2027 – 2028 KSDE CTE Resource Guide

KANSAS
STATE DEPARTMENT OF
EDUCATION

Kansas leads the world in the success of each student

2027-2028 KSDE CTE Resource Guide

The Kansas State Department of Education (KSDE) Career and Technical Education (CTE) Resource Guide is a comprehensive guide containing relevant information regarding career opportunities available for Kansas students to explore.

Career and Technical Education is organized into educational activities that offer a sequence of courses.

This provides individuals with the rigorous academic content, relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions, which may include high-skill, high-wage or in-demand industry sectors or occupations.

In Kansas, we focus on six industries. Throughout this guide they are consistently identified by colors and icons. Occupations are then organized around knowledge and skills that have common characteristics and job duties, known as career clusters. Kansas identifies a total of 13 broad career clusters. Additionally, 32 career pathways represent the career, education and training options available to students in each of these industries. On the next page you will find the "Kansas CTE Sunflower" image, along with a list of industries listed in bold, and the clusters italicized with the pathways listed below each of them.



OVERALL RESOURCES

- Cluster Handbook SY 2027-2028
- Career Ready Practices and CTE Course Competencies
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) - Occupational Employment Demand (formerly High Demand Occupations)
- K-12 : Student Resources : U.S. Bureau of Labor Statistics (bls.gov)
- My Next Move
- O*NET OnLine (onetonline.org)
- Today's Occupations (ks.gov)

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats - Kansas Board of Regents (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

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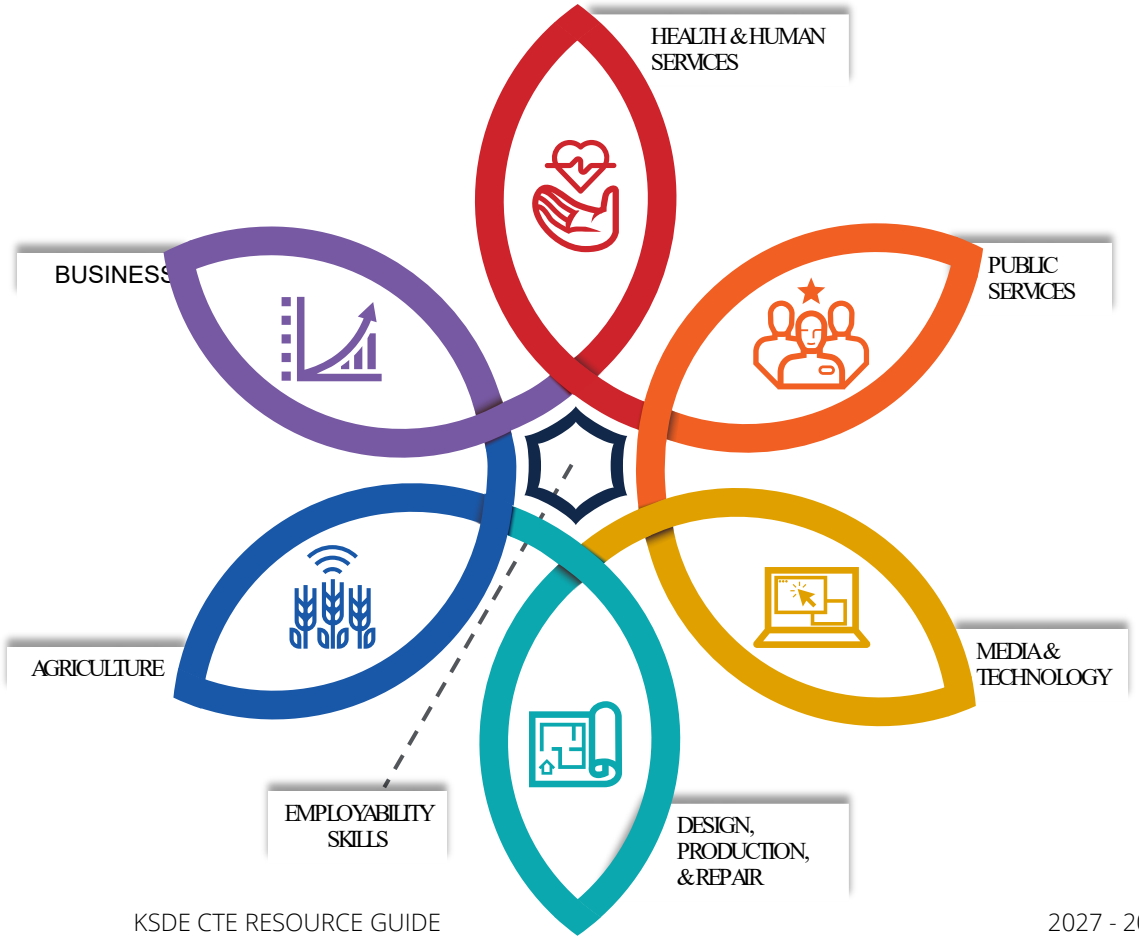
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Health & Human Services

Healthcare & Human Services

HEALTH & HUMAN SERVICES INDUSTRY

Healthcare & Human Services

Biotechnology
Family, Community & Consumer Services
Health Science

"Caring for Communities"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Non-Degree Award	
Home Health & Personal Care Aides	$29,190
Nursing Assistants	$36,910
Social & Human Service Assistants	$40,540
Medical Secretaries & Administrative Assistants	$39,540
Medical Assistants	$39,090
Pharmacy Technicians	$39,210
Associate's Degree	
*Physical Therapist Assistant	$63,010
*Radiologic Technologies & Technicians	$68,740
*Occupational Therapy Assistants	$64,880
*Licensed Practical & Vocational Nurses	$59,920
*Dental Hygienists	$82,060
H.S. Diploma & Work Experience or Bachelor's Degree	
*Child, Family, & School Social Workers	$52,690
*Substance Abuse, Behavioral Disorder, & Mental Health Counselors	$57,760
Bachelor's, Master's, or Doctoral/Professional Degree	
*Clinical Laboratory Technologists Technicians	$60,470
*Healthcare Social Workers	$64,280
*Registered Nurses	$78,060
*Medical & Health Services Managers	$104,990
*Nurse Practitioners	$124,690
*Pharmacists	$134,350

* High Demand, High Wage
Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Biotechnology
Pathway

"Caring for Communities"

This pathway focuses on using biology, biochemistry, and genetics to improve agriculture, healthcare, industry, and the environment. It includes topics like gene research, biotechnology, microbiology, drug development, DNAsequencing, and ethical and legal aspects of the field.

