



# Education Asset Inventory

A landscape analysis of credentials offered for targeted sectors in Greater Kansas City



Advanced Manufacturing



Engineering & Architecture



Information Technology



Finance & Insurance



Life Sciences

5th Annual Inventory | November 2019

# MARC

MID-AMERICA REGIONAL COUNCIL

## OVERVIEW

The Education Asset Inventory is produced by the Mid-America Regional Council (MARC) to

- Provide educators and students with the most current list of credentials being offered to prepare for high-demand occupations.
- Present areas of opportunity for colleges and universities to develop curriculum for new programs where there are gaps.
- Share industry insights to better prepare the next generation workforce for in-demand occupations in Greater Kansas City.

## METHODOLOGY

Using employment and other economic data, MARC’s research services staff identified five sectors that are particularly important to the regional economy — traded sectors in which we specialize. These include: Advanced Manufacturing, Engineering and Architecture, Finance and Insurance, Information Technology and Life Sciences.

In 2015, the first edition of this report was produced in partnership with the Council for Adult & Experiential Learning (CAEL). Since 2016, MARC has taken the methodology established by CAEL and expanded it to include the Life Sciences industry; added or removed institutions based on closures, expansions and contributions to the targeted industry sectors; added important programs that are growing in demand, such as data analytics and business analytics; and, most recently, captured more online and hybrid programs being offered in the region.

The schools highlighted in this report are within a 150-mile radius of the Kansas City region and offer credentials that benefit at least one of the targeted industries. Since the first report, several public and private institutions (or their satellite campuses) have been added and some for-profit institutions have closed or are no longer accepting students.

Program offerings for credentials in the targeted industries were identified from online course catalogs and information confirmed and/or provided by the institutions. We strive to make the inventory as accurate as possible as of the time of publication. To notify MARC of any errors or omissions, please contact Erika Garcia Reyes, [egarcia@marc.org](mailto:egarcia@marc.org).

## ABOUT MARC

MARC is a nonprofit association of city and county governments and the metropolitan planning organization for the bistate Kansas City region. Governed by a Board of Directors made up of local elected officials, MARC serves nine counties — Cass, Clay, Jackson, Platte and Ray counties in Missouri, and Johnson, Leavenworth, Miami and Wyandotte counties in Kansas — and 119 cities. MARC provides a forum for the region to work together to advance social, economic and environmental progress. The agency’s work is organized under eight interrelated policy goals: efficient transportation and quality places; a healthy environment; a competitive economy; effective local government; safe and secure communities; quality early learning; thriving older adults and communities; and exemplary core capacities. MARC is funded by federal, state and private grants, local contributions and earned income. A major portion of MARC’s budget is passed through to local governments and other agencies for programs and services.

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for targeted sectors in Greater Kansas City

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# Partners

## Regional Leadership Groups

- Civic Council of Greater Kansas City
- Greater Kansas City Chamber of Commerce
- Kansas City Area Development Council
- Mid-America Regional Council

## Philanthropy

- Bloch Family Foundation
- DeBruce Foundation
- Ewing Marion Kauffman Foundation
- Greater Kansas City Community Foundation
- Hall Family Foundation
- Hispanic Development Fund
- United Way of Greater Kansas City

## Workforce Investment Boards

- Full Employment Council
- Workforce Partnership

## K-12 Civic Intermediaries

- KC STEM Alliance
- Missouri Career Pathways
- PREP-KC
- Urban Education Research Center

## Nonprofit Organizations

- Big Brothers Big Sisters of Kansas City
- Kansas State College Advising Corps
- KC Scholars
- Missouri College Advising Corps
- National College Advising Corps

## Secondary Education

- Blue Valley CAPS
- Kansas City Kansas School District
- Kansas City Missouri School District
- Liberty School District
- Manual Technical Center
- North Kansas City School District
- Northland CAPS
- Shawnee Mission School District
- Summit Tech Academy

## Postsecondary Education

- Avila University
- Baker University
- Donnelly College
- Johnson County Community College
- Kansas City Kansas Community College
- Kansas State University
- Lincoln University
- Metropolitan Community College
- Park University
- Rockhurst University
- University of Central Missouri
- University of Kansas
- University of Missouri – Columbia
- University of Missouri – Kansas City
- Western Governors University
- William Jewell College

# Introduction

Developing and retaining a talented, educated workforce is critical to regional prosperity. As employers adopt emerging technologies and compete on the global stage, there is a continual demand on educational institutions to adjust their curriculum to meet business needs, teaching the skills and competencies students need to be successful in the 21st century workforce and beyond.

The Education Asset Inventory is designed to help educators and administrators better align educational output with industry needs. The inventory provides a comprehensive overview of degree programs in specific high-growth sectors that are available at public, private and nonprofit postsecondary institutions located within the Kansas City region. This tool can help educators and administrators make informed decisions about courses and curriculum, and help prospective students find institutions that offer the credentials they need for their chosen careers.

Each year since 2015, the Mid-America Regional Council (MARC) has published the Education Asset Inventory on behalf of GradForce KC, a regional network of educators and organizations convened by MARC to focus on improving postsecondary educational attainment, meeting the talent needs of industry, and fostering the development of career pathways and talent pipelines to support economic and civic vitality.



GradForce KC members include the region's largest school districts (by enrollment); tech academies; representatives from a network of 17 public and nonprofit postsecondary institutions; nonprofit, philanthropic and workforce organizations that are regional in scope and have a complementary mission; state officials located in the region whose work is related to education; and education intermediaries.

In addition to the Education Asset Inventory, MARC helps advance GradForce KC's mission with Talent-to-Industry Exchanges — in-depth, sector-specific processes that couple deep economic and labor force analysis with direct input from leading firms in key industries — and other workforce development publications. Learn more at [kcworkforce.org/reports.htm](http://kcworkforce.org/reports.htm).

Through its work, GradForce KC is helping many stakeholders and partners across the region — government agencies, nonprofits, foundations and more — advance educational attainment in our region. Some of these efforts are described on the following page. We would like to take this opportunity to thank all our community stakeholders for their partnership and ongoing support and collaboration.

## Increasing Postsecondary Attainment

**KC DEGREES** connects adults in the Kansas City region, age 25 and older, to quality credentials and degrees by providing comprehensive career and education advising services and referrals to community organizations to help address barriers to success, including financial, family and/or academic barriers. To date, KC Degrees has helped 97 adults complete a postsecondary program and another 432 adults are currently enrolled.



Connecting Adults to Credentials & Careers

KC Degrees encourages clients to use the Agile Work Profiler developed by the DeBruce Foundation to gauge their interests and abilities. The profiler, which takes only 10 minutes to complete, helps students identify career options, gain a better understanding of the careers that might be of the most interest to them, learn how much training and education is required, and find out how much they can expect to earn. KC Degrees College Success Navigators then help guide students through application and enrollment processes.

**KC SCHOLARS** is a regional workforce pipeline program that provides scholarships and college planning, persistence and completion support for high school students and adult learners as they pursue credit-bearing credentials, associate and/or bachelor's degrees. As of the fall semester of 2019, 1,200 KC Scholars are enrolled in college.



Launched on the same day in late 2016, KC Scholars and KC Degrees work with a postsecondary network of 17 regional higher education institutions. The information in this report is shared with these institutions each fall to highlight gaps in education and training opportunities across the postsecondary spectrum, from certificates to doctoral degrees. For example, earlier editions of the Education Asset Inventory illustrated the need for more credentials in cybersecurity to meet growing workforce needs, and postsecondary institutions responded by adding programs in this emerging field.

## Promoting Regional Prosperity

**KC RISING** is a collaborative effort of the Civic Council of Greater Kansas City, the Kansas City Area Development Council, the Greater Kansas City Chamber of Commerce and the Mid-America Regional Council, focused on inclusive regional economic prosperity. This business-led effort includes representation from government, education, and civic and nonprofit organizations. KC Rising brings people and organizations together to achieve a shared vision of regional prosperity for all by aligning and accelerating community efforts for greatest impact.

KC Rising measures success by comparing the region to 30 peer metros on a variety of indicators, with a goal of being a top-10 metro in quality jobs, gross regional product and median household income. KC Rising contributed to this report by providing business insights from employers in key traded sectors.



## Postsecondary Credentials

Throughout the inventory, available programs are categorized by the type of credential a student may earn. General definitions for each credential type are provided below.

