



CAREER PATH

Natural Resources Agriculture

CAREER CLUSTER

Agriculture, Food and Natural Resources

CAREER PATHWAY

Natural Resources and Environmental Service Systems



MATERIALS SCIENTIST

Research and study the structures and chemical properties of various natural and manmade materials, including metals, alloys, rubber, ceramics, semiconductors, polymers, and glass. Determine ways to strengthen or combine materials or develop new materials with new or specific properties for use in a variety of products and applications. Includes glass scientists, ceramic scientists, metallurgical scientists, and polymer scientists.

Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as a materials scientist 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
Materials scientists	0.0%	6.5%	93.2%
Physical Scientists	0.0%	4.0%	96.0%
Life, physical, and social science	5.6%	12.7%	81.7%

Most Common Educational Level: Master's 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	\$27.42	\$36.62	\$46.79
	Yearly	\$57,000	\$76,200	\$97,300
Missouri	Hourly	\$23.67	\$29.14	\$41.95
	Yearly	\$49,200	\$60,600	\$87,300

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

National and State Employment Trends

Materials Scientist	Employment		Percent Change	Job Openings*
	2006	2016		
United States	9,700	10,500	+ 9%	340
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 State University

Springfield, MO
(417) 836-5000
www.missouristate.edu

Missouri University of Science and Technology

Rolla, MO
(573) 341-4111
www.mst.edu

Washington University

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



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