



CAREER PATH

Health

CAREER CLUSTER
Health Sciences

CAREER PATHWAY
Biotechnology Research and Development



BIOMEDICAL ENGINEER

Apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems and products, such as artificial organs, prostheses, instrumentation, medical information systems, and health management and care delivery systems.

Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as a biomedical engineer are reinforced by taking rigorous and relevant courses, as well as participating in work-based experiences and student organization activities.

(See the Sample Personal Plan of Study for suggested coursework, activities, and knowledge and skills to pursue in preparation of an occupation in this Career Cluster.)

Education Requirements

Occupation	Percent of Missouri employees aged 25 to 44 in the occupation whose highest level of educational attainment is:		
	High School or Less	Some College	Bachelor Degree or More
Biomedical engineers	0.0%	18.0%	75.7%
Engineers	2.5%	16.1%	81.4%
Architecture and Engineering	10.3%	31.0%	58.6%

Most Common Educational Level: Bachelor's degree

Apprenticeships are available for more than 240 occupations. Visit www.oa.doleta.gov/bat.cfm

Note: Be sure to learn whether your occupation has a specific requirement for education or licensing.

National and State Wage Information

Location	Pay Period	2007		
		Entry*	Median	Experienced**
United States	Hourly	\$27.68	\$36.27	\$46.52
	Yearly	\$57,600	\$75,400	\$96,800
Missouri	Hourly	\$27.49	\$34.37	\$41.73
	Yearly	\$57,200	\$71,500	\$86,800

Based on (*) lower 25% and (**) upper 25% percentile of wages

National and State Employment Trends

Biomedical Engineer	Employment		Percent Change	Job Openings*
	2006	2016		
United States	14,400	17,400	+ 21%	630
Missouri	130	160	+ 26%	10

*The estimate for Job Openings includes both turnover that results from people who leave the occupation (e.g. quit, retire, death) and new jobs that are created.

Educational Opportunities

Note: This list may not be all inclusive. For more information about Missouri schools and programs, visit www.dhe.mo.gov

Saint Louis University-Main Campus

Saint Louis, MO
(314) 977-2222
www.imagine.slu.edu

Washington University in St Louis

Saint Louis, MO
(314) 935-5000
www.wustl.edu



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