CAREER PATH

Natural Resources Agriculture

CAREER CLUSTER

Agriculture, Food and Natural Resources

CAREER PATHWAY

Natural Resources and Environmental Service Systems

BIOCHEMIST / BIOPHYSICIST

Study the chemical composition and physical principles of living cells and organisms, their electrical and mechanical energy, and related phenomena. May conduct research to further understanding of the complex chemical combinations and reactions involved in metabolism, reproduction, growth, and heredity. May determine the effects of foods, drugs, serums, hormones, and other substances on tissues and vital processes of living organisms.

Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as a biochemist 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
Biochemists and biophysicists	0.0%	5.3%	94.6%
Life Scientists	0.0%	8.6%	91.4%
Life, Physical, & Social Science	5.6%	12.7%	81.7%

Most Common Educational Level: Doctoral degree

Note: Be sure to learn whether your occupation has a specific requirement for education or licensing. Apprenticeships are available for more than 240 occupations. Visit www.oa.doleta.gov/bat.cfm

National and State Wage Information

Location	Pay Period	2007		
		Entry*	Median	Experienced**
United States	Hourly	$27.54	$38.11	$50.29
	Yearly	$57,300	$79,300	$104,600
Missouri	Hourly	$21.27	$35.98	$49.77
	Yearly	$44,200	$74,800	$103,500

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

National and State Employment Trends

Biochemist	Employment		Percent Change	Job Openings*
	2006	2016		
United States	20,100	23,300	+ 16 %	730
Missouri	N/A	N/A	N/A	N/A

*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

Missouri Western State University
Saint Joseph, MO
(816) 271-4200
www.missouriwestern.edu

Northwest Missouri State University
Maryville, MO
(660) 562-1212
www.nwmissouri.edu

Rockhurst University
Kansas City, MO
(816) 501-4000
www.rockhurst.edu

University of Missouri - Columbia
Columbia, MO
(573) 882-2121
www.missouri.edu

University of Missouri - Kansas City
Kansas City, MO
(816) 235-1000
www.umkc.edu

University of Missouri - St Louis
Saint Louis, MO
(314) 516-5000
www.umsl.edu

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

William Jewell College
Liberty, MO
(816) 781-7700
www.jewell.edu

Compiled October 2008 by the Missouri Department of Elementary and Secondary Education, Division of Career Education, www.dese.mo.gov/careered
Primary data source: CareerOneStop, www.careerinfonet.org

Missouri Connections
Connect to Your Future

www.missouriconnections.org

MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

www.dese.mo.gov

MISSOURI DEPARTMENT OF HIGHER EDUCATION

MDHE
Missouri Department of Higher Education
Building Missouri's future... by degrees

www.dhe.mo.gov

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

MISSOURI Career Center
Where talent and opportunities meet
MissouriCareerSource.com

www.missouricareersource.com

MORE WITH MERIC
TIMELY TARGETED INTELLIGENT

www.missourieconomy.org