



# CAREER PATH Industrial & Engineering Technology

CAREER CLUSTER  
**Manufacturing**

CAREER PATHWAY  
**Logistics & Inventory Control**



## OPERATIONS RESEARCH ANALYST

Formulate and apply mathematical modeling and other optimizing methods using a computer to develop and interpret information that assists management with decision making, policy formulation, or other managerial functions. May develop related software, service, or products. Frequently concentrates on collecting and analyzing data and developing decision support software. May develop and supply optimal time, cost, or logistics networks for program evaluation, review, or implementation.

### Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as an operations research analyst 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
Operations research analysts	6.6%	22.7%	70.7%
Mathematical science occupations	1.1%	7.9%	91.0%
Computer and mathematical	4.5%	19.6%	75.9%

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](http://www.oa.doleta.gov/bat.cfm)

### National and State Wage Information

Location	Pay Period	2007		
		Entry*	Median	Experienced**
United States	Hourly	\$24.29	\$32.19	\$43.06
	Yearly	\$50,500	\$67,000	\$89,600
Missouri	Hourly	\$24.51	\$31.05	\$39.73
	Yearly	\$51,000	\$64,600	\$82,600

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

### National and State Employment Trends

Operations Research Analyst	Employment		Percent Change	Job Openings*
	2006	2016		
United States	58,400	64,600	+ 11%	1,790
Missouri	700	720	+ 4%	20

\*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](http://www.dhe.mo.gov)*

**Central Methodist University**  
Fayette, MO  
(660) 248-3391  
[www.centralmethodist.edu](http://www.centralmethodist.edu)

**Hickey College**  
Saint Louis, MO  
(314) 434-2212  
[www.hickeycollege.edu](http://www.hickeycollege.edu)

**Metropolitan Community College - Blue River**  
Independence, MO  
(816) 655-6000  
[www.mcckc.edu](http://www.mcckc.edu)

**Metropolitan Community College - Business & Technology**  
Kansas City, MO  
(816) 482-5210  
[www.mcckc.edu](http://www.mcckc.edu)

**Metropolitan Community College - Longview**  
Lee's Summit, MO  
(816) 672-2000  
[www.mcckc.edu](http://www.mcckc.edu)

**Metropolitan Community College - Maple Woods**  
Kansas City, MO  
(816) 437-3000  
[www.mcckc.edu](http://www.mcckc.edu)

**Missouri Southern State University**  
Joplin, MO  
(417) 625-9300  
[www.mssu.edu](http://www.mssu.edu)

(more-over)

**University of Phoenix**  
Kansas City, MO  
(816) 943-9600  
www.phoenix.edu



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ELEMENTARY AND SECONDARY  
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www.dese.mo.gov

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