

Civil Engineers (17-2051)

Occupation description: Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, and water and sewage systems. Includes architectural, structural, traffic, ocean, and geo-technical engineers. Excludes Hydrologists (19-2043).

Employment and Job Openings

	Employment			Average annual openings		
	2016 estimate	2026 projection	Percent change	Labor force exits	Occupation transfers	Total
Alaska	1,031	1,040	0.9	22	51	74
United States	303,500	335,700	10.6	6,900	15,700	25,820

Job outlook

Alaska: Alaska's employment growth is low with high employment opportunities. [Read more.](#)

2019 Wages ?

	Mean Wage	Wage by Percentile				
	Mean	10th	25th	Median	75th	90th
United States	45.36	26.63	32.76	41.86	54.60	69.50
Alaska	48.49	31.35	36.46	45.39	57.87	72.19
Anchorage/Mat-Su Area	50.81	32.16	37.98	47.90	60.52	74.26
Fairbanks North Star Borough	44.33	31.17	34.21	40.40	51.76	65.15
Balance of State	45.98	26.05	35.24	43.83	54.90	68.91

Labor Force Indicators

2016 Worker Characteristics

Total workers	Nonresident workers	Percent nonresident	Percent age 45 plus	Percent age 50 plus
908	48	5.3	45.6	35.4

2016 Potential Supply

Qualified but working in another occupation	101
Currently employed in a lower paid occupation	54
UI claimants previously working in occupation	39

2016 ALEXsys Employment Data

Number of registrants	215
Number of job position postings	73
Ratio of registrants to job position postings	2.9

Alaska Licensing Information

Engineer – [View licensing requirements and number licensed](#)

Typical Entry-level Education, Experience, and/or On-the-job Training

Education: Bachelor's degree

Work experience: None

On-the-job training: None

Training Resources

	Degree
Change & Time Management	

	Degree
Alaska Petroleum Academy (Kenai)	
Cook Inlet Training Standards/24 Hour Hazwoper	
Cook Inlet Training Standards/Hazwoper Refresher (8 Hours)	
Petroleum Chemical Health and Safety (16 Hours)	
Petroleum Chemical Health and Safety Refresher (8 Hours)	

	Degree
Alaska Teamster-Employer Service Training Trust (Anchorage)	
North Slope Training Cooperative	

	Degree
Alaska West Training Center (Fairbanks)	
Hydrogen Sulfide - H2S	
Petroleum Technician - ER06	
Petroleum Workers Safety and Health - S05	
Unescorted Module - NSTC01	
Unescorted Module Update/Refresher - NSTC02	

	Degree
Beacon Occupational Health and Safety Services (Anchorage)	
Cook Inlet Training Standards & Industrial Safety (CITS)	Certificate
North Slope Training Cooperative (NSTC), Optional H2S/FES	Certificate

	Degree
Environmental Management Inc (Anchorage)	
EPA/AHERA Project Design Initial - 24 Hours	Certificate

EPA/AHERA Project Design Refresher	Certificate
NSTC 6 PACK + H2S Module	Certificate
Ilisagvik College (Barrow)	
Industrial Safety, Level 1	Endorsement
LTR Training Systems, Inc. (Anchorage)	
Fall Protection - Basic/Authorized	
Fall Protection -Tower Climbing & Rescue	
Northern Industrial Training (Palmer)	
Energy Isolation - Lockout/Tag out/018	
NSTC ASH Update / 003	
NSTC Confined Space Entry / 004	
NSTC Energy Isolation / 005	
NSTC Fall Protection / 006	
NSTC Hydrogen Sulfide (H2S) Module/002	
NSTC Respiratory Protection /007	
NSTC Unescorted/001	
PEC Premier Basic Orientation / 051	
PEC Premier Core Compliance / 052	
Nu-Solutions Consulting (Anchorage)	
Advanced Primavera P6, Fundamentals Professional Client, Course 106-P	Certificate
Advanced Project Modeling and Estimating, Class E-201	Certificate
Essentials of HD Performance HD P101	
Essentials of Project Modeling and Estimating, Class E-101	Certificate
Hybrid Primavera P6 102	
Managing Risk in Primavera Risk Analysis, Course 501	
Migrating from P3 to Primavera P6	
Oracle Primavera Contract Management, Course 201	Certificate
Primavera P6 Advanced	
Primavera P6 Analytics 11g	
Primavera P6 Fundamentals Rel15 (P6 Web), Course 101	Certificate
Primavera P6 Professional Fundamentals, Course 102	Certificate
Primavera P6 Reporting with BI Publisher 11g	
Primavera P6, Application Administration 15, Course 106-A	Certificate

Project Management in Oracle Primavera Contractor, Course 700	
Resource Management in Oracle Primavera P6, Course 106-R	Certificate
Resource Management in Oracle Primavera Web Access, Course 107	Certificate
Scheduling in Oracle Primavera P6 and Contractor, for U.S. Army Corps of Engineers Projects	Certificate

	Degree
University of Alaska Anchorage (Anchorage)	
Arctic Engineering	MS
Civil Engineering	BS
Civil Engineering	MCE
Civil Engineering	MS
Earthquake Engineering	GCRT
Project Management	MS

	Degree
University of Alaska Fairbanks (Fairbanks)	
Civil Engineering	BS
Civil Engineering	MCE
Civil Engineering	MS

	Degree
University of Alaska, Mining and Petroleum Training Service (Soldotna)	
North Slope Training Consortium (NTSC)	

	Degree
Vocational Training and Resource Center (Juneau)	
Drafting with AutoCAD	