- **Certificate** — A credential verifying the completion of a program area. Certificates typically require at least one but less than two full-time-equivalent academic years, or from 900 to 1,800 contact hours.
- **Associate Degree** — A credential that requires at least two but less than four years of full-time-equivalent college course work.
- **Concentration** — This category includes an undergraduate-level sequence of at least four courses, or 12 credit hours, in a specific program area.
- **Minor** — A credential for a student’s specialization conducted as part of an undergraduate program area. Course requirements vary by program and institution.
- **Bachelor’s Degree** — A credential, also called a baccalaureate degree, that normally requires at least four but not more than six years of full-time-equivalent college-level course work.
- **Master’s Degree** — A credential that requires the completion of a program area beyond the bachelor’s degree. It typically requires at least one but not more than two years of full-time equivalent college-level course work.
- **Graduate Certificate** — A credential verifying the completion of a post-graduate program area that is more specialized in scope than a master’s degree. It typically can be completed in one semester but may take up to a year of full-time equivalent college-level course work.
- **Doctorate** — A credential such as a Ph.D., professional degree or other doctoral degree that requires advanced work beyond the master’s level, including the preparation and defense of a dissertation based on original research, or the planning and execution of an original project demonstrating substantial scholarly achievement.

## Educational Institutions Included in the 2019 Asset Inventory

The institutions included in the inventory data are listed below and shown by number on the following map.

### PUBLIC INSTITUTIONS

1. Emporia State University, 1 Kellogg Circle, Emporia, Kansas
2. Johnson County Community College, 12345 College Blvd., Overland Park, Kansas
3. Kansas City Kansas Community College, 7250 State Ave., Kansas City, Kansas
4. Kansas City University of Medicine and Biosciences, 1750 Independence Ave, Kansas City, Missouri
5. Kansas State University, Manhattan, Kansas
  - 5A. Olathe Campus, 22201 W Innovation Dr., Olathe, Kansas
6. Lincoln University, Jefferson City, Missouri
7. Metropolitan Community College
  - 7A. Blue River Campus, 20301 East 78 Highway, Independence, Missouri
  - 7B. Business & Technology Campus, 1775 Universal Avenue, Kansas City, Missouri
  - 7C. Longview Campus, 500 SW Longview Road, Lee's Summit, Missouri
  - 7D. Maple Woods Campus, 2601 NE Barry Road, Kansas City, Missouri
  - 7E. Penn Valley Campus, 3201 Southwest Trafficway, Kansas City, Missouri
8. Missouri Western University, St. Joseph, Missouri
9. Missouri University of Science & Technology, Rolla, Missouri
10. Northwest Missouri State University, 800 University Drive, Maryville, Missouri
  - 10A. Northwest Missouri State University — Kansas City Campus, 6889 N. Oak Trafficway, Gladstone, Missouri
11. Pittsburg State University, Pittsburg, Kansas
12. University of Central Missouri, Warrensburg, Missouri
13. University of Kansas, Lawrence, Kansas
  - 13A. Edwards Campus, 12600 S. Quivira Rd., Overland Park, Kansas
  - 13B. Medical Center, 3901 Rainbow Blvd., Kansas City, Kansas
14. University of Missouri — Columbia, Columbia, Missouri
15. University of Missouri — Kansas City, 5100 Rockhill Road, Kansas City, Missouri

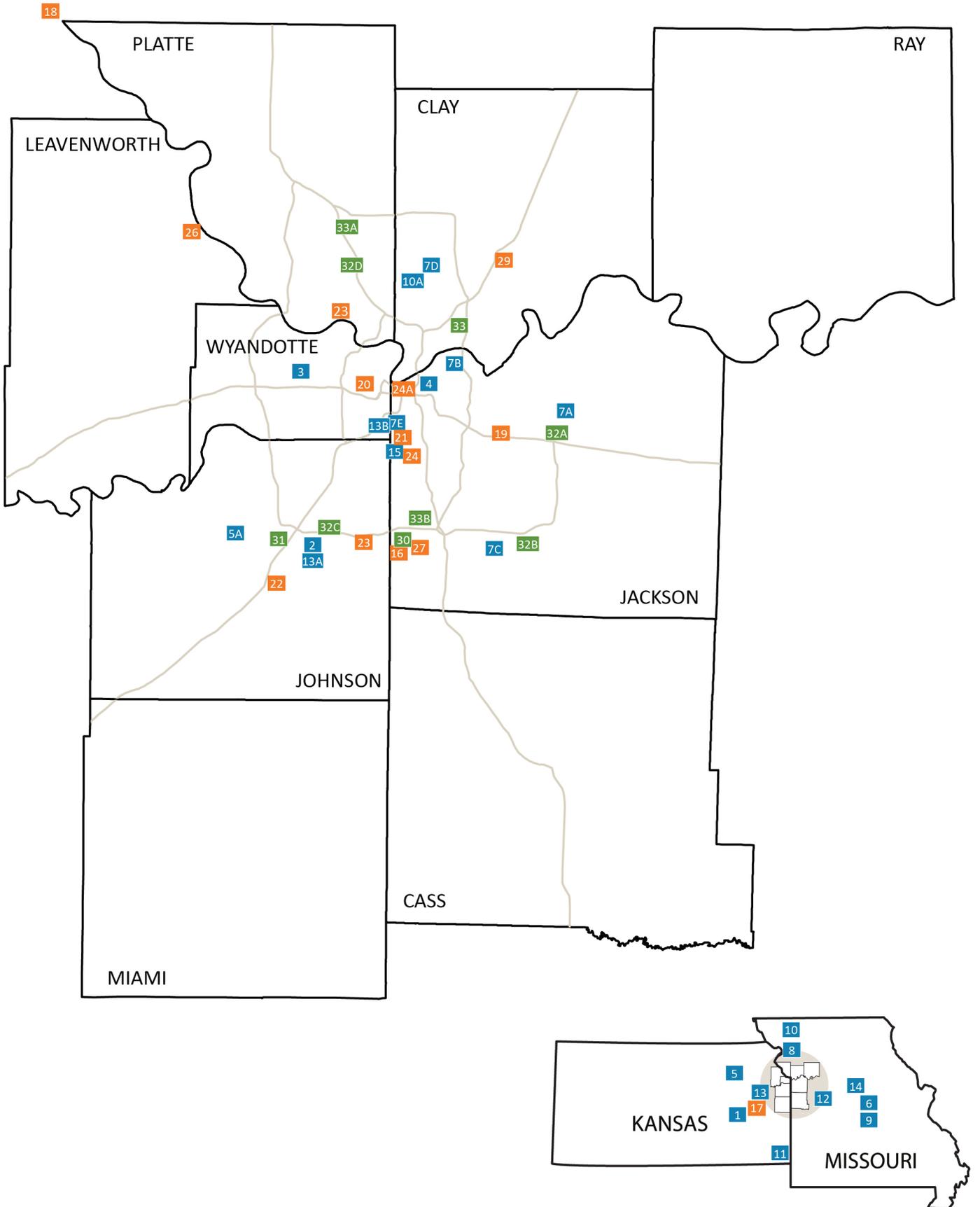
### PRIVATE NON-PROFIT INSTITUTIONS

16. Avila University, 11901 Wornall Road, Kansas City, Missouri
17. Baker University, 618 8th St., Baldwin City, Kansas
18. Benedictine College, 1020 N 2nd St., Atchison, Kansas
19. Columbia College-Kansas City, 4240 Blue Ridge Blvd. #400, Kansas City, Missouri
20. Donnelly College, 608 N 18th St., Kansas City, Kansas
21. Kansas City Art Institute, 4415 Warwick Blvd., Kansas City, Missouri
22. MidAmerica Nazarene University, 2030 E College Way, Olathe, Kansas
23. Ottawa University-Kansas City, 4370 W 109th St. #200, Overland Park, Kansas
24. Park University, 8700 NW River Park Dr., Parkville, Missouri
  - 24A. Park University-Kansas City, 911 Main St. #300, Kansas City, Missouri
25. Rockhurst University, 1100 Rockhurst Road, Kansas City, Missouri
26. University of Saint Mary, 4100 S 4th St., Leavenworth, Kansas
27. Webster University, 10450 Holmes Road #100, Kansas City, Missouri
28. Western Governors University Missouri, online only
29. William Jewell College, 500 College Hill, Liberty, Missouri

