b>100%</b>

## Annual Salary by Degrees

DEGREES	COUNT	MEAN	5	25	MEDIAN	75	95	%
Bachelor's or academically qualified	985	\$92,864	\$55,000	\$68,000	\$84,000	\$108,000	\$160,000	68.2%
Between Bachelor and Master's	195	\$98,961	\$59,573	\$75,000	\$93,000	\$115,000	\$151,000	13.5%
Master's	177	\$103,636	\$60,000	\$80,000	\$97,437	\$120,000	\$185,300	12.3%
Between Master's and Doctorate	22	\$128,418	\$73,800	\$93,000	\$111,500	\$170,000	\$180,000	1.5%
Doctorate	65	\$107,736	\$60,000	\$90,000	\$106,000	\$126,500	\$150,001	4.5%
	<b>1444</b>							<b>100%</b>

## Annual Salary by Final Year of Graduation (B.Sc.)

YEAR	COUNT	MEAN	5	25	MEDIAN	75	95	%
<1976	51	\$151,133	\$84,000	\$110,000	\$138,000	\$174,544	\$235,000	3.6%
1977	10	\$128,914	\$95,000	\$106,000	\$116,869	\$150,000	\$185,000	0.7%
1978	21	\$143,019	\$95,000	\$110,000	\$127,000	\$169,000	\$225,000	1.5%
1979	13	\$139,482	\$95,266	\$130,000	\$142,000	\$145,000	\$195,000	0.9%
1980	12	\$128,841	\$69,634	\$121,228	\$135,000	\$141,000	\$180,000	0.8%
1981	11	\$136,802	\$86,000	\$108,000	\$135,000	\$155,000	\$212,000	0.8%
1982	22	\$127,329	\$75,000	\$100,000	\$109,327	\$150,401	\$215,000	1.5%
1983	17	\$144,396	\$90,000	\$120,000	\$143,000	\$165,000	\$250,000	1.2%
1984	13	\$130,320	\$82,000	\$105,000	\$120,000	\$135,860	\$241,000	0.9%
1985	17	\$117,799	\$84,450	\$99,802	\$110,000	\$123,000	\$187,000	1.2%
1986	27	\$128,880	\$84,000	\$101,000	\$125,000	\$155,000	\$200,000	1.9%
1987	32	\$117,795	\$88,000	\$95,250	\$112,162	\$126,500	\$180,000	2.2%
1988	21	\$116,968	\$92,000	\$105,000	\$118,500	\$128,232	\$150,000	1.5%
1989	24	\$118,608	\$78,720	\$97,500	\$112,014	\$132,500	\$167,000	1.7%
1990	18	\$132,362	\$73,416	\$107,000	\$118,556	\$142,000	\$307,500	1.3%
1991	18	\$118,751	\$80,142	\$95,000	\$115,000	\$136,000	\$200,000	1.3%
1992	16	\$118,518	\$96,000	\$109,084	\$117,500	\$123,560	\$160,000	1.1%
1993	22	\$117,303	\$86,564	\$106,700	\$114,000	\$128,000	\$155,000	1.5%
1994	33	\$119,035	\$61,000	\$105,000	\$115,000	\$135,000	\$170,000	2.3%
1995	30	\$120,829	\$80,000	\$90,000	\$119,500	\$145,000	\$180,000	2.1%
1996	28	\$113,741	\$79,900	\$95,500	\$106,356	\$128,000	\$162,500	2.0%
1997	31	\$111,830	\$70,000	\$90,984	\$105,000	\$129,000	\$150,000	2.2%
1998	30	\$98,969	\$65,000	\$80,000	\$97,153	\$110,000	\$150,000	2.1%
1999	47	\$99,726	\$66,500	\$80,000	\$100,000	\$115,000	\$155,000	3.3%
2000	43	\$97,017	\$66,000	\$82,810	\$96,000	\$109,000	\$132,000	3.0%
2001	57	\$96,447	\$75,000	\$87,000	\$95,000	\$104,281	\$139,900	4.0%
2002	55	\$94,834	\$65,000	\$83,000	\$92,000	\$106,000	\$126,300	3.9%
2003	48	\$93,246	\$67,008	\$80,000	\$91,000	\$104,100	\$132,000	3.4%
2004	58	\$86,945	\$61,000	\$75,000	\$85,500	\$97,500	\$128,000	4.1%
2005	82	\$84,601	\$60,000	\$74,200	\$84,500	\$92,000	\$110,000	5.8%
2006	69	\$80,924	\$55,185	\$67,750	\$80,000	\$90,000	\$110,000	4.8%
2007	83	\$74,375	\$53,250	\$64,770	\$74,000	\$82,000	\$104,000	5.8%
2008	93	\$75,589	\$57,600	\$67,000	\$73,000	\$82,000	\$95,625	6.5%
2009	86	\$68,658	\$55,500	\$60,639	\$66,800	\$73,700	\$90,000	6.0%
2010	96	\$64,753	\$52,000	\$57,460	\$61,950	\$70,000	\$80,636	6.7%
2011	90	\$60,448	\$45,000	\$55,000	\$58,750	\$66,000	\$80,570	6.3%
	<b>1424</b>							<b>100%</b>

