

**Engineering Programs
CSU, UC & WUE**

Field	Sample Job Description	Job forecast (between 2016-2026)	Salary range	Salary Average	Options for BS in California	WUE Options for BS
Aerospace	Aerospace engineers design, test, and supervise the manufacture of aircraft, spacecraft, and missiles. Those who work with aircraft are called aeronautical engineers, and those working specifically with spacecraft are astronautical engineers.	6%	\$69,150- \$160,290	\$113,030	CPP CPSLO CSULB SDSU SJSU UCI UCLA UCSD	New Mexico State University University of North Dakota
Agricultural	Agricultural engineers—also known as biological and agricultural engineers—work on a variety of activities. These activities range from aquaculture (raising food, such as fish, that thrive in water) to land farming to forestry; from developing biofuels to improving conservation; from planning animal environments to finding better ways to process food.	8%	\$43,150- \$86,400	\$68,730	CPSLO	New Mexico State University North Dakota State University South Dakota State University
Biological	Biomedical engineers design instruments, devices, and software used in healthcare; develop new procedures using knowledge from many technical sources; or conduct research needed to solve clinical problems. They frequently work in research and development or quality assurance.	7%	\$52,070- \$142,610	\$88,040	CPSLO CSULB SJSU UCB UCD UCI UCM	Colorado State University University of Colorado Denver Montana State University Bozeman University of Nevada Reno University of Utah Washington State University
Chemical	Chemical engineers work in manufacturing, pharmaceuticals, healthcare, design and construction, pulp and paper, petrochemicals, food processing, specialty chemicals, polymers, biotechnology, and environmental health and safety industries, among others.	8%	\$62,230- \$169,080	\$102,160	CPP,CSULB SJSU ,UCB UCD ,UCI UCLA ,UCR UCSB ,UCSD	Colorado State University Montana State University Bozeman North Idaho College New Mexico Institute of Mining and Technology New Mexico State University South Dakota School of Mining +8
Civil	Civil engineers design and supervise the construction of roads, buildings, airports, tunnels, dams, bridges, and water supply and sewage systems.	11%	\$54,150- \$138,110	\$84,770	CPSLO CSUC CSUFRES CSUFULL CSULA, CSULB CSUN,CSUS SDSU,SFSU SJSU,UCB UCD ,UCI UCLA	Boise State University Colorado Mesa University Colorado State University Colorado State University Pueblo Idaho State University Metropolitan State University of Denver Montana Tech +23
Computer	Computer engineers (or computer hardware engineers) research, design, develop, test, and oversee the manufacture and installation of computer hardware, including computer chips, circuit boards, computer systems, and related equipment such as keyboards, routers, and printers.	5%	\$66,290- \$176,900	\$115,120	CPP CPSLO CSUC CSUFRES CSUFULL CSULB CSUN CSUS ,SDSU SFSU,SJSU UCD ,UCI UCR,UCSB UCSC	Colorado State University Fort Lewis College Metropolitan State University of Denver Northern Arizona University North Dakota State University Portland State University South Dakota School of Mining and Technology +14
Construction	Construction engineers are responsible for overseeing the construction of airports, malls, schools, manufacturing facilities, highways, high-rise structures, water treatment plants and much more.	11%	\$54,150- \$138,110	\$84,770	CPP CSULB CSUS SDSU	North Dakota State University University of New Mexico Washington State University