### FOR-PROFIT INSTITUTIONS

30. DeVry University, 1310 E. 104th St., Suite 120, Kansas City, Missouri
31. Grantham University, 16025 W 113th St., Lenexa, Kansas
32. National American University
  - 32A. Independence, 3620 Arrowhead Ave., Independence, Missouri
  - 32B. Lee's Summit, 401 NW Murray Road, Lee's Summit, Missouri
  - 32C. Overland Park, 10310 Mastin St., Overland Park, Kansas
  - 32D. Zona Rosa, 7490 NW 87th St., Kansas City, Missouri
33. Pinnacle Career Institute
  - 33A. North Kansas City, 11500 NW Ambassador Dr. #221, Kansas City, Missouri
  - 33B. South Kansas City, 1001 E 101st Terr., Suite 325, Kansas City, Missouri

# MAP OF EDUCATIONAL INSTITUTIONS INVENTORIED



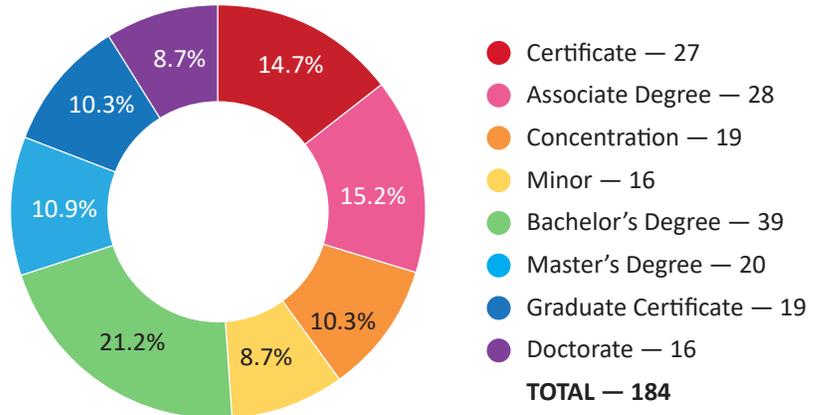


# Advanced Manufacturing

## Industry Insights

- Students are more likely to be encouraged to pursue a four-year college degree than a career in the trades, even as the demand for skilled trades occupations continues to grow.<sup>1</sup>
- High schools in Missouri and Kansas offer Career and Technical Education (CTE) courses that prepare students for the trades, but participation rates average only about 3.4% in Missouri and 10.2% in Kansas.<sup>1</sup>
- Currently, 69,212 workers in the Kansas City region are employed in advanced manufacturing occupations.<sup>2</sup>
- The average annual wage for workers in the advanced manufacturing sector is \$42,900.<sup>2</sup>
- Total demand (replacement and growth) in this industry over the next five years is expected to add 38,386 jobs.<sup>2</sup>

Credentials Available by Type



Credentials Available by Institution Type

	Public	Private Non-Profit	For-Profit
Certificate	26	—	1
Associate	26	—	2
Concentration	17	—	2
Minor	16	—	—
Bachelor	30	6	3
Master	20	—	—
Graduate Certificate	19	—	—
Doctorate	16	—	—
<b>Total</b>	<b>170</b>	<b>6</b>	<b>8</b>

### Types of Firms:

Precision technologies, CNC machining, millwork, robotics, 3D printing

### Local Examples:

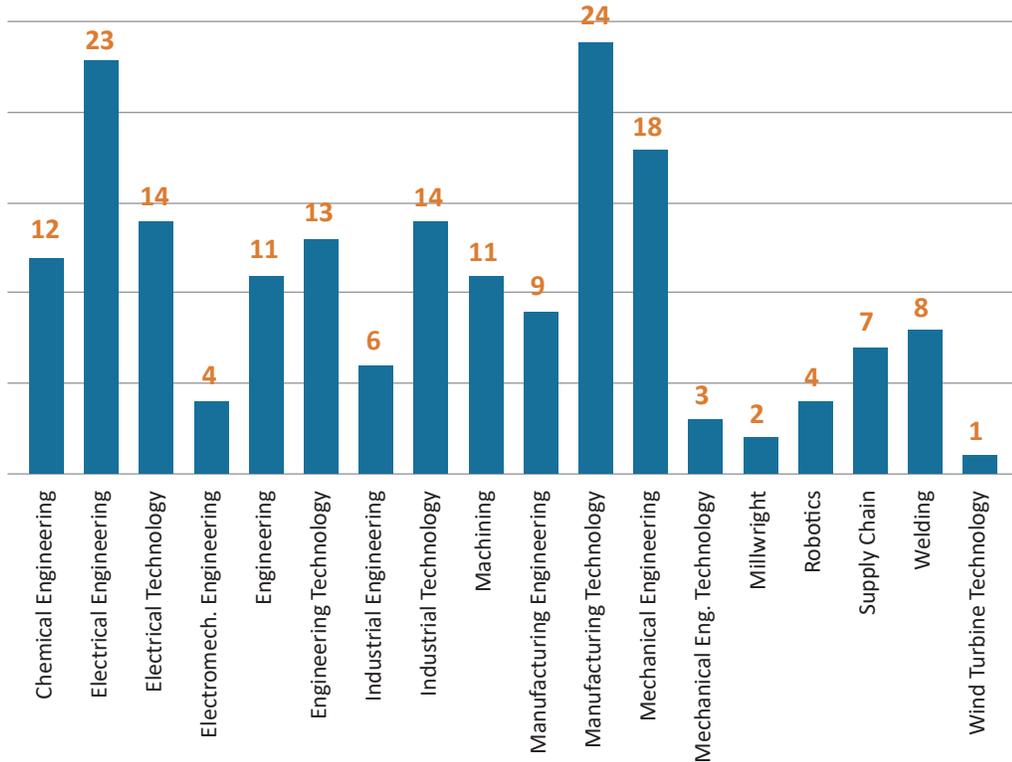
Bayer, Ford, Garmin, GM, Holland America, Honeywell

**Total Employment:** 69,212 jobs

<sup>1</sup> Skilled Trades Talent-to-Industry Exchange, [www.kcworkforce.com/reports.htm](http://www.kcworkforce.com/reports.htm)

<sup>2</sup> Jobs EQ

## Advanced Manufacturing Credentials Available by Program



**184**  
Total  
Credentials

## Advanced Manufacturing Credentials by Program and Type

Program	Certificate	Associate	Concentration	Minor	Bachelor	Master	Grad Certificate	Doctorate
Chemical Engineering			1		5	3		3
Electrical Engineering			1	1	10	5	2	4
Electrical Technology	4	5	2	1	2			
Electromechanical Engineering		2	2					
Engineering		1		3	1		5	1
Engineering Technology	1	1	4	2	3	1	1	
Industrial Engineering					3	1		2
Industrial Technology	6	6	1			1		
Machining	5	6						
Manufacturing Engineering						4	3	2
Manufacturing Technology	1	2	4	7	5	1	4	
Mechanical Engineering			1		7	4	2	4
Mechanical Engineering Technology			1	1	1			
Millwright	1	1						
Robotics	2	1					1	
Supply Chain	1		2	1	2		1	
Welding	5	3						
Wind Turbine Technology	1							

# Advanced Manufacturing Programs by Institution

		Chemical Engineering	Electrical Engineering	Electrical Technology	Electromechanical Engineering	Engineering	Engineering Technology	Industrial Engineering	Industrial Technology	Machining	Manufacturing Engineering	Manufacturing Technology	Mechanical Engineering	Mechanical Eng. Technology	Millwright	Robotics	Supply Chain	Welding	Wind Turbine Technology
PUBLIC	JCCC			●					●									●	●
	KCKCC			●						●									●
	K-State	●	●					●	●		●	●	●						
	MCC			●	●	●	●		●	●		●			●	●		●	●
	MUS&T	●	●			●	●		●		●	●	●			●	●		
	Missouri Western		●									●	●				●		
	Pitt State			●	●	●	●	●				●	●	●					
	UCM		●	●			●	●	●			●	●			●			
	Univ. of KS	●	●		●			●					●	●				●	
	Univ. of KS Edwards		●			●													
	Univ. of MO Columbia	●	●			●	●	●	●		●		●					●	
	UMKC		●			●							●	●					
PRIVATE	Benedictine	●	●			●						●							
	Rockhurst		●									●							
FOR-PROFIT	DeVry		●	●													●		
	Grantham			●			●	●											
	National American																●		
	Pinnacle																		●

