Occupation Overview

Collin College

2200 West University Drive
McKinney, Texas 75070
972.377.1793

Parameters

Occupations

Code	Description
17-2000	Engineers

Regions

Code	Description
48085	Collin County, TX
48397	Rockwall County, TX

Timeframe

2015 - 2020

Datarun

2014.3 – QCEW Employees

Occupation Summary for Engineers

5,553	+12.0%	$47.35/hr
Jobs (2014)	% Change (2015-2020)	Median Earnings
28% above National average	Nation: +5.7%	Nation: $42.43/hr

Growth

5,762	6,455	693	12.0%
2015 Jobs	2020 Jobs	Change (2015-2020)	% Change (2015-2020)

Occupation	2015 Jobs	2020 Jobs	Change	% Change
Aerospace Engineers (17-2011)	229	256	27	12%
Agricultural Engineers (17-2021)	4	5	1	25%
Biomedical Engineers (17-2031)	19	23	4	21%
Chemical Engineers (17-2041)	52	59	7	13%
Civil Engineers (17-2051)	709	840	131	18%
Computer Hardware Engineers (17-2061)	832	928	96	12%
Electrical Engineers (17-2071)	933	1,030	97	10%
Electronics Engineers, Except Computer (17-2072)	909	999	90	10%
Environmental Engineers (17-2081)	124	143	19	15%
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)	75	84	9	12%
Industrial Engineers (17-2112)	652	727	75	12%
Marine Engineers and Naval Architects (17-2121)	7	9	2	29%
Materials Engineers (17-2131)	64	69	5	8%
Mechanical Engineers (17-2141)	777	853	76	10%

Mining and Geological Engineers, Including Mining Safety Engineers (17-2151)	8	10	2	25%
Nuclear Engineers (17-2161)	19	22	3	16%
Petroleum Engineers (17-2171)	154	176	22	14%
Engineers, All Other (17-2199)	195	223	28	14%

Percentile Earnings for Engineers (17-2000)

$38.09/hr	$47.35/hr	$59.48/hr
25th Percentile Earnings	Median Earnings	75th Percentile Earnings

Regional Trends

	Region	2015 Jobs	2020 Jobs	% Change
●	Region	5,762	6,455	12.0%
■	Collin County, TX	5,549	6,218	12.1%
▲	Rockwall County, TX	213	236	11.1%
◆	Texas	155,154	169,503	9.2%
+	United States	1,610,127	1,701,834	5.7%

Regional Breakdown

County	2020 Jobs
Collin County, TX	6,218
Rockwall County, TX	236

Job Postings Summary

161	2 : 1
Unique Postings (Oct 2014) 365 Total Postings	Posting Intensity (Oct 2014) Regional Average: 4 : 1

There were 365 total job postings for *Engineers* in October 2014, of which 161 were unique. These numbers give us a Posting Intensity of 2-to-1, meaning that for every 2 postings there is 1 unique job posting.

This is lower than the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that companies may not be trying as hard to hire this position.

Occupation Gender Breakdown

Gender	2014 Jobs	2014 Percent
Males	3,761	67.7%
Females	1,792	32.3%

Occupation Age Breakdown

Age	2014 Jobs	2014 Percent
14-18	25	0.4%
19-24	258	4.7%
25-34	1,042	18.8%
35-44	1,531	27.6%
45-54	1,598	28.8%
55-64	901	16.2%
65+	199	3.6%

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2014 Jobs	2014 Percent
White (Not Hispanic or Latino)	3,648	65.7%
Asian (Not Hispanic or Latino)	1,146	20.6%
Hispanic or Latino (All Races)	427	7.7%
Black or African American (Not Hispanic or Latino)	276	5.0%
Two or More Races (Not Hispanic or Latino)	41	0.7%
American Indian or Alaska Native (Not Hispanic or Latino)	11	0.2%
Native Hawaiian or Other Pacific Islander (Not Hispanic or Latino)	3	0.1%

Occupational Programs

1	2	393
Programs (2013)	Completions (2013)	Openings (2013)

CIP Code	Program	Completions (2013)
14.0101	Engineering, General	2

Industries Employing Engineers

Industry	Occupation Jobs in Industry (2014)	% of Occupation in Industry (2014)	% of Total Jobs in Industry (2014)
Engineering Services	1,087	19.6%	33.2%
Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	441	7.9%	17.1%
Telephone Apparatus Manufacturing	437	7.9%	17.1%
Semiconductor and Related Device Manufacturing	349	6.3%	17.8%
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	303	5.5%	16.3%

Appendix A - Data Sources and Calculations

State Data Sources

This report uses state data from the following agencies: Texas Workforce Commission

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.