INTRODUCTORY LEVEL COURSES
- **Chemistry**
- **Computing Systems**
- **Computer Applications**

TECHNICAL LEVEL COURSES
- **Anatomy & Physiology**
- **Human Body Systems**
- **Pharmacology**
- **Biotechnology Essentials**
- **Entrepreneurship**

Biomedical Strand
- **Medical Interventions**
- **Principles of Biomedical Science**
- **Robotics I**

Biochemistry Strand
- **Applied Biochemistry**
- **Plant & Soil Science**
- **Food Science**

APPLICATION-LEVEL COURSES
- **Biotechnology Work-Based Learning**
- **Advanced Biotechnology Work-Based Learning**
- **Applied Biotechnology**

Biomedical Strand
- **Biomedical Innovation**
- **Emerging Technologies**

Biochemistry Strand
- **Particular Topics in Engineering**

OCCUPATIONS
- **Biological Science Teachers** (Postsecondary)
- **Biological Scientists** (All Other)
- **Biological Technicians**
- **Clinical Laboratory Technologists & Technicians**
- **Natural Science Managers**

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
*Biological Technicians	$48,400
*Clinical Laboratory Technologists & Technicians	$60,470

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **American Red Cross/American Heart Association: Basic Life Support (BLS)**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)** (Infant/ Child)
- **American Red Cross/ American Heart Association: First Aid**
- **Bioscience Core Skill Institute (BCSI): Aseptic Technique** (Lab Bench Level)
- **Biotility-Applied Biotech Training: Biotechnician Assistant Credential (BACE)**
- **Bioscience Core Skill Institute (BCSI): Essential 5**
- **Bioscience Core Skill Institute (BCSI): Numeracy**
- **Bioscience Core Skill Institute (BCSI): Safety - Hazard Assessment**
- **Bioscience Core Skill Institute (BCSI): Small Volume Metrology**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **KS Dept. for Aging & Disability Services: Certified Nurse Aide (CNA)**
- **KS Dept. of Agriculture: Pesticide Applicator** (Personal or Commercial)

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Health Science Career Cluster (onetoonline.org)
- Health Science Advance CTE (careertech.org)
- Careers in Health Science (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION
- Kansas Health Occupations Students of America (HOSA)

hosa future health professionals

Family, Community & Consumer Services *Pathway*

"Caring for Communities"

Family, Community and Consumer Service careers address the societal and environmental factors affecting the community, such as access to healthy foods, income and poverty, adequate childcare, and access to education. These careers are dedicated to mental and emotional well-being aimed at supporting individuals through mental health challenges and promoting psychological health. This field includes work in public services, social work and case management, or nonprofit sectors with missions to address social inequalities and provide support services for all age ranges.

INTRODUCTORY LEVEL COURSES

- **Introduction to Family & Consumer Sciences**
- **Career & Life Planning**

TECHNICAL LEVEL COURSES

- **Culinary Essentials**
- **Nutrition and Dietetics**
- **Family Studies**
- **Leadership Service in Action**
- **Foundations of Mental and Behavioral Health**
- **Human Growth & Development** (Early Years)
- **Lifespan Development**
- **Dimensions of Wellness**

APPLICATION-LEVEL COURSES

- **Family, Community and Consumer Services (Human Services) Work Based Learning**
- **Advanced Family, Community and Consumer Services (Human Services) Work Based Learning**

Optional Course

- **Entrepreneurship**

OCCUPATIONS

- **Child, Family, & School Social Workers**
- **Community & Social Services Specialist** (All Other)
- **Community Outreach Coordinator**
- **Counselors** (All Other)
- **Customer Service Representative**
- **Healthcare Social Workers**
- **Mental Health & Substance Abuse Social Workers**
- **Social & Community Service Managers**
- **Social & Human Service Assistants**
- **Social Workers** (All Other)
- **Substance Abuse, Behavioral Disorder, & Mental Health Counselors**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Moderate-Term On-the-Job Training	
Social & Human Service Assistants	**$40,540**
Bachelor's Degree	
***Child, Family, & School Social Workers**	**$52,690**
***Substance Abuse, Behavioral Disorder, & Mental Health Counselors**	**$57,760**
***Social & Community Service Managers**	**$73,470**
Master's Degree & Internship/Residency	
***Healthcare Social Workers**	**$64,280**
***Social Workers, all other**	**$86,130**

* High Demand, High Wage

Source:

2025 Kansas Occupational Employment Demand

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **AAFCS Pre-Pac: Broad Field Family & Consumer Sciences**
- **AAFCS Pre-Pac: Family & Community Services**
- **AAFCS Pre-Pac: Nutrition, Food & Wellness**
- **AAFCS Pre-Pac: Personal & Family Finances**
- **CareerSafe: OSHA Cyber Safety Awareness Training** (Level 2)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Postsecondary Partnerships (ksde.org)

POSTSECONDARY RESOURCES

- Kansas DegreeStats (ksdegreestats.org)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.org)

RESOURCES

- Career Ready Practices and CTE Course Competencies (ksde.gov)
- Human Services Career Cluster (onetoonline.org)
- Careers in Human Services (MyNextMove.org)
- Human Services Advance CTE (careertech.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Mental Health Provider (HirePaths.com)

STUDENT ORGANIZATION

- Family, Community and Career Leaders of America (FCCLA)

Health Science
Pathway

"Caring for Communities"

This pathway focuses on the health professions and related clinical sciences. It includes planning, managing, and providing therapeutic services, diagnostic services, health informatics, and support services.