- Certificate
- Associate
- Concentration
- Minor
- Bachelor
- Master
- Grad. Cert.
- Doctorate

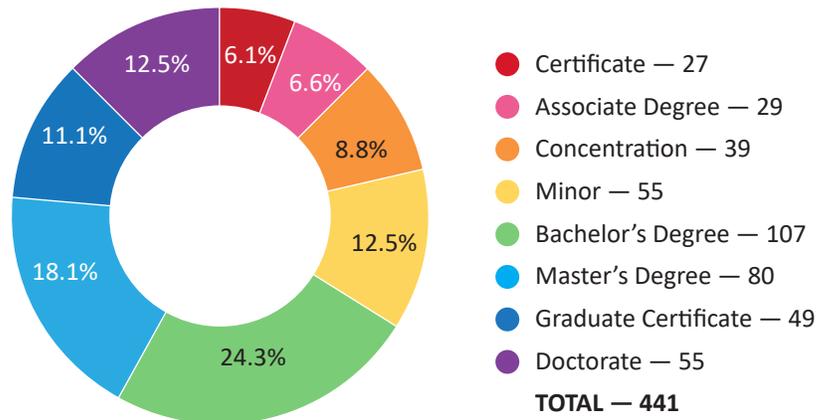


# Engineering & Architecture

## Industry Insights

- The region’s current engineering and architecture workforce lacks diversity. Women make up 51% of the total population, but only 15% of the engineering and architecture workforce. People of color account for 25% of the total population, but only 9% of the workforce in this sector.<sup>1</sup>
- Degrees awarded don’t always align with local demand. During the 2017-2018 academic year, the number of students earning credentials in entry-level occupations such as surveying and mapping technicians, civil engineering technicians and drafters met only 22% of local demand (63 graduates/293 job openings.)<sup>1</sup>
- A total of 19,422 workers in the region are employed in engineering and architecture occupations.<sup>2</sup>
- The average wage in this sector is \$79,000 per year.<sup>2</sup>
- Total demand (replacement and growth) in this sector over the next five years is estimated at 8,048 jobs.<sup>2</sup>

## Credentials Available by Type



## Credentials Available by Institution Type

	Public	Private Non-Profit	For-Profit
Certificate	26	—	1
Associate	26	1	2
Concentration	38	1	—
Minor	46	9	—
Bachelor	82	21	4
Master	79	—	1
Graduate Certificate	46	2	1
Doctorate	55	—	—
<b>Total</b>	<b>398</b>	<b>34</b>	<b>9</b>

### Types of Firms:

Engineering and architectural firms, specialized design services

### Local Examples:

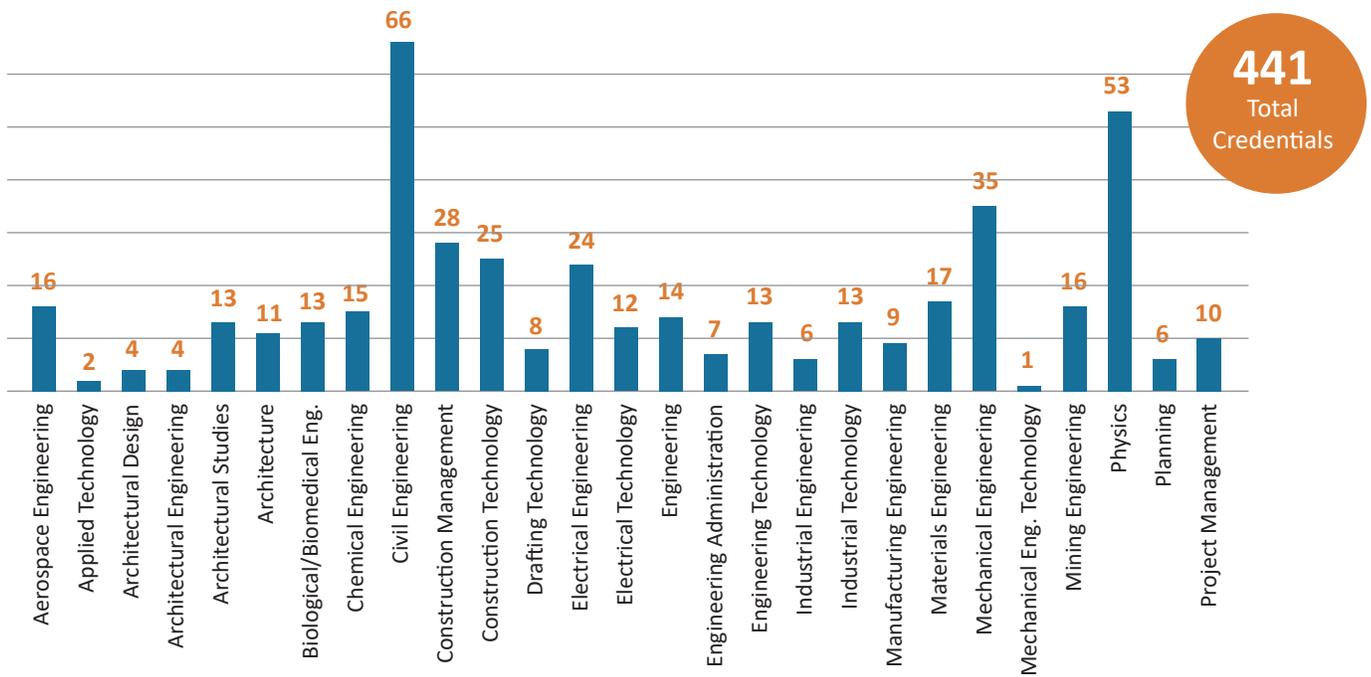
Black & Veatch, BNIM, Burns & McDonnell, HNTB, HOK, Honeywell

**Total Employment:** 19,422 jobs

<sup>1</sup> Skilled Trades Talent-to-Industry Exchange, [www.kcworkforce.com/reports.htm](http://www.kcworkforce.com/reports.htm)

<sup>2</sup> Jobs EQ

## Engineering & Architecture Credentials Available by Program



**441**  
Total  
Credentials

## Engineering & Architecture Credentials by Program and Type

	Certificate	Associate	Concentration	Minor	Bachelor	Master	Grad Certificate	Doctorate
Aerospace Engineering			1	3	3	4	2	3
Applied Technology					1	1		
Architectural Design			1			1	2	
Architectural Engineering					2	1	1	
Architectural Studies			3	1	2	4	1	2
Architecture	1				2	3	4	1
Biological/Biomedical Engineering	1		1	5	3			3
Chemical Engineering			2		5	3		5
Civil Engineering		2	4	6	20	13	12	9
Construction Management	3	3	6	6	5	2	3	
Construction Technology	12	5	2	1	4		1	
Drafting Technology	1	4	1	1	1			
Electrical Engineering			1	1	10	6	2	4
Electrical Technology	3	4	2	1	2			
Engineering		1		5	2		5	1
Engineering Administration				1	1	4		1
Engineering Technology	1	1	4	2	3	1	1	
Industrial Engineering					3	1		2
Industrial Technology	5	6	1			1		
Manufacturing Engineering						4	3	2
Materials Engineering			3	2	2	4	2	4
Mechanical Engineering			3	3	9	8	3	9
Mechanical Engineering Technology			1					
Mining Engineering			2	1	3	4	2	4
Physics		2	1	17	21	7		5
Planning				3	1	2		
Project Management	1		1			3	5	

