

# K-12 Career and Technical Education

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Jim Means, CTE Executive Director

Wichita Public Schools



# Kansas Secondary Career Clusters and Pathways Model

- Six broad career fields
- 16 career clusters
- 31 career pathways – more occupationally specific
- A core of foundation knowledge and skills common to all career clusters and pathways

# Kansas Secondary-Level Career Clusters and Pathways

## Agriculture, Food, and Natural Resources

- Agriculture Science
- Plant Systems
- Power, Structural & Technical Systems

## Arts, A/V Technology, and Communications

- A/V Communications
- Visual Arts

## Information Technology

- Information Support & Services
- Network Systems
- Programming & Software Development
- Web and Digital Communications

## Environmental and Agricultural Systems

## Arts, Communication, and Information

## Science, Technology Engineering, and Mathematics

- BioChemistry
- BioMedical
- Cartography/Geospatial/Spatial Mathematics
- Engineering & Applied Mathematics

## Foundation Knowledge and Skills

### Academic and Technical Skills

- |                      |                                      |
|----------------------|--------------------------------------|
| • Employability      | • Information Technology Application |
| • Ethics             | • Legal Responsibilities             |
| • Systems            | • Communication                      |
| • Teamwork           | • Safety, Health, and Environment    |
| • Career Development |                                      |
| • Problem Solving    |                                      |
| • Critical Thinking  |                                      |

## Industrial, Manufacturing, and Engineering Systems

## Manufacturing

- Maintenance
- Production

## Architecture and Construction

- Construction
- Design & Pre-construction

## Transportation, Distribution, and Logistics

- Mobile Equipment Maintenance

## Business, Marketing, and Management

## Health Science

## Health Science

- Health Science

## Human Resources and Services

## Law, Public Safety and Security

- Correction, Security, & Law Enforcement Services
- Emergency & Fire Management Services

## Education and Training

- Teaching/Training

## Government and Public Administration

- Government & Public Administration

## Human Services

- Consumer Services
- Early Childhood Development & Services
- Family & Community Services

## Hospitality and Tourism

- Restaurant & Event Management
- Travel & Tourism

## Finance

- Business Finance

## Marketing

- Marketing

## Business Management and Administration

- Business Entrepreneurship & Management

# Arts, Communication and Information

- **Arts, AV Technology and Communications** - journalist, photographer, video editor, public relations specialist, reporter, illustrator, art teacher, artist, graphic designer, commercial or industrial designer, interior designer, commercial or industrial designer, textile designer, fashion designer, fashion design management, set and exhibit designer
- **Information Technology** - network technician, network PC support specialist, network administrator, network transport administrator, data communications analyst, software applications specialist, software applications tester, applications engineer, applications data modeler, systems engineer, network analyst, computer support specialist, applications support, database administrator, computer software engineer, web administrator/developer

# Industrial, Manufacturing and Engineering Systems

- **Architecture and Construction** - construction manager, general contractor, specialty contractor, project manager, electrician, plumbers, equipment operator, construction & building inspector, carpenter, civil engineering technician, cost estimator, purchasing manager, environmental engineer
- **Manufacturing** - assembler, automated machining technician, calibration technician, industrial machinery mechanic, machine operator, tool and die maker, manufacturing engineer
- **Science, Technology Engineering and Mathematics** - civil engineer or technician, industrial engineer or technician, industrial engineer or technician, engineering manager, materials engineer, safety engineer
- **Mobile Equipment Maintenance** - service technician, automotive body repairs, heavy equipment mechanic, general and operations manager, safety manager



# Health Science

- **Health Science** - athletic trainer, licensed practical nurse, registered nurse, physician, physician assistant, paramedic, pharmacist, geneticist, biochemist, veterinarian, dental hygienist, dentist, physical therapist, respiratory therapist, occupational therapist

# Human Resources and Services

- **Education and Training** - teacher, school counselor, school administrator, social worker, child psychologist, corporate trainer, coach, college/university professor
- **Human Services** - consumer credit counselor, customer service representative, field merchandising representative, buyer, realtor, employee benefits representative, community services director, adult day care coordinator, volunteer coordinator, social services worker, employment counselor, dietician, relief worker
- **Law, Public Safety and Security** – pre-law, law enforcement, security, corrections, EMT, paramedic, rescue worker, fire fighter, fire prevention, hazardous materials removal, fire inspector

# Business, Marketing and Management

- **Business Management and Administration** - compliance officer, human resources manager, public relations manager, accounts payable manager, manufacturing or hospital management
- **Finance** -accountant, financial analyst, investment banker, controller, auditor, economist, tax examiner, revenue agent
- **Hospitality and Tourism** - baker, chef and head cook, food service manager, event planner
- **Marketing** - small business owner, account executive, sales manager, merchandise buyer, advertising manager, marketing associate, public information director