INTRODUCTORY LEVEL COURSES
- **Chemistry**
- **Introduction to Health Care**

TECHNICAL LEVEL COURSES
- **Anatomy & Physiology**
- **Fundamentals of Emergency Services**
- **Human Body Systems**
- **Medical Interventions**
- **Medical Terminology**
- **Health Care Essentials I**
- **Nutrition & Dietetics**
- **Health Care Essentials II**
- **EMS First Responder**
- **Entrepreneurship**

Sports Med/Rehabilitation Strand
- **Fundamentals of Rehab**
- **Care of Athletes**
- **Sports Medicine I**

Allied Health Strand
- **Medical Imaging**
- **Principles of Phlebotomy**
- **Pharmacology**

APPLICATION-LEVEL COURSES
- **Certified Patient Care Technician**
- **Certified Nursing Assistant**
- **Certified Medication Aide**
- **Health Science Work-Based Learning**
- **Advanced Health Science Work-Based Learning**

Sports Med/Rehabilitation Strand
- **Sports Medicine II**

Allied Health Strand
- **Home Health Aide**
- **Principles of Pharmacy**
- **EKG Technician**
- **EMT I**
- **EMT II**

OCCUPATIONS
- **Clinical Laboratory Technologists & Technicians**
- **Dental Assistants**
- **Dental Hygienists**
- **Diagnostic Medical Sonographers**
- **Health Technologists & Technicians** (All Other)
- **Home Health & Personal Care Aides**
- **Licensed Practical & Licensed Vocational Nurses**
- **Medical Assistants**
- **Medical Clinical Laboratory Technicians**
- **Medical & Health Services Managers**
- **Medical Records Specialists**
- **Medical Scientists** (except Epidemiologists)
- **Medical Secretaries & Administrative Assistants**
- **Nursing Assistants**
- **Nurse Practitioners**
- **Occupational Therapists**
- **Occupational Therapy Assistants**
- **Pharmacists**
- **Pharmacy Aides**
- **Pharmacy Technicians**
- **Phlebotomists**
- **Physical Therapist Assistants**
- **Physical Therapists**
- **Physician Assistants**
- **Physicians** (All Other)
- **Physician Assistants**
- **Psychiatric Technicians**
- **Radiologic Technologists & Technicians**
- **Respiratory Therapists**
- **Registered Nurses**
- **Speech-Language Pathologists**
- **Surgical Technologists**

Occupations & Degrees	Median Annual Wage
Postsecondary Nondegree Award	
Pharmacy Aides	**$28,800**
Home Health & Personal Care Aides	**$29,190**
Nursing Assistants	**$36,910**
Psychiatric Technicians	**$37,700**
Medical Secretaries & Administrative Assistants	**$39,540**
Medical Assistants	**$39,090**
Phlebotomists	**$38,330**
Pharmacy Technicians	**$39,210**
Dental Assistants	**$39,840**
***Medical Records Specialists**	**$48,670**
***Health Technologists & Technicians** (All Other)	**$59,780**
***Surgical Technologists**	**$57,580**
***Licensed Practical & Licensed Vocational Nurses**	**$59,920**
Associate's Degree	
Physical Therapist Assistants	**$63,010**
Radiologic Technologists & Technicians	**$68,740**
Occupational Therapy Assistants	**$64,880**
***Respiratory Therapists**	**$73,580**
Dental Hygienists	**$82,060**
***Diagnostic Medical Sonographers**	**$88,170**
Bachelor's Degree	
***Clinical Laboratory Technologists & Technicians**	**$60,470**
Registered Nurses	**$78,060**
Medical & Health Services Managers	**$104,990**
Master's Degree	
Speech-Language Pathologists	**$81,360**
Occupational Therapists	**$97,000**
***Physician Assistants**	**$124,440**
***Nurse Practitioners**	**$124,690**
Doctoral or Professional Degree	
***Physical Therapists**	**$98,840**
***Pharmacists**	**$134,350**
***Physicians** (All Other)	**$140,330**

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

Health Science

Pathway (continued)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **American Red Cross/American Heart Association: Advanced Life Support (ACLS/ALS)**
- **American Red Cross/American Heart Association: Automated External Defibrillator (AED)**
- **American Red Cross/American Heart Association: Basic Life Support (BLS)**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)** (Infant/ Child)
- **American Red Cross / American Heart Association: First Aid**
- **American Red Cross/American Heart Association: Pediatric Advanced Life & Support (PALS)**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **KS Dept. for Aging & Disability Services: Certified Medical Aide (CMA)**
- **KS Dept. for Aging & Disability Services: Home Health Aide**
- **KS Emergency Medical Services Association: Emergency Medical Responder (EMR)** (First Responder)
- **National Consortium for Health Science Education: National Health Science Assessment**
- **National Health Career Association/National Center for Competency Testing: American Medical Certification Association EKG/ECG/ECT Technician**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NHA/AMCA: Certified Patient Care Technician (CPCT/A)**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **KS Board of Pharmacy/Pharmacy Technician Certification Board: Pharmacy Technician**
- **KS Dental Board: Dental Assistant**
- **KS Dept. for Aging & Disability Services: Certified Nurse Aide (CNA)**
- **KS Emergency Medical Services Association: Emergency Medical Technician (EMT)**
- **National Health Career Association/American Society for Clinical Pathology/American Medical Certification Association: Phlebotomy Technician**

POSTSECONDARY CREDITS

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- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Health Science Career Cluster (onetoonline.org)
- Health Science Advance CTE (careertech.org)
- Careers in Health Science (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Registered Nurse (HirePaths.com)
- Cool Careers: Medical Imaging Technician (HirePaths.com)

STUDENT ORGANIZATION

- Kansas Health Occupations Students of America (HOSA)

hosa future health professionals



Public Services

- Education
- Public Service & Safety

PUBLIC SERVICES INDUSTRY

Education

Early Childhood Development & Services
Teaching / Training

"Caring for Communities"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Associate Degree	
Teaching Assistants (except Postsecondary)	$27,960
Tutors	$33,420
Preschool Teachers (except Special Education)	$43,200
Bachelor's Degree	
*Elementary School Teachers (except Special Education)	$50,820
*Kindergarten Teachers (except Special Education)	$54,230
*Middle School Teachers (except Special & Career / Technical Education)	$58,820
*Secondary School Teachers (except Special & Career / Technical Education)	$58,770
Master's Degree	
*Educational, Guidance, & Career Counselors & Advisors	$58,430
*Instructional Coordinators	$62,310
*Education Administrators (Kindergarten through Secondary)	$97,000
*Education Administrators (Postsecondary)	$105,870

* High Demand, High Wage

Source: Kansas Occupational Employment Demand

PUBLIC SERVICES INDUSTRY | EDUCATION

Early Childhood Development & Services Pathway

"Caring for Communities"

Careers dedicated to nurturing the holistic growth of children from birth to 8 years old through education, care, and early intervention. Professionals in this field specialize in fostering physical, cognitive, emotional, and social development in early learners by applying proven and promising strategies for whole-child wellness.