# Engineering & Architecture Programs by Institution

	Aerospace Engineering	Applied Technology	Architectural Design	Architectural Engineering	Architectural Studies	Architecture	Biol./Biomedical Engineering	Chemical Engineering	Civil Engineering	Construction Management	Construction Technology	Drafting Technology	Electrical Engineering	Electrical Technology	Engineering	Engineering Administration	Engineering Technology	Industrial Engineering	Industrial Technology	Manufacturing Engineering	Materials Engineering	Mechanical Engineering	Mechanical Eng. Technology	Mining Engineering	Physics	Planning	Project Management
<b>PUBLIC</b>	Emporia State																										
	JCCC									●	●	●		●	●				●								
	KCKCC								●	●	●	●		●											●		
	K-State			●	●	●	●	●	●	●	●		●	●		●		●		●		●	●		●	●	●
	K-State Olathe		●																								
	Lincoln								●	●			●												●	●	
	MCC								●	●	●	●	●			●		●	●	●	●	●	●	●	●	●	
	MUS&T	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
	Missouri Western		●						●	●	●	●	●	●			●			●	●	●	●	●	●	●	
	Northwest MO State																								●	●	
	Pitt State									●	●	●			●	●	●	●						●	●	●	
	UCM								●	●	●		●	●	●				●	●		●	●	●	●	●	
	Univ. of KS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
	Univ. of KS Edwards				●				●	●	●	●	●	●		●	●										●
Univ. of MO Columbia	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
UMKC						●		●	●	●		●	●	●	●						●	●		●	●	●	
<b>PRIVATE NON-PROFIT</b>	Avila								●																		
	Baker																								●	●	
	Benedictine						●	●	●				●		●							●			●	●	
	Mid-America Nazarene																								●	●	
	Ottawa														●												
	Park									●	●															●	●
	Park-KC																									●	
	Rockhurst						●		●	●			●									●			●	●	
	Webster																										●
	Wm. Jewell								●																●	●	
<b>FOR-PROFIT</b>	DeVry												●	●													●
	Grantham												●				●	●									●
	National American								●								●	●								●	●

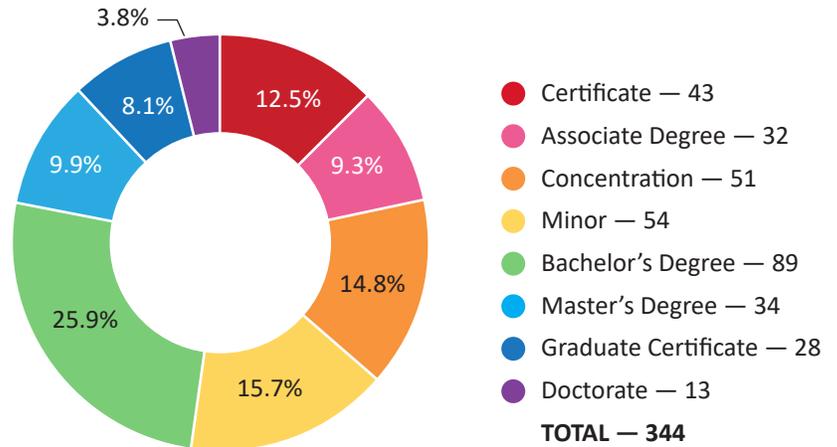


# Information Technology

## Industry Insights

- In the Kansas City region, there were forty cybersecurity firms in 2018 that have generated \$2 billion dollars in revenue.<sup>1</sup>
- There are currently 41,114 workers employed in IT occupations in the region.<sup>2</sup>
- The average annual wage in this sector is \$77,900.<sup>2</sup>
- Total demand (replacement and growth) is expected to add 20,237 jobs in this sector over the next five years.<sup>2</sup>
- In the next five years, there will be a need for an additional 6,585 software developers and programmers.<sup>2</sup>

**Credentials Available by Type**



**Credentials Available by Institution Type**

	Public	Private Non-Profit	For-Profit
Certificate	31	6	6
Associate	25	3	4
Concentration	25	15	11
Minor	38	16	—
Bachelor	50	30	9
Master	26	4	4
Graduate Certificate	25	2	1
Doctorate	13	—	—
<b>Total</b>	<b>233</b>	<b>76</b>	<b>35</b>

### Types of Firms:

Health IT, software publishers, data processing, hosting and related services, computer systems design services

### Local Examples:

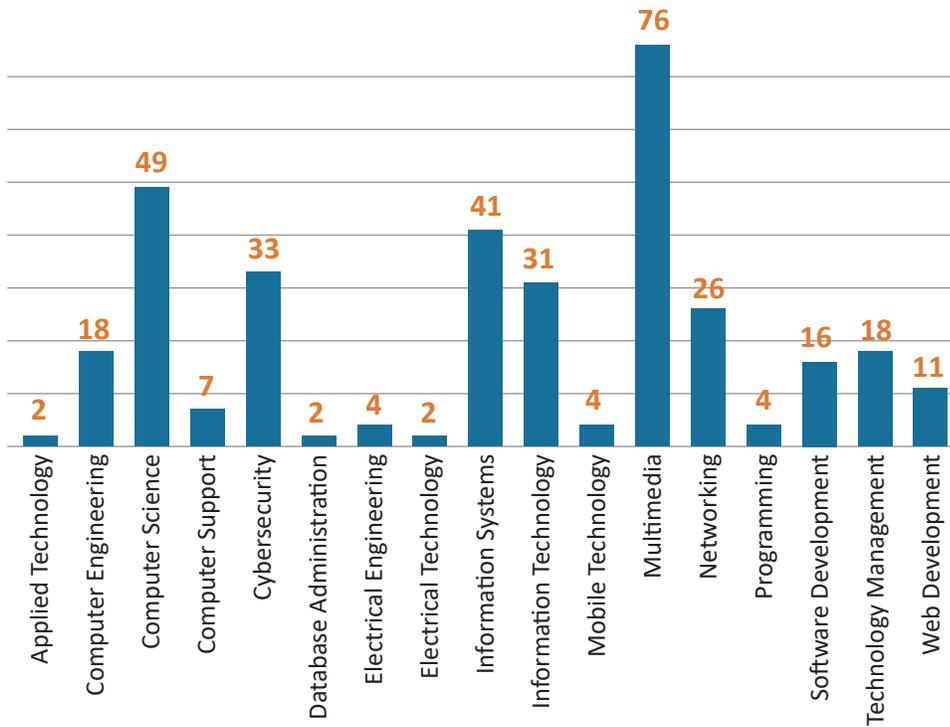
Cerner, DST, Jack Henry & Associates, Netsmart Tech

**Total Employment:** 41,114 jobs

<sup>1</sup>Enterprise KC

<sup>2</sup>Jobs EQ

## Information Technology Credentials Available by Program



**344**  
Total  
Credentials

## Information Technology Credentials by Program and Type

	Certificate	Associate	Concentration	Minor	Bachelor	Master	Grad Certificate	Doctorate
Applied Technology	1				1			
Computer Engineering		4	1		6	4		3
Computer Science	2	2	2	12	19	7		5
Computer Support	4	1		2				
Cybersecurity	5	1	7	5	4	5	6	
Database Administration			2					
Electrical Engineering						1	1	2
Electrical Technology		1		1				
Information Systems	5	5	4	8	14		5	
Information Technology	2	2	4	4	10	7	2	
Mobile Technology	1			1			2	
Multimedia	6	6	15	18	23	2	5	1
Networking	8	5	4	1	3	1	3	1
Programming	2	1			1			
Software Development	3	2	5		3	2	1	
Technology Management	1		2	1	5	5	3	1
Web Development	3	2	5	1				

# Information Technology Programs by Institution

		Applied Technology	Computer Engineering	Computer Science	Computer Support	Cybersecurity	Database Administration	Electrical Engineering	Electrical Technology	Information Systems	Information Technology	Mobile Technology	Multimedia	Networking	Programming	Software Development	Technology Management	Web Development
PUBLIC	Emporia State			●		●				●	●		●					
	JCCC				●	●				●			●	●		●		●
	KCKCC	●	●		●	●							●	●	●	●		●
	K-State		●	●	●	●		●	●	●			●			●		
	K-State Olathe	●																
	Lincoln									●	●							
	MCC		●	●	●	●			●	●	●		●	●		●	●	
	MUS&T		●	●	●	●		●		●	●	●	●	●		●	●	
	Missouri Western	●	●	●	●	●				●	●		●	●				
	Northwest MO State			●	●	●				●	●		●				●	●
	Northwest MO State-KC			●													●	●
	Pitt State					●				●	●		●	●			●	●
	UCM			●	●	●	●		●	●	●	●	●	●		●	●	●
	Univ. of KS		●	●	●	●				●	●		●	●		●	●	●
	Univ. of KS Edwards					●					●	●					●	
	Univ. of MO Columbia		●	●	●					●	●		●	●				
	UMKC		●	●	●	●			●	●	●		●	●		●		
PRIVATE NON-PROFIT	Avila			●	●								●		●	●		●
	Baker			●	●					●			●					
	Benedictine			●	●													
	Columbia Coll.-KC																●	
	Donnelly									●	●							
	KCAI												●					
	Mid-America Nazarene			●	●	●	●			●			●			●		
	Ottawa									●								
	Park			●		●	●			●	●	●	●	●		●	●	●
	Park-KC									●	●							
	Rockhurst			●									●					
	St. Mary					●				●	●		●			●		
	Webster					●	●											
	Western Governors			●		●	●			●	●			●		●	●	
Wm. Jewell												●						
FOR-PROFIT	DeVry					●	●	●		●	●		●	●	●	●	●	●
	Grantham		●	●	●	●				●	●			●	●		●	
	National American									●	●							
	Pinnacle											●						