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Electrical	Electrical engineers design, develop, test, and supervise the manufacture of electrical equipment. Some of this equipment includes electric motors; machinery controls, lighting, and wiring in buildings; radar and navigation systems; communications systems; and power generation, control, and transmission devices used by electric utilities.	7%	\$60,250-\$150,340	\$95,060	CPP,CPSLO, CSUB CSUFRES CSUFULL CSULA CSULB CSUN ,CSUSM SDSU,SFSU SJSU,UCD UCI,UCLA UCR, UCSB UCSC, UCSD	Boise State University Colorado State University Eastern Washington University Idaho State University Montana State University Bozeman Montana Tech Northern Arizona University +25
Environmental	Environmental engineers use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems. They work to improve recycling, waste disposal, public health, and water and air pollution control. They also address global issues, such as unsafe drinking water, climate change, and environmental sustainability.	8%	\$52,160-\$134,060	\$86,800	CPP CPSLO HSU SDSU UCM UCR UCSD	Arizona State University/ Polytechnic Campus Northern Arizona University Colorado State University Montana Tech University of Nevada Reno Eastern New Mexico University Roswell New Mexico Institute of Mining and Technology Portland State University
Industrial	Industrial engineers find ways to eliminate wastefulness in production processes. They devise efficient systems that integrate workers, machines, materials, information, and energy to make a product or provide a service.	10%	\$53,230-\$130,930	\$85,880	CPP CPSLO CSUEB SJSU UCB	Colorado State University Pueblo Montana State University Bozeman North Dakota State University New Mexico State University South Dakota School of Mining and Technology
Marine	Marine engineers and naval architects design, build, and maintain ships, from aircraft carriers to submarines and from sailboats to tankers. Marine engineers are also known as marine design engineers or marine mechanical engineer and are responsible for the internal systems of a ship, such as the propulsion, electrical, refrigeration, and steering systems. Naval architects are responsible for the ship design, including the form, structure, and stability of hulls.	12%	\$63,980-\$145,550	\$90,970	CSUMA	-
Materials	Materials engineers develop, process, and test materials used to create a range of products, from computer chips and aircraft wings to golf clubs and biomedical devices. They study the properties and structures of metals, ceramics, plastics, composites, nanomaterials (extremely small substances), and other substances in order to create new materials that meet certain mechanical, electrical, and chemical requirements. They also help select materials for specific products and develop new ways to use existing materials.	2%	\$57,080-\$149,860	\$94,610	CPSLO SJSU UCB UCD UCI UCLA UCM UCR	Boise State University New Mexico Institute Mining Technology University of Idaho University of Utah Washington State University
Mechanical	Mechanical engineers use the principles of energy, materials, and mechanics to design and manufacture machines and devices of all types. They create the processes and systems that drive technology and industry.	9%	\$55,310-\$133,900	\$85,880	CPP, CPSLO CSUC CSUFRES CSUFULL CSULA CSULB CSUMA CSUN, CSUS SDSU, SFSU SJSU, UCB UCD UCI, UCLA UCM, UCR UCSC, UCSD	Arizona State University Boise State University Colorado Mesa University Colorado State University Central Washington University Eastern Washington University Idaho State University +28

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Mining	Mining and geological engineers design mines for the safe and efficient removal of minerals such as coal and metals for manufacturing and utilities.	8%	\$54,700-\$160,320	\$94,240		Montana Tech New Mexico Institute of Mining and Technology South Dakota School of Mining and Technology University of Arizona University of Alaska Fairbanks University of Nevada Reno University of Utah
Nuclear	Nuclear engineers research and develop the processes, instruments, and systems used to derive benefits from nuclear energy and radiation. Many of these engineers find industrial and medical uses for radioactive materials—for example, in equipment used in medical diagnosis and treatment. Many others specialize in the development of nuclear power sources for ships or spacecraft.	4%	\$66,400-\$159,330	\$105,810	UCB	Idaho State University University of New Mexico
Petroleum	Petroleum engineers design and develop methods for extracting oil and gas from deposits below the earth's surface. Petroleum engineers also find new ways to extract oil and gas from older wells.	15%	\$74,400-\$208,000	\$132,280		Montana Tech New Mexico Institute of Mining and Technology University of Alaska Fairbanks University of North Dakota University of Washington
Software	Software Engineers (developers) are the creative minds behind computer programs. Some develop the applications that allow people to do specific tasks on a computer or another device. Others develop the underlying systems that run the devices or that control networks.	24%	\$59,870-\$160,100	\$101,790	CPSLO CSUEB CSUS CSUMB CSUSM SJSU UCI	
Structural	Manages and directs staff at project site. Performs engineering duties; plans, designs and oversees the construction and maintenance of buildings, bridges, and other structures. Researches and analyzes maps, blueprints, photos, charts, and other data to plan projects. Gathers information to prepare and present reports on project topics.	11%	\$54,150-\$138,110	\$84,770	UCSD	