INTRODUCTORY LEVEL COURSES

- **Introduction to Education**
- **Introduction to Family & Consumer Sciences**
- **Career & Life Planning**

TECHNICAL LEVEL COURSES

- **Leadership Service in Action**
- **Teaching Observation**

Early Childhood Education Strand

- **Orientation to Early Childhood Development**
- **Foundations of Early Childhood Develop**

Early Childhood Related Services Strand

- **Foundations of Early Childhood Development**
- **Family Studies**
- **Human Growth & Development** (Early Years)

Optional Course

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Early Childhood Development & Services Work –Based Learning**
- **Advanced Early Childhood Development & Services Work–Based Learning**

OCCUPATIONS

- **Childcare Workers**
- **Child Welfare Specialist**
- **Community & Social Services Specialist** (All Other)
- **Early Childhood Educator** (specializing in Family Support)
- **Education & Childcare Administrators** (Preschool & Daycare)
- **Education Administrators** (Kindergarten through Secondary)
- **Family Life Educator**
- **Foster Care Coordinator**
- **Parent Educator**
- **Preschool Teachers** (except Special Education)
- **Social & Human Services Assistance**

SOURCES

Kansas Occupational Employment Demand

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Moderate-Term On-the-Job Training	
Childcare Workers	**$28,800**
Associate's Degree **Pre-School Teachers** (except Special Education)	**$43,200**
Bachelor's Degree **Childcare and Preschool Administrators**	**$51,670**
Special Education Teacher, Pre-School	**$57,250**

Source: Kansas Occupational Employment Demand (KDOL)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **AAFCS Pre-Pac: Broad Field Family & Consumer Sciences**
- **AAFCS Pre-Pac: Early Childhood Education**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)** (Infant/ Toddler)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **Council for Professional Recognition: Child Development Associates (CDA)**
- **KCCTO: Foundation for Safe & Healthy Early Care Facilities: Module** (18 clock hours: must complete all)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS

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- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Human Services Career Cluster (onetoonline.org)
- Careers in Human Services (MyNextMove.org)
- Human Services Advance CTE (careertech.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Early Childhood Teacher (HirePaths.com)

STUDENT ORGANIZATION

- Family, Community and Career Leaders of America (FCCLA)

PUBLIC SERVICES INDUSTRY | EDUCATION

Teaching / Training
Pathway

"Caring for Communities"

Teaching and Training encompasses teaching and instructional design roles across diverse educational levels, from kindergarten through Grade 12 (K-12) to adult learning. This field includes integrating educational technology and emerging teaching methods into curriculum development and delivery. Careers in this pathway also involve providing professional development and training for educators while facilitating learning experiences, and they involve providing coaching for individuals and groups. This field promotes lifelong learning in various settings, including schools, colleges, corporate environments, and community organizations.

INTRODUCTORY LEVEL COURSES
- **Introduction to Education**
- **Introduction to Family & Consumer Sciences**
- **Career & Life Planning**

TECHNICAL LEVEL COURSES
- **Teaching as a Career**
- **Coaching and Leadership**
- **Technology for Teachers**
- **Family Studies**
- **Teaching Observation**
- **Human Growth & Development** (Early Years)
- **Lifespan Development**

Optional Course
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **Teaching/Training Work Based Learning**
- **Advanced Teaching/Training Work Based Learning**
- **Educational Leadership**

OCCUPATIONS
- **Coaches & Scouts**
- **Educational Administrators** (Kindergarten through Secondary)
- **Education Teachers** (Postsecondary)
- **Education Administrators** (Postsecondary)
- **Educational, Guidance, & Career Counselors & Advisors**
- **Elementary School Teachers** (except Special Education)
- **Instructional Coordinators**
- **Kindergarten Teachers** (except Special Education)
- **Middle School Teachers** (except Special & Career/Technical Education)

OCCUPATIONS *(continued)*
- **Preschool Teachers** (except Special Education)
- **Secondary School Teachers** (except Special & Career/Technical Education **Self-Enrichment Teachers**
- **Special Education Teaching Assistants**
- **Teaching Assistants** (except Postsecondary)
- **Teachers & Instructors** (All Other)
- **Tutors**

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Associate's Degree	
Teaching Assistants (except Postsecondary)	**$27,690**
Tutors	**$33,420**
Self-Enrichment Teachers	**$36,780**
Bachelor's Degree	
Substitute Teachers (Short-Term)	**$32,460**
***Coaches & Scouts**	**$40,040**
***Elementary School Teachers** (except Special Education)	**$50,820**
***Kindergarten Teachers** (except Special Education)	**$54,230**
***Middle School Teachers** (except Special & Career/Technical Education)	**$58,820**
***Secondary School Teachers** (except Special & Career/Technical Education)	**$58,770**
***Teachers and Instructors** (All Other)	**$81,850**
Master's Degree & Internship/Residency	
***Educational, Guidance, & Career Counselors & Advisors**	**$58,430**
***Instructional Coordinators**	**$62,310**
***Education Administrators** (Kindergarten through Secondary)	**$97,000**
***Education Administrators** (Postsecondary)	**$105,870**

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **AAFCS (pre-PAC): Education Fundamentals**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **Master Teacher, Inc: Paraeducator assessment** (Parts 1 & 2 - must take both)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
- Excel in CTE Initiative (kansasregents.org)
- Postsecondary Partnerships (ksde.org)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.org)