## Annual Salary by Function

FUNCTION	COUNT	MEAN	5	25	MEDIAN	75	95	%
Corporate Management	102	\$147,133	\$93,000	\$112,000	\$139,500	\$160,000	\$230,000	7.1%
Design	329	\$79,129	\$52,000	\$61,500	\$73,200	\$89,000	\$125,000	22.8%
Exploration	33	\$70,300	\$51,000	\$57,000	\$64,064	\$75,000	\$119,000	2.3%
Inspect/Quality Control/Res. Services	85	\$95,014	\$65,000	\$78,800	\$90,000	\$108,900	\$135,000	5.9%
Marketing/Sales	42	\$94,627	\$67,000	\$75,000	\$91,000	\$109,000	\$127,347	2.9%
Operating or Maintenance	25	\$112,829	\$75,000	\$96,500	\$120,000	\$130,000	\$150,001	1.7%
Project Administration	46	\$87,366	\$59,500	\$68,000	\$79,000	\$99,560	\$140,000	3.2%
Project or Operations Management	572	\$101,112	\$58,800	\$77,525	\$95,000	\$118,500	\$164,000	39.6%
Reg. Approvals and/or Enforcement	50	\$95,681	\$59,000	\$78,000	\$90,000	\$110,000	\$144,000	3.5%
Research/Planning	94	\$89,089	\$52,000	\$69,000	\$86,750	\$105,000	\$140,000	6.5%
Teaching	16	\$96,113	\$53,250	\$65,385	\$89,000	\$120,000	\$170,000	1.1%
Other	50	\$83,135	\$50,000	\$58,000	\$76,500	\$103,000	\$133,000	3.5%
	<b>1444</b>							<b>100%</b>

## Annual Salary by Industry

INDUSTRY	COUNT	MEAN	5	25	MEDIAN	75	95	%
Agriculture and Forestry	17	\$84,132	\$52,000	\$67,332	\$80,000	\$105,000	\$120,000	1.2%
Consulting	404	\$90,843	\$55,000	\$65,000	\$81,700	\$108,000	\$156,000	28.0%
Educational Services	44	\$103,017	\$60,000	\$76,000	\$104,500	\$128,560	\$140,000	3.0%
Manufacturing Durables	139	\$80,128	\$50,000	\$60,000	\$71,000	\$92,130	\$133,538	9.6%
Manufacturing Non-Durables	46	\$98,827	\$63,600	\$75,000	\$87,000	\$115,000	\$170,000	3.2%
Procurement and Construction	96	\$91,719	\$55,000	\$67,300	\$82,558	\$102,000	\$170,000	6.6%
Resource Industry Oil & Gas	44	\$103,783	\$58,995	\$75,000	\$95,300	\$121,000	\$185,000	3.0%
Resource Industry without Oil & Gas	272	\$111,193	\$72,000	\$84,800	\$102,500	\$130,000	\$175,000	18.8%
Service For Profit	19	\$95,611	\$52,000	\$61,000	\$87,000	\$132,140	\$160,000	1.3%
Service Not For Profit	102	\$95,856	\$62,000	\$75,467	\$90,000	\$108,000	\$150,001	7.1%
Utilities	200	\$98,980	\$58,260	\$77,350	\$94,536	\$113,375	\$160,500	13.9%
Other	61	\$91,580	\$55,000	\$68,000	\$85,000	\$105,000	\$152,000	4.2%
	<b>1444</b>							<b>100%</b>