# Environmental and Agricultural Systems

- **Agriculture, Food, and Natural Resources** – agriculture science, land management, plant systems, food scientist, biologist, power technician, structural and technical systems specialist

# Guidance and Counseling Support

- **Kansas Career Pipeline** – a web-based resource used at the middle and high school level for career surveys and research
- **College and Career Centers** – a resource located in every high school to provide information and guidance for college and career planning
- **Summer Externships** – opportunities for CTE teachers and high school guidance counselors to spend two weeks working in an occupational area

# District Career Development Plan

- Grade 7 – All students set up their Kansas Career Pipeline account and take the career interests survey
- Grade 8 and 9 – Students continue career exploration using ACT Explore
- Grade 10 – Students retake the interests survey and take skills survey
- Grade 11 – Students take the work values survey
- Grade 12 – Students can use the KCP to create a post-graduation plan for continued education, training or career options; and identify financial aid and scholarship opportunities
- CTE classes make use of the KCP for career research, creating an electronic portfolio than can include resumes, cover letters, collecting information needed for job applications, document awards and achievements

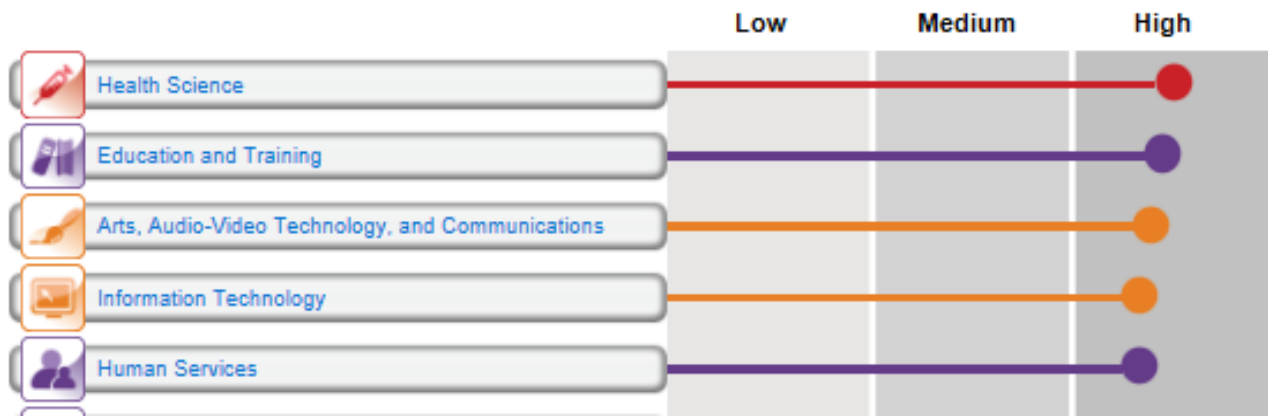
## Pathways

Based on the results of the skills assessment, you have or believe that you could acquire skills to work in these top five pathways, in the order in which they are listed in your online report, you can click on the pathway titles and learn about the occupations included in each pathway.



## 16 National career clusters

Based on the results of the skills assessment, your perceived degree of skill to work in the occupations contained in the National clusters looks like this. From your online report, be sure to explore the occupations in the clusters in the "High" range by clicking on the cluster title.



# Impact of Senate Bill 155

- Increasing awareness of and interest in postsecondary technical education opportunities
- Tuition assistance – allows for expansion of existing programs, removes financial obstacles for new offerings, and prompts conversation with parents and students that believed any kind of college education or training wasn't possible
- Incentive payments for professional certifications will provide additional funding to grow and develop programs deemed high demand by the Kansas Dept of Labor
- Partnerships between secondary and postsecondary programs

# Moving CTE Forward

- **Curriculum development and alignment** – working with postsecondary technical education programs to identify natural linkages between programs, and create those linkages if they do not exist
- **Additional opportunities for concurrent and articulated credit** – better curriculum alignment will create new opportunities for secondary students to earn college credit while still in the high school classroom
- **Opportunities to collaborate and expand programs** – the Wichita Public Schools is collaborating with the Wichita Area Technical School to identify potential strategies to better coordinate facilities and resources



Wichita East High School

WATC –  
Grove  
Campus

Jim Means  
Executive Director, CTE  
Wichita Public Schools  
201 N. Water, Room 515  
Wichita, KS 67215  
316-973-4511  
[jmeans2@usd259.net](mailto:jmeans2@usd259.net)



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