RESOURCES
- Career Ready Practices and CTE Course Competencies (ksde.org)
- Education & Training Career Cluster (onetoonline.org)
- Education & Training Advance CTE (careertech.org)
- Careers in Education & Training (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Elementary Teacher (HirePaths.com)

STUDENT ORGANIZATION
- Family, Community and Career Leaders of America (FCCLA)

PUBLIC SERVICES INDUSTRY

Public Service & Safety

Corrections, Security, Law, & Law Enforcement Services
Emergency & Fire Management Services
Government & Public Administration

"Caring for Communities"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Long-Term On-the-Job Training	
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	$24,960
Security Guards	$36,090
Public Safety Telecommunications	$40,680
Court, Municipal, and License Clerks	$41,780
Protective Service Workers, All Other	$44,250
*Postal Service Mail Carriers	$56,330
H.S. Diploma & Moderate-Term On-the-Job Training or Nondegree Award	
Correctional Officers and Jailers	$46,080
*Police and Sheriff's Patrol Officers	$56,610
*First-Line supervisors of police and detectives	$82,220
Postsecondary Nondegree Award or Long-Term On-the-Job Training	
Emergency Medical Technicians	$34,650
Firefighters	$44,060
Associates Degree	
* Paralegals & Legal Assistants	$48,910
Bachelor's Degree or Postsecondary Degree	
* Compliance Officers	$66,980
* Lawyers	$112,000

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Corrections, Security, Law, & Law Enforcement Services

Pathway

"Caring for Communities"

Careers in law enforcement, corrections, and both public and private security. This pathway focuses on safeguarding communities, managing correctional and rehabilitation facilities, and providing comprehensive protective services. Professionals in this field work to prevent crime, inform and educate citizens, and ensure public order, contributing to the overall safety and well-being of society.

INTRODUCTORY LEVEL COURSES

- **Introduction to Law, Public Safety, Corrections & Security (LPSCS)**

TECHNICAL LEVEL COURSES

- **Entrepreneurship**

Pre-Law Strand

- **Business Communications**
- **Business Management**
- **Business Law**
- **Accounting**
- **Business Economics**
- **Practical Law**

Law Enforcement Strand

- **EMS First Responder**
- **Hazardous Materials for the First Responder**
- **Law Enforcement I**
- **Forensic Science**

APPLICATION-LEVEL COURSES

- **Corrections, Security, Law & Law Enforcement Services Work Based Learning**
- **Advanced Corrections, Security, Law & Law Enforcement Services Work Based Learning**

Pre-Law Strand

- **Foundations in Law**
- **Legal Proceedings**

Law Enforcement Strand

- **Law Enforcement II**
- **Certified Protection Officer**
- **Corrections Officer**
- **Forensic Science II**

OCCUPATIONS

- **Correctional Officers & Jailers**
- **Detectives & Criminal Investigators**
- **First –line supervisors of police and detectives**
- **Lawyers**

OCCUPATIONS

- **Lifeguards, Ski Patrol, & Other Recreational Protective Service Workers**
- **Paralegals & Legal Assistants**
- **Police & Sheriff's Patrol Officers**
- **Protective Service Workers** (All Other)
- Public Safety Telecommunications
- **Security Guards**

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Short-Term On-the-Job Training	
Lifeguards, Ski Patrol, & Other Recreational Protective Service Workers	**$24,960**
Security Guards	**$36,090**
Public Safety Telecommunications	**$40,680**
Protective Service Workers (All Other)	**$44,250**
H.S. Diploma & Moderate-Term On-the-Job Training or Nondegree Award	
Correctional Officers & Jailers	**$46,080**
***Police & Sheriff's Patrol Officers**	**$56,610**
***First-Line supervisors of police and detectives**	**$68,180**
Postsecondary Degree or Long-Term On-the-Job Training	
***Paralegals & Legal Assistants**	**$47,320**
Bachelor's Degree or Postsecondary Degree	
***Lawyers**	**$112,000**

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **American Red Cross/American Heart Association: Basic Life Support (BSL)**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)** (Infant/ Child)
- **American Red Cross/ American Heart Association: First Aid**
- **International Federation of Protection Officers: Certified Protection Officer**
- **KS Emergency Medical Services Association: Emergency Medical Responder (EMR)** (First Responder)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Law, Public Safety, Corrections, and Security Career Cluster (onetoonline.org)
- Law, Public Safety, Corrections, and Security Advance CTE (careertech.org)
- Careers in Law, Public Safety, Corrections, and Security (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- LAPSEN | Home
- Kansas Mock Trial (ksbar.org)

STUDENT ORGANIZATION

- Skills USA Kansas

SkillsUSA

Emergency & Fire Management Services

Pathway

"Caring for Communities"

Careers focused on strategic actions taken to prepare for and manage crises and emergencies, including natural disasters, fires, accidents, and other urgent situations. Careers in this field involve training in rapid assessment, effective communication, and critical decision making to mitigate risks, provide urgent medical services, and coordinate recovery efforts.

INTRODUCTORY LEVEL COURSES

- **Introduction to Law, Public Safety, Corrections & Security (LPSCS)**
- **Introduction to Emergency Medical Services (EMS)**

TECHNICAL LEVEL COURSES

- **Medical Terminology**
- **EMS First Responder**
- **Hazardous Materials for the First Responder**
- **Fire Service Special Operations**
- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **EMT I**
- **EMT II**
- **Fire Science I**
- **Fire Science II**
- **Emergency & Fire Management Services Work-Based Learning**
- **Advanced Emergency & Fire Management Services Work-Based Learning**

OCCUPATIONS

- **Emergency Medical Technicians & Paramedics**
- **Firefighters**
- **First Line Supervisors of Firefighting & Prevention Workers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Moderate-Term On-the-Job Training or Nondegree Award	
Emergency Medical Technicians	**$34,650**
Postsecondary Nondegree Award or Long-Term On-the-Job Training	
Firefighters	**$44,060**
First Line Supervisors of Firefighting & Prevention Workers	**$75,630**