## Annual Salary by Experience

EXPERIENCE	COUNT	MEAN	5	25	MEDIAN	75	95	%
<1 year	105	\$63,460	\$48,000	\$55,000	\$60,000	\$69,000	\$83,700	7.3%
1 year	36	\$67,287	\$48,000	\$53,000	\$59,793	\$65,750	\$120,000	2.5%
1.5 years	60	\$65,133	\$51,692	\$56,651	\$62,500	\$69,650	\$91,275	4.2%
2 years	72	\$73,990	\$56,000	\$60,000	\$66,466	\$75,357	\$117,555	5.0%
3 years	110	\$71,598	\$54,000	\$62,000	\$71,000	\$78,360	\$91,000	7.6%
4 years	96	\$78,994	\$51,886	\$66,104	\$76,500	\$88,000	\$121,000	6.6%
5 years	95	\$81,248	\$62,800	\$70,000	\$76,000	\$88,900	\$114,000	6.6%
6 years	95	\$86,921	\$61,500	\$76,000	\$85,000	\$94,500	\$113,008	6.6%
7-8 years	113	\$93,092	\$66,000	\$78,000	\$90,000	\$101,920	\$132,000	7.8%
9-10 years	101	\$101,025	\$67,000	\$85,000	\$94,500	\$112,000	\$144,000	7.0%
11-12 years	96	\$99,693	\$71,000	\$86,800	\$98,200	\$109,500	\$139,900	6.6%
13-14 years	61	\$110,465	\$75,000	\$95,000	\$105,000	\$123,000	\$150,000	4.2%
15-17 years	97	\$120,171	\$84,000	\$96,760	\$114,000	\$136,000	\$187,000	6.7%
18-20 years	55	\$115,759	\$80,142	\$100,500	\$113,000	\$130,000	\$160,000	3.8%
21-24 years	72	\$126,462	\$88,000	\$110,000	\$120,000	\$134,842	\$175,000	5.0%
25+ years	180	\$139,019	\$83,000	\$107,000	\$131,000	\$156,000	\$212,500	12.5%
	<b>1444</b>							<b>100%</b>

## Annual Salary by Sector

SECTOR	COUNT	MEAN	5	25	MEDIAN	75	95	%
Public Sector	445	\$72,195	\$52,000	\$60,000	\$68,640	\$80,000	\$105,000	31.0%
Private Sector	992	\$95,163	\$55,000	\$69,000	\$85,550	\$111,725	\$165,000	69.0%
<b>Total Salary</b>	<b>1437</b>							<b>100%</b>
SECTOR	COUNT	MEAN	5	25	MEDIAN	75	95	%
Base Salary	1444	\$96,219	\$55,135	\$71,000	\$89,472	\$112,441	\$160,000	100%
Salary including bonus	1444	\$110,182	\$58,000	\$77,053	\$97,918	\$127,549	\$200,000	100%

## Salary Changes - Full Time Positions

YEAR	MEDIAN SALARY	% INCREASE	AVERAGE SALARY	% INCREASE
1987	\$48,000	-	\$49,269	-
1989	\$50,928	6.10%	\$62,887	27.60%
1991	\$54,110	6.20%	\$57,578	-8.40%
1993	\$54,480	0.70%	\$56,703	-1.50%
1995	\$56,400	3.50%	\$59,142	4.30%
1997	\$60,000	6.40%	\$62,266	5.30%
1999	\$62,500	4.20%	\$65,401	5.00%
2001	\$66,000	5.60%	\$68,877	5.30%
2003	\$68,800	4.20%	\$71,210	3.40%
2005	\$71,008	3.20%	\$73,607	3.40%
2007	\$74,000	4.20%	\$77,374	5.10%
2008	\$76,352	3.20%	\$83,025	7.30%
2009	\$80,000	4.80%	\$86,908	4.70%
2010	\$82,950	3.70%	\$91,548	5.30%
2011	\$84,224	1.54%	\$91,154	-0.40%
2012	\$89,472	6.23%	\$96,219	5.56%

## Regression Analysis

Stepwise linear regression was used to find the best model for estimating salaries. The formula produced explains over sixty percent of the variance in salary (61.3%). Any model explaining at least 50% of the variance in the dependent variable can be considered an effective model. Refer to the "Classification Rating Guide", which can be found on [www.apecs.sk.ca](http://www.apecs.sk.ca), to determine the values for each factor.

FACTOR	B (COEFFICIENT)	BETA (RELATIVE IMPORTANCE)
Duties (A)	106	0.184
Experience (C)	266	0.294
Recommendations, Decisions and Commitments (D)	70	0.082
Supervision Scope (G)	904	0.291
Absence From Base Of Operations (J)	558	0.067
Receipt of professional designation (Constant)	7389 44168	N/A

## Formula for Expected Salary (SE) without Bonus:

$$SE = 44168 + 106*(A) + 266*(C) + 70*(D) + 904*(G) + 558*(J)$$

Add 7389 if you have acquired professional status within your field (P.Eng or P.Geo)