



Engineering Occupations in Inland Empire, 2006-2012

Counties: Riverside, CA (6065), San Bernardino, CA (6071)

Sorted by: New and Replacement Jobs

Produced by: Inland Empire Center of Excellence

Color Code

| | |
|--|-----------------------------------|
| | Not a living wage (under \$17.50) |
| | Requires a 4-year degree |

| SOC Code | Description | 2006 Jobs | 2012 Jobs | Change | % Change | Rep. Jobs | New & Rep. Jobs | % New & Rep. | Avg EPW | State % Change | Education Level |
|------------------------|--|---------------|---------------|--------------|------------|--------------|-----------------|--------------|----------------|----------------|-----------------------------------|
| 17-2051 | Civil engineers | 2,270 | 2,553 | 283 | 12% | 354 | 637 | 28% | \$36.50 | 8% | Bachelor's degree |
| 17-2141 | Mechanical engineers | 1,385 | 1,689 | 304 | 22% | 308 | 612 | 44% | \$34.30 | 6% | Bachelor's degree |
| 17-2112 | Industrial engineers | 938 | 1,205 | 267 | 28% | 195 | 462 | 49% | \$32.05 | 9% | Bachelor's degree |
| 17-2072 | Electronics engineers, except computer | 984 | 1,174 | 190 | 19% | 172 | 362 | 37% | \$41.26 | 5% | Bachelor's degree |
| 17-3022 | Civil engineering technicians | 838 | 985 | 147 | 18% | 179 | 326 | 39% | \$28.37 | 8% | Associate's degree |
| 17-1022 | Surveyors | 674 | 781 | 107 | 16% | 172 | 279 | 41% | \$31.98 | 9% | Bachelor's degree |
| 17-3029 | Engineering technicians, except drafters, all other | 614 | 742 | 128 | 21% | 148 | 276 | 45% | \$27.26 | 7% | Associate's degree |
| 17-2199 | Engineers, all other | 586 | 704 | 118 | 20% | 122 | 240 | 41% | \$37.93 | 7% | Bachelor's degree |
| 17-3031 | Surveying and mapping technicians | 801 | 866 | 65 | 8% | 157 | 222 | 28% | \$27.25 | 8% | Moderate-term on-the-job training |
| 17-3025 | Environmental engineering technicians | 437 | 556 | 119 | 27% | 101 | 220 | 50% | \$17.90 | 15% | Associate's degree |
| 17-3027 | Mechanical engineering technicians | 473 | 592 | 119 | 25% | 90 | 209 | 44% | \$23.19 | 6% | Associate's degree |
| 17-2071 | Electrical engineers | 522 | 613 | 91 | 17% | 95 | 186 | 36% | \$40.23 | 5% | Bachelor's degree |
| 17-2081 | Environmental engineers | 280 | 354 | 74 | 26% | 68 | 142 | 51% | \$38.00 | 18% | Bachelor's degree |
| 17-1011 | Architects, except landscape and naval | 839 | 837 | (2) | (0%) | 113 | 111 | 13% | \$33.42 | 13% | Bachelor's degree |
| 17-3026 | Industrial engineering technicians | 242 | 307 | 65 | 27% | 41 | 106 | 44% | \$23.31 | 5% | Associate's degree |
| 17-2131 | Materials engineers | 228 | 280 | 52 | 23% | 48 | 100 | 44% | \$34.77 | 10% | Bachelor's degree |
| 17-2011 | Aerospace engineers | 223 | 268 | 45 | 20% | 35 | 80 | 36% | \$37.03 | 2% | Bachelor's degree |
| 17-2061 | Computer hardware engineers | 243 | 284 | 41 | 17% | 34 | 75 | 31% | \$39.63 | 7% | Bachelor's degree |
| 17-3024 | Electro-mechanical technicians | 165 | 204 | 39 | 24% | 32 | 71 | 43% | \$17.52 | 8% | Associate's degree |
| 17-2031 | Biomedical engineers | 374 | 406 | 32 | 9% | 31 | 63 | 17% | \$39.25 | 14% | Bachelor's degree |
| 17-1021 | Cartographers and photogrammetrists | 208 | 229 | 21 | 10% | 37 | 58 | 28% | \$26.77 | 11% | Bachelor's degree |
| 17-1012 | Landscape architects | 936 | 936 | 0 | 0% | 53 | 53 | 6% | \$23.22 | 13% | Bachelor's degree |
| 17-2041 | Chemical engineers | 128 | 143 | 15 | 12% | 30 | 45 | 35% | \$34.22 | 7% | Bachelor's degree |
| 17-2111 | Health and safety engineers, except mining safety engineers and inspectors | 135 | 151 | 16 | 12% | 28 | 44 | 32% | \$33.03 | 8% | Bachelor's degree |
| 17-2161 | Nuclear engineers | 177 | 183 | 6 | 3% | 29 | 35 | 20% | \$38.70 | 8% | Bachelor's degree |
| 17-3021 | Aerospace engineering and operations technicians | 75 | 90 | 15 | 20% | 12 | 27 | 35% | \$24.08 | (0%) | Associate's degree |
| 17-2171 | Petroleum engineers | 124 | 125 | 1 | 1% | 19 | 20 | 16% | \$44.42 | (2%) | Bachelor's degree |
| 17-2121 | Marine engineers and naval architects | 42 | 43 | 1 | 2% | 10 | 11 | 26% | \$30.86 | 3% | Bachelor's degree |
| 17-2151 | Mining and geological engineers, including mining safety engineers | 43 | 44 | 1 | 2% | 3 | 4 | 10% | \$26.00 | 2% | Bachelor's degree |
| 17-2021 | Agricultural engineers | 208 | 192 | (16) | (8%) | 9 | (7) | (4%) | \$30.86 | 10% | Bachelor's degree |
| Totals/Averages | | 15,192 | 17,536 | 2,344 | 14% | 2,725 | 5,069 | 32% | \$31.77 | 8% | |

Source: EMSI Complete Employment (September 2007). Extracted on Feb 1, 2007 by the Inland Empire Center of Excellence

Data Sources and Calculations**Industry Data**

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor or with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data combined with past trends in each industry and the industry growth rates in national projections (Bureau of Labor Statistics) and states' own projections, where available.

Occupation Data

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

Educational Attainment Data

EMSI's educational attainment numbers are based on Census 1990, Census 2000, the Current Population Survey, and EMSI's demographic data. By combining these sources, EMSI interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department.