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **American Red Cross/American Heart Association: Basic Life Support (BLS)**
- **American Red Cross/American Heart Association: Cardiopulmonary Resuscitation (CPR)** (Infant/ Child)
- **American Red Cross/ American Heart Association: First Aid**
- **DOT: Hazardous Materials Transportation**
- **KS Emergency Medical Services Association: Emergency Medical Responder (EMR)** (First Responder)
- **Local Fire Departments: Fire Fighter** (Level 2)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATION

- **KS Emergency Medical Services Association: Emergency Medical Technician (EMT)**
- **Local Fire Departments: Fire Fighter** (Level 1)

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Law, Public Safety, Corrections, and Security Career Cluster (onetoonline.org)
- Law, Public Safety, Corrections, and Security Advance CTE (careertech.org)
- Careers in Law, Public Safety, Corrections, and Security (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Kansas State Firefighters Association
- The Kansas Board of Emergency Medical Services (ksbems.org)

STUDENT ORGANIZATION

- Skills USA Kansas

SkillsUSA

Government & Public Administration

Pathway

"Caring for Communities"

This pathway prepares individuals to serve as managers in the executive arm of local, state, and federal government and focuses on the systematic study of executive organization and management. It includes instruction in the roles, development, and principles of public administration; the management of public policy; executive-legislative relations; public budgetary processes and financial management; administrative law; public personnel management; professional ethics; and research methods.

INTRODUCTORY LEVEL COURSES

- **Career & Life Planning**
- **Introduction to Government & Public Administration**

TECHNICAL LEVEL COURSES

- **Government & Public Administration Fundamentals**
- **IT for Service Professions**
- **Lifespan Development**
- **Entrepreneurship**

Public Administration Strand

- **Business Management**
- **Business Law**
- **Accounting**
- **Business Economics**

Pre-Law Legal Assistance Strand

- **Government & Public Media Relations**
- **Business Law**
- **Business Economics**
- **Practical Law**

APPLICATION-LEVEL COURSES

- **Foundations in Law**
- **Legal Proceedings**
- **Government & Public Administration Worked-Based Learning**
- **Advanced Government & Public Administration Worked-Based Learning**

OCCUPATIONS

- **Compliance Officers**
- **Postal Service Mail Carriers**
- **Court, Municipal. & License Clerks**
- **File Clerks**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Long-Term On-the-Job Training	
Court, Municipal, & License Clerks	**$41,780**
File Clerks	**$61,550**
Postal Service Mail Carriers	**$56,330**
Bachelor's Degree	
Compliance Officers	**$66,980**

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS

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- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

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- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Government & Public Administration Career Cluster (onetoonline.org)
- Government & Public Administration Advance CTE (careertech.org)
- Careers in Government & Public Administration (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Kansas Mock Trial (ksbar.org)

STUDENT ORGANIZATION

- Family, Community and Career Leaders of America (FCCLA)



Media & Technology

Digital Technology

MEDIA & TECHNOLOGY INDUSTRY

Digital Technology

Information Support & Services
Media Design & Communications
Networking & Telecommunications
Programming & Software Development

"Connecting and Supporting Success"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Short-Term On-the-Job Training or Some College & Moderate-Term On-the-Job Training	
Receptionists & Information Clerks	$35,320
*Computer User Support Specialist	$50,870
Bachelor's Degree	
*Network & Computer Systems Administrators	$82,150
*Software Quality Assurance Analysts & Testers	$83,070
*Computer Programmers	$91,600
*Computer Systems Analysts	$97,300
*Software Developers	$106,660
Bachelor's Degree & 5 Years or More Work Experience	
*Computer Network Architects	$100,910
*Computer & Information Systems Managers	$154,830

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Information Support & Services *Pathway*

"Connecting and Supporting Success"

This pathway prepares individuals to master and use computer software programs and applications for inputting, verifying, organizing, storing, retrieving, transforming (changing, updating, and deleting), and extracting information. It includes instruction in using various operating system configurations and in types of data entry such as word processing, spreadsheets, calculators, management programs, design programs, database programs, and research programs.

INTRODUCTORY LEVEL COURSES
- **Computing Systems**
- **Computer Applications**

TECHNICAL LEVEL COURSES
- **Foundations of Information Technology**
- **Information Support & Services I**
- **AP CyberSecurity**
- **CyberSecurity I**
- **Web Design**

Optional Supportive Courses:
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **Information Support & Services II**
- **CyberSecurity II**
- **Information Support & Services Work-based Learning**
- **Advanced Information Support & Services Work-based Learning**

OCCUPATIONS
- **Computer Occupations** (All Other)
- **Computer User Support Specialists**
- **Receptionists & Information Clerks**

Occupations & Degrees	Median Annual Wage
H.S. Diploma or Short-Term On-the-Job Training or Some College & Moderate-Term On-the-Job Training	
Receptionists & Information Clerks	$35,320
***Computer User Support Specialists**	**$50,870**

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **Adobe: Digital Publishing Suite**
- **CISCO: CCNA**
- **CISCO: CCNP**
- **CISCO: CCIE**
- **CISCO: CCDE**
- **Microsoft (MOS): Microsoft Office Specialist - Associate A**
- **Microsoft (MOS): Microsoft Office Specialist – Expert A**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **CompTIA: A+**
- **CompTIA: Network+**
- **CompTIA: Server+**
- **CompTIA: Security+**

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
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- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Digital Technology Career Cluster (onetonline.org)
- Digital Technology Advance CTE (careertech.org)
- Careers in Digital Technology (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Cybersecurity Analyst (HirePaths.com)

STUDENT ORGANIZATION
- Business Professionals of America
- Future Business Leaders of America
- Skills USA Kansas
- Technology Student Association

Media Design & Communications *Pathway*

"Connecting and Supporting Success"

This pathway prepares individuals to apply HTML, XML, Javascript, graphics applications, and other authoring tools to the design, editing, and publishing (launching) of documents, images, graphics, sound, and multimedia products on the World Wide Web. It includes instruction in Internet theory, web page standards and policies, elements of web page design, user interfaces, vector tools, special effects, interactive and multimedia components, search engines, navigation, morphing, e-commerce tools, and emerging web technologies.