● Certificate ● Associate ● Concentration ● Minor ● Bachelor ● Master ● Grad. Cert. ● Doctorate

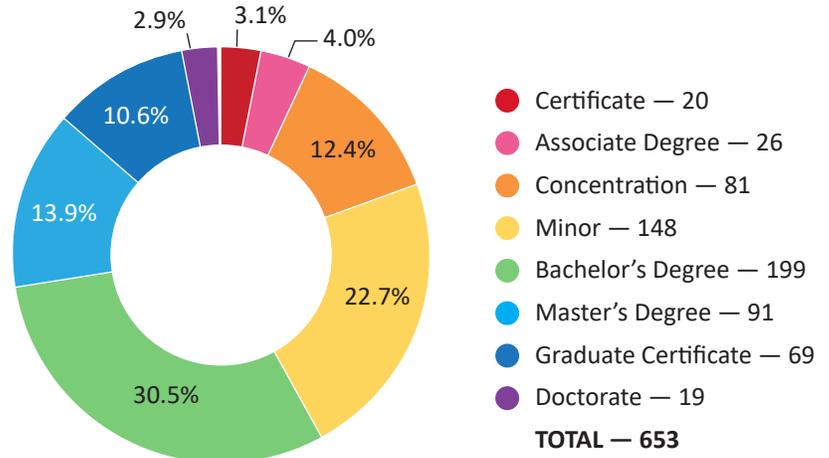


# Finance & Insurance

## Industry Insights

- Business degrees make up a large portion of the region’s postsecondary attainment, but the field is changing rapidly. The World Economic Forum estimates that 65 percent of children entering primary school today will ultimately end up working in completely new job types that don’t yet exist.<sup>1</sup>
- During the 2017-2018 academic year, 635 degrees were awarded in statistics, but the demand was only 30 per year. However, some of these degrees prepare students for a wide variety of fields and career paths.<sup>2</sup>
- The finance and insurance sector employs 69,573 individuals in the Kansas City region.<sup>2</sup>
- The average wage in this sector is \$63,100 per year.<sup>2</sup>
- Total demand (replacement and growth) is expected to add 35,374 jobs in this industry over the next five years.<sup>2</sup>

### Credentials Available by Type



### Credentials Available by Institution Type

	Public	Private Non-Profit	For-Profit
Certificate	12	6	2
Associate	12	7	7
Concentration	37	33	11
Minor	87	61	—
Bachelor	107	81	11
Master	55	30	6
Graduate Certificate	42	22	5
Doctorate	19	—	—
<b>Total</b>	<b>371</b>	<b>240</b>	<b>42</b>

#### Types of Firms:

Banks, securities and brokerage firms, insurance carriers and agencies

#### Local Examples:

American Century Mutual Funds, Arthur J. Gallagher & Co., Bank of America Corporation, BATS, Commerce Bank, Kansas City Life, Lockton, UMB

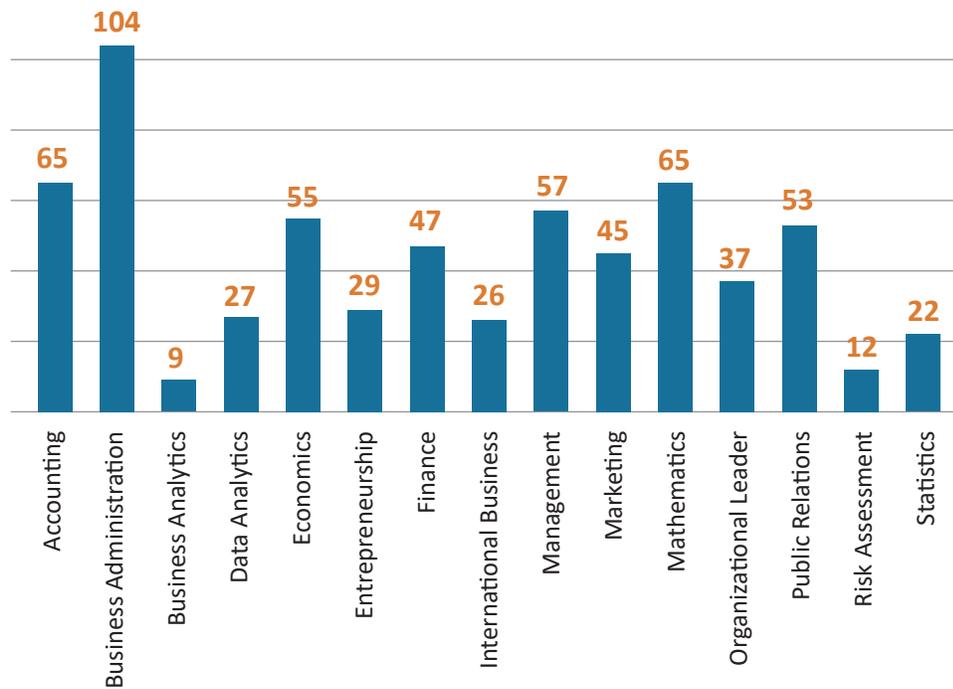
**Total Employment:** 69,573 jobs

<sup>1</sup> “The Future of Jobs,” Chapter 1.  
<http://reports.weforum.org/future-of-jobs-2016>

<sup>2</sup> Jobs EQ

## Finance & Insurance Credentials Available by Program

**653**  
Total  
Credentials



## Finance & Insurance Credentials by Program and Type

	Certificate	Associate	Concentration	Minor	Bachelor	Master	Grad Certificate	Doctorate
Accounting	3	5	7	9	24	11	5	1
Business Administration	1	11		25	26	32	8	1
Business Analytics			1	1	2	2	3	
Data Analytics	3		2	4	6	5	7	
Economics		1	3	20	23	4		4
Entrepreneurship	2		8	12	2		4	1
Finance	2		8	8	17	4	8	
International Business	1		10	6	6	2	1	
Management	2	6	10	7	16	7	8	1
Marketing	1	2	11	11	15	1	3	1
Mathematics				19	27	9	5	5
Organizational Leader	2		4	9	7	3	11	1
Public Relations	1		11	11	21	6	2	1
Risk Assessment	2	1	5	1	2	1		
Statistics			1	5	5	4	4	3