INTRODUCTORY LEVEL COURSES

- **Introduction to Web & Digital Media**
- **Computer Applications**
- **Drawing for Designers**

TECHNICAL LEVEL COURSES

- **Graphic Design II**
- **Computer Programming**
- **Web Design**
- **Interactive Media**
- **Principles of Illustration**
- **Graphic Design I**
- **2D Animation**
- **3D Animation**
- **Journalism & Media Communications**
- **Audio/Video Production I**
- **Digital Media Technology**
- **Photo Imaging I**
- **Media & Public Relations**
- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Media Design & Communications - Graphic Design Work-based Learning**
- **Applied Graphic Design**
- **Applied Game Design**
- **Media Design & Communications - Web & Design Work-based Learning**
- **Audio/Video Production II**
- **Media Design & Production**
- **Advanced Media Design & Production**
- **Photo Imaging II**
- **Advanced Media Design and Communications Work-based Learning**

OCCUPATIONS

- **Career/Technical Education Teaches** (Postsecondary)
- **Graphic Designers**
- **Librarians & Media Collections Specialists**
- **Special Effects Artists & Animators**
- **Web Developers**
- **Web & Digital Interface Designers**

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
*Graphic Designers	$49,820
Master's Degree	
*Librarians & Media Collections Specialists	$59,580

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Adobe: Dreamweaver**
- **Adobe: Frame Maker**
- **Adobe In-Design**
- **Adobe Photoshop**
- **Adobe Premier Pro**
- **Apple: App Development with Swift** (Level 1)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **CISCO: CCDE**
- **CISCO: CCIE**
- **CISCO: CCNA**
- **CISCO: CCNP**

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS *(continued)*

- **Microsoft (MOS): Microsoft Office Specialist** (Associate A)
- **Microsoft (MOS): Microsoft Office Specialist** (Expert A)
- **Microsoft (MOS): Access**
- **Microsoft (MOS): Excel**
- **Microsoft (MOS): PowerPoint**
- **Microsoft (MOS): Word**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATION

- **CompTIA: A+**
- **CompTIA: Network+**
- **CompTIA: Security+**
- **CompTIA: Server+**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Digital Technology Career Cluster (onetonline.org)
- Digital Technology Advance CTE (careertech.org)
- Careers in Digital Technology (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Cybersecurity Analyst (HirePaths.com)

STUDENT ORGANIZATION

- Business Professionals of America

BUSINESS PROFESSIONALS of AMERICA
Giving Purpose to Potential

- Future Business Leaders of America

FBLA

- Skills USA Kansas

SkillsUSA

- Technology Student Association

TSA
TECHNOLOGY STUDENT ASSOCIATION

Networking & Telecommunications
Pathway

"Connecting and Supporting Success"

This pathway focuses on the design, implementation, and management of linked systems of computers, peripherals, and associated software to maximize efficiency and productivity, and that prepares individuals to function as network specialists and managers at various levels. It includes instruction in operating systems and applications; systems design and analysis; networking theory and solutions; types of networks; network management and control; network and flow optimization; security; configuring; and troubleshooting.

INTRODUCTORY LEVEL COURSES
- **Computing Systems**
- **Computer Applications**

TECHNICAL LEVEL COURSES
- **Foundations of Information Technology**
- **Telecommunications**
- **Digital Electronics**
- **GIS Technology**
- **Fundamentals of Electricity & Electronics**
- **Network Systems I**
- **AP Networking**
- **AP Cybersecurity**

Optional Supportive Courses:
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **Network Systems II**
- **Networking and Telecommunications Work-based Learning**
- **Advanced Networking and Telecommunications Work-based Learning**
- **Applied Telecommunications**
- **GIS Spatial Applications**

OCCUPATIONS
- **Computer & Information Systems Managers**
- **Computer Network Architects**
- **Computer Network Support Specialists**
- **Computer Occupations** (All Other)
- **Computer Science Teachers** (Postsecondary)
- **Computer Systems Analysts**
- **Information Security Analysts**
- **Network & Computer Systems Administrators**

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
*Network & Computer Systems Administrators	$82,150
*Computer Occupations (All Other)	$100,090
Bachelor's Degree & 5 Years or More Work Experience	
*Computer Network Architects	$100,910
*Computer & Information Systems Managers	$154,830

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **CISCO: Certified Entry Networking Technician CCENT**
- **CISCO: CCDE**
- **CISCO: CCIE**
- **CISCO: CCNA**
- **CISCO: CCNP**
- **Citrix: Certified Associate** (Networking)
- **Microsoft (MOS): Microsoft Office Specialist** (Associate A)
- **Microsoft (MOS): Microsoft Office Specialist** (Expert A)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATION
- **CompTIA: A+**
- **CompTIA: Network+**
- **CompTIA: Security+**
- **CompTIA: Server+**

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Digital Technology Career Cluster (onetonline.org)
- Digital Technology Advance CTE (careertech.org)
- Careers in Digital Technology (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Cybersecurity Analyst (HirePaths.com)

STUDENT ORGANIZATION
- Business Professionals of America
- Future Business Leaders of America
- Skills USA Kansas
- Technology Student Association

Programming & Software Development

Pathway

"Connecting and Supporting Success"

This pathway focuses on the general writing and implementation of generic and customized programs to drive operating systems and that generally prepares individuals to apply the methods and procedures of software design and programming to software installation and maintenance. It includes instruction in software design, low- and high-level languages and program writing; program customization and linking; prototype testing; troubleshooting; and related aspects of operating systems and networks.