# Finance & Insurance Programs by Institution

		Accounting	Business Admin.	Business Analytics	Data Analytics	Economics	Entrepreneurship	Finance	International Business	Management	Marketing	Mathematics	Organizational Leader	Public Relations	Risk Assessment	Statistics	
PUBLIC	Emporia State	●●●	●●	●		●●	●●	●	●	●●	●●●	●●		●●		●	
	JCCC	●	●		●						●●						
	KCKCC	●●	●			●					●						
	K-State	●●	●●		●●	●●	●●	●	●	●	●	●●	●●	●●		●●	
	K-State Olathe												●			●●	
	Lincoln	●●	●●									●●	●●				
	MCC	●									●				●●		
	MUS&T		●●	●●	●	●●	●●	●●	●	●●	●●	●●	●●				●
	Missouri Western	●	●●			●●	●	●●		●	●	●●	●	●●			
	Northwest MO State	●●	●●		●	●●		●			●	●●				●	
	Northwest MO State-KC									●	●			●			
	Pitt State	●●	●●		●	●●		●●	●●	●	●	●●	●●	●			
	UCM	●●	●●		●●	●●	●●	●●	●●	●●	●●	●●	●●		●●	●●	●●
	Univ. of KS	●●	●●	●	●	●●	●●	●	●		●●	●●	●●	●●	●●	●	
	Univ. of KS Edwards	●●	●●			●									●		●
	Univ. of KS Med. Ctr.																●
Univ. of MO Columbia	●●	●●		●●	●●	●●	●●	●	●	●●	●●	●●		●●	●	●●	
UMKC	●●	●●			●●	●●	●●			●	●	●●	●●	●	●	●●	
PRIVATE NON-PROFIT	Avila	●●	●●			●		●●	●	●●	●●	●	●	●			
	Baker	●●	●●			●●		●●	●●	●●	●	●●	●●	●●			
	Benedictine	●●	●●			●●	●	●●	●	●	●	●●		●●			
	Columbia Coll.-KC		●●							●●							
	Donnelly		●●										●				
	KCAI						●										
	Mid-America Nazarene	●	●●						●	●●	●●	●●	●				
	Ottawa	●●	●●			●●	●	●●	●	●●	●●	●●	●	●	●		
	Park	●●	●●	●		●●	●●	●●	●●	●●	●●	●●	●	●●		●	
	Park-KC	●●	●					●	●	●●	●		●	●●			
	Rockhurst	●	●●	●●	●●	●●		●	●	●●	●	●●	●●	●●	●●		
	St. Mary	●	●●							●	●	●●		●			
	Webster		●		●●			●	●	●●			●	●●			
	Western Governors	●●	●●		●●							●		●			
Wm. Jewell	●	●●		●●	●●	●					●●	●●	●				
FOR-PROFIT	DeVry	●●	●●		●●		●●	●		●●	●						
	Grantham	●	●●				●	●		●			●	●			
	National American	●●	●●				●	●		●●	●						

● Certificate ● Associate ● Concentration ● Minor ● Bachelor ● Master ● Grad. Cert. ● Doctorate

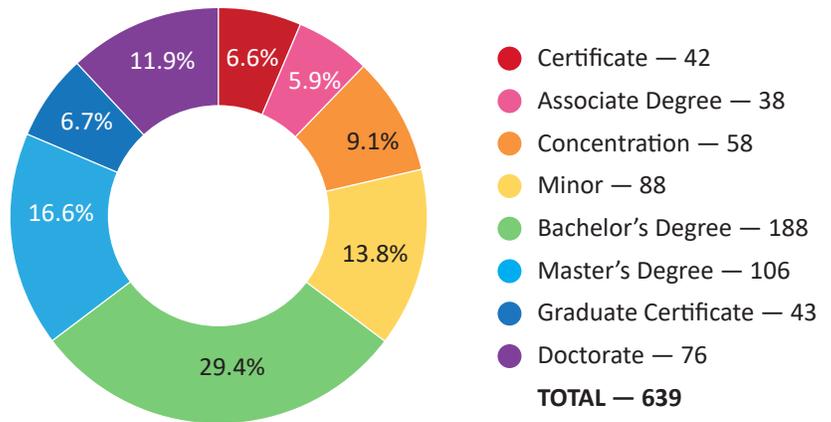


# Life Sciences

## Industry Insights

- About two-thirds of life science companies focus on human health, 25% are animal-focused and 8% are plant-focused. Animal-focused companies have seen the largest increase, up from 21% in 2006.<sup>1</sup>
- Talent must be developed for this sector to grow, and in some occupations the number of degrees awarded in the region does not meet demand. For example, only 15 degrees were awarded for chemical technicians during the 2017-2018 academic year, but the demand was more than double that number, at 35 job openings per year.<sup>2</sup>
- Currently, 25,081 workers are employed in life sciences occupations in the region.<sup>3</sup>
- The average annual wage in this sector is \$65,400.<sup>2</sup>
- Total demand (replacement and growth) in this industry is expected to add 12,348 jobs over the next five years.<sup>2</sup>

## Credentials Available by Type



## Credentials Available by Institution Type

	Public	Private Non-Profit	For-Profit
Certificate	36	2	4
Associate	32	1	5
Concentration	52	4	2
Minor	63	25	—
Bachelor	125	57	6
Master	87	16	3
Graduate Certificate	33	10	—
Doctorate	74	2	—
<b>Total</b>	<b>502</b>	<b>117</b>	<b>20</b>

### Types of Firms:

Agricultural, chemical, pharmaceutical, clinics and labs, informatics

### Local Examples:

Bayer, Boehringer Ingelheim, Ceva, MRI Global, TEVA Pharmaceuticals

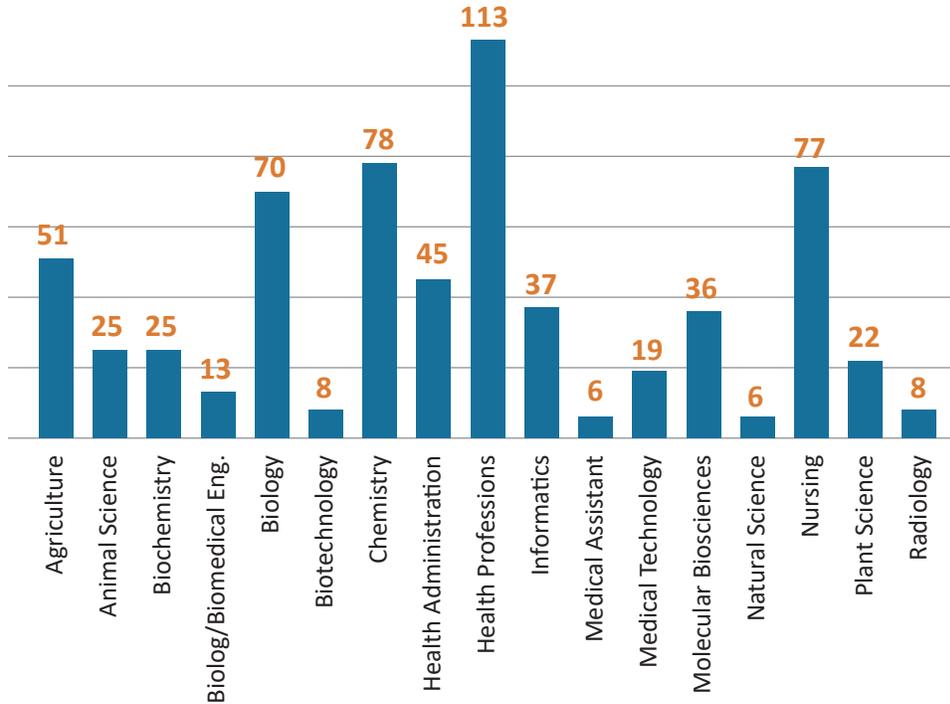
**Total Employment:** 25,081 jobs

<sup>1</sup> BioNexus KC Regional Life Sciences Industry Census 2018

<sup>2</sup> Jobs EQ

<sup>3</sup> Total from Jobs EQ using occupations defined by BioNexus KC

## Life Sciences Credentials Available by Program



**639**  
Total  
Credentials

## Life Sciences Credentials by Program and Type

	Certificate	Associate	Concentration	Minor	Bachelor	Master	Grad Certificate	Doctorate
Agriculture	3		5	18	13	8	2	2
Animal Science	3	1	1	4	4	7	2	3
Biochemistry			3	1	15	2		4
Biological/Biomedical Engineering	1			1	5	3		3
Biology		4	6	18	31	8		3
Biotechnology	2		2	1	1	1	1	
Chemistry		6	8	21	28	9		6
Health Administration		1	7	5	8	13	10	1
Health Professions	9	13	8	5	24	20	13	21
Informatics	5	5	4	5	6	5	4	3
Medical Assistant	5	1						
Medical Technology	1		3		11	3		1
Molecular Biosciences			5	2	9	8	1	11
Natural Science				1	4	1		
Nursing	8	5	1	2	23	14	10	14
Plant Science	1	1	5	4	3	4		4
Radiology	4	1			3			

# Life Sciences Programs by Institution

		Agriculture	Animal Science	Biochemistry	Biolog./Biomed. Engineering	Biology	Biotechnology	Chemistry	Health Admin.	Health Professions	Informatics	Medical Assistant	Medical Technology	Molecular Biosciences	Natural Science	Nursing	Plant Science	Radiology
PUBLIC	Emporia State			●●		●●		●●			●			●		●	●	
	JCCC	●								●●	●●	●				●●	●●	
	KCKCC		●			●		●		●●		●				●●		
	KCUMB												●					
	K-State	●●●	●●●	●●	●●	●●	●	●●●		●●			●	●●	●	●	●●	
	K-State Olathe	●	●●			●●		●●		●●							●●	
	Lincoln	●				●●		●●					●		●	●●		
	MCC		●●			●		●		●●	●		●			●●		●
	MUS&T				●	●●		●●			●							
	Missouri Western			●		●●		●●	●●	●●	●●		●		●	●●	●	
	NW MO State	●●	●●	●		●●		●●					●			●	●●	●
	NW MO State-KC									●								
	Pitt State					●●		●●			●		●	●●		●●		
	UCM	●●	●	●		●●		●●	●	●●	●		●●	●		●●	●	●
	Univ. of KS			●●	●●	●●	●●	●●	●●	●●	●●			●●			●●	
	Univ. of KS Edwards					●●	●		●●	●				●				
	Univ. of KS Med Ctr						●		●●	●●	●●		●●	●●		●●	●●	●
	Univ. of MO Columbia	●●●	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
UMKC	●●		●		●●	●	●●	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	
PRIVATE NON-PROFIT	Avila			●		●●		●	●●							●		●
	Baker			●		●●		●●	●●	●				●		●●		
	Benedictine			●		●●		●●							●	●		
	Columbia Coll.-KC								●									
	Donnelly															●●		
	Mid-America Nazarene					●●		●●	●●		●●					●●		
	Ottawa					●●		●●	●●	●●						●●		
	Park					●●		●●	●●	●●					●	●		
	Park-KC								●●									
	Rockhurst			●	●	●●		●	●	●●	●		●			●		
	St. Mary					●●		●●		●	●●		●			●●		
	Webster								●●							●●		
	Western Governors								●●				●			●●		
	Wm. Jewell			●		●		●●	●							●		
FOR-PROFIT	DeVry							●●			●●	●						
	Grantham							●			●●	●				●●		
	National American							●●		●●	●	●				●		
	Pinnacle								●			●						

● Certificate ● Associate ● Concentration ● Minor ● Bachelor ● Master ● Grad. Cert. ● Doctorate



# Combined Inventory Results

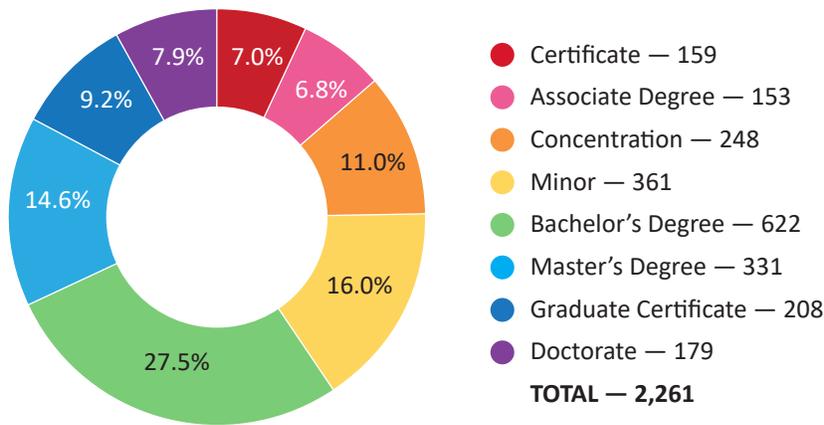
## Industry Insights

Comparing the five sectors illustrates that some have more entry-level opportunities than others. By increasing the availability of shorter-term, stackable credentials, businesses and educational institutions can provide more lower-threshold, career-entry opportunities that allow students to begin working in their chosen fields while they continue their education.

The chart below illustrates the balance of entry-level educational opportunities versus bachelor's degrees and above for each sector.



## Credentials Available by Type



## Credentials Available by Sector by Institution Type

	Advanced Manufacturing	Engineering & Architecture	Information Technology	Finance & Insurance	Life Sciences
<b>Public</b>	170	398	233	371	502
<b>Private</b>	6	34	76	240	117
<b>For-Profit</b>	8	9	35	42	20

# Credentials Available by Type, Sector and Institution

	Advanced Manufacturing	Engineering & Architecture	Information Technology	Finance & Insurance	Life Sciences
PUBLIC	Emporia State	1 2	1 3 2 1	7 9 9 3	6 2 6 4
	JCCC	3 4	4 6	9 8	2 3
	KCKCC	4	4 4	7 8	2 5
	KCUMB				
	K-State	1 4 3 2	3 11 13 9	2 2 1 3 3 2	2 1 6 17 7 6 4
	K-State Olathe		1		2
	Lincoln University		1 2 2 1	1 1 1	5 4 1
	MCC	16 19	17 14	9 8	1 4
	MUS&T	2 3 3 6 16 6	12 10 15 21 22 23	1 5 3 3 16 2	12 4 2 13 1
	Missouri Western	1 1 1 3	1 2 3 1	2 5 4 2 1	8 7 1
	NW Mo State		1 1	2 1 4 5 1	6 7
	NW Mo State-KC			1	1 2
	Pitt State University	1 2 11 7 6 1	1 12 9 6 4	8 6 3 1	1 10 10 3 2
	Univ. of Central Mo	1 2 4 1 1	2 3 7 2	1 7 6 10 6 2 1	4 11 13 10 1
	Univ of Kansas	3 4 3 3	1 4 2 15 17 15 11	1 1 8 3 3 2	2 7 13 6 5 3
	Univ of Ks-Edwards	1 2	1 3 6 6	1 1 2	1 1 2 4 3
	Univ of Ks-Med Ctr				1
Univ of Mo-Columbia	1 2 4 3 3	7 9 10 9 1 10	4 5 4 2	1 15 7 14 11 8 7	
UMKC	2 2 2	3 7 4 4 2	1 2 2 4 1 1 4	6 5 5 7 1 4	
PRIVATE NON-PROFIT	Avila		1	2 3 3 2	6 8 2 6
	Baker		1 2	2 2 3	1 5 7 10 2 2
	Benedictine	4	1 8	1 1	7 8 1
	Columbia Coll.-KC			1	1 1 1 2 1
	Donnelly			1 1 1	1 1 2
	KC Art Institute			5	1
	Mid-Am Nazarene		1 2	1 1 4 2	1 7 5 2
	Ottawa		1	1	8 6 8 4
	Park		1 1 2 1	2 1 7 3 2 1	1 9 11 6 1 3
	Park-KC		1	2	2 4 1 2
	Rockhurst	2	2 5	1 1	2 8 7 9 3 6
	St. Mary			3 2 1	2 2 5 1
	Webster		1	1 1	1 1 3 8 3
	Western Governors			7 3	4 4
William Jewell		1 2	1	1 6 7	
FOR-PROFIT	DeVry	1 1 1	1 1 1	2 1 10 4 2 1	1 6 4 3 5
	Grantham	1 2	1 1 2 1	3 2 4 2	2 1 4 3
	National American	1	1	1 1 1	5 5 3
	Pinnacle	1		1	

● Certificate  
 ● Associate  
 ● Concentration  
 ● Minor  
 ● Bachelor  
 ● Master  
 ● Grad. Cert.  
 ● Doctorate

# Future Work and Next Steps

Goals for GradForce KC and MARC's Workforce Development Program include:

- Aligning education outputs with employer needs in new and emerging areas.
- Supporting the development of alternative career pathways for non-degreed workers, such as industry-recognized certificates, stackable credentials and micro-credentials.
- Increasing opportunities and access for disadvantaged candidates to be successful in the workforce.
- Engaging in public policy to support education and workforce development.

In 2020, MARC will also undertake a human-centered design process in preparation for the next Education Asset Inventory. Through this process we will engage students, educators, counselors and higher education administrators to explore ways to improve this report. For more information or to get involved in these discussions, please contact Erika Garcia Reyes at [egarcia@marc.org](mailto:egarcia@marc.org).



## **Contacts:**

Anita Davis, Workforce Development Program Director, 816-701-8308 or [adavis@marc.org](mailto:adavis@marc.org)

Erika Garcia Reyes, Workforce Development Project Manager, 816-701-8241 or [egarcia@marc.org](mailto:egarcia@marc.org)

600 Broadway, Suite 200, Kansas City, MO 64105

Phone 816-474-4240 | Fax 816-421-7758 | [www.marc.org](http://www.marc.org)