INTRODUCTORY LEVEL COURSES

- **Computing Systems**
- **Introduction to Computer Coding**
- **Introduction to Web & Digital Media**

TECHNICAL LEVEL COURSES

- **Database Applications**
- **Computer Programming**
- **Web Design**
- **AP Computer Science Principles**
- **AP Cybersecurity**
- **Cybersecurity I**
- **Foundations of Computer Science**
- **Foundations of Artificial Intelligence**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **AP Computer Science A**
- **IB Computing**
- **Computer Science Capstone**
- **Applied Game Design**
- **Programming & Software Development Work-based Learning**
- **Advanced Programming & Software Development Work-based Learning**

OCCUPATIONS

- **Computer Network Support Specialists**
- **Computer Programmers** (Postsecondary)
- **Computer Science Teachers** (Postsecondary)
- **Computer Systems Analysts**
- **Software Developers**
- **Software Quality Assurance Analysts & Testers**
- **Web & Digital Interface Designers**
- **Web Developers**

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
*Software Quality Assurance Analysts & Testers	$83,070
*Computer Programmers	$91,600
Computer Systems Analysts	$97,300
*Software Developers	$106,660

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Adobe: Dreamweaver**
- **Adobe: Illustrator**
- **Apple: App Development with Swift** (Level 1)
- **CISCO: CCDE**
- **CISCO: CCIE**
- **CISCO: CCNA**
- **CISCO: CCNP**
- **Microsoft (MOS): Microsoft Office Specialist** (Associate A)
- **Microsoft (MOS): Microsoft Office Specialist** (Expert A)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **CompTIA: A+**
- **CompTIA: Network+**
- **CompTIA: Security+**
- **CompTIA: Server+**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Digital Technology Career Cluster (onetonline.org)
- Digital Technology Advance CTE (careertech.org)
- Careers in Digital Technology (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Cybersecurity Analyst (HirePaths.com)

STUDENT ORGANIZATION

- Business Professionals of America

- Future Business Leaders of America

- Skills USA Kansas

- Technology Student Association



Design, Production, & Repair

- Advanced Manufacturing
- Construction
- Supply Chain & Transportation

DESIGN, PRODUCTION, & REPAIR INDUSTRY

Advanced Manufacturing

Automation Engineering
Aviation Production
Engineering & Applied Mathematics
Manufacturing

"Building and Moving"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Moderate-Term On-the-Job Training	
Miscellaneous Assemblers and Fabricators	$41,280
Food Batchmakers	$41,830
Packaging and Filling Machine Operators and Tenders	$43,030
*Installation, Maintenance, and Repair Workers, All Other	$46,680
*Mixing and Blending Machine Setters, Operators, and Tenders	$47,450
*Computer Numerically Controlled Tool Operators	$47,540
*Weighers, Measurers, Checkers, and Samplers, Recordkeeping	$47,680
*Welders, Cutters, Solderers, and Brazers	$49,040
*Inspectors, Testers, Sorters, Samplers, and Weighers	$55,930
*Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	$57,970
H.S. Diploma & Long-Term On-the-Job Training	
*Machinists	$48,490
*Industrial Machinery Mechanics	$70,170
*First-Line Supervisors of Production and Operating Workers	$72,500
*First-Line Supervisors of Mechanics, Installers, and Repairers	$76,380
Associates Degree	
Electrical and Electronic Engineering Technologists and Technicians	$73,060
Bachelor's Degree	
*Engineers, All Other	$69,210
*Occupational Health and Safety Specialists	$78,480
*Mechanical Engineers	$91,770
*Industrial Engineers	$96,650
*Electrical Engineers	$97,680
*Industrial Production Managers	$122,700
*Aerospace Engineers	$126,640

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Automation Engineering & Industrial Machine Maintenance Technology

Pathway

"Building and Moving"

This pathway prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing, installing, calibrating, modifying and maintaining automated systems. It includes instruction in computer systems; electronics and instrumentation; programmable logic controllers (PLCs); electric, hydraulic and pneumatic control systems; actuator and sensor systems; process control; robotics; applications to specific industrial tasks; and report preparation.

INTRODUCTORY LEVEL COURSES

- Introduction to Manufacturing
- Production Print Reading I
- Introduction to Computer Coding
- Introduction to Physical Computing
- Introduction to Skilled Trades
- Introduction to Engineering

TECHNICAL LEVEL COURSES

- Computer Programming
- Mechanical Drive Systems
- Fundamentals of Electrical Theory
- Engineering Design
- Robotics I
- Foundations of Electronics
- Welding Processes I
- Hand & Power Tools
- Entrepreneurship
- Drafting/CAD
- Cybersecurity I

APPLICATION-LEVEL COURSES

- Industrial Maintenance Systems
- Digital Electronics
- Computer Integrated Manufacturing
- Advanced AET/IMMT Work-Based Learning
- Robotics II
- Automated Integrated Systems I
- Automated Integrated Systems II
- Fluid Power
- AET/IMMT Work-Based Learning
- Materials Science in Engineering

OCCUPATIONS

- Electro-Mechanical & Mechatronics Technologies & Technicians
- Mechanical Engineers
- Industrial Machinery Mechanics
- Industrial Engineers
- Industrial Production Managers

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Long-Term On-the-Job Training	
*Industrial Machinery Mechanics	$70,170
Associate Degree	
Electrical & Electronic Engineering Technologists & Technicians	$73,060
Bachelor's Degree	
* Mechanical Engineers	$91,770
* Industrial Engineers	$96,650
* Industrial Production Managers	$122,700

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Autodesk: User, Professional, Specialist**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Advanced Manufacturing Career Cluster (onetoonline.org)
- Advanced Manufacturing Advance CTE (careertech.org)
- Careers in Advanced Manufacturing (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Robotics and Automation Engineer (HirePaths.com)
- Cool Careers: Drone Pilot (HirePaths.com)

STUDENT ORGANIZATION

- Skills USA Kansas

- Technology Student Association

Aviation Production
Pathway

"Building and Moving"

This pathway generally prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in a wide variety of projects. It includes instruction in various engineering support functions for research, production, and operations, and applications to specific engineering specialties.

INTRODUCTORY LEVEL COURSES
- **Production Print Reading I**
- **Introduction to Skilled Trades**
- **Introduction to Manufacturing**

TECHNICAL LEVEL COURSES
- **Hand & Power Tools**
- **Aviation Fundamentals**
- **Aviation Systems**
- **Entrepreneurship**

Design Strand
- **Drafting/CAD**

Production Strand
- **Production Methods I**

APPLICATION-LEVEL COURSES
- **Aviation Production Work-Based Learning**
- **Advanced Aviation Production Work-Based Learning**

Design Strand
- **Aerospace Drawings I**
- **Aerospace Drawings II**
- **Special Projects & Research in Aviation**
- **Aerospace Engineering**

Production Strand
- **Aviation Tooling**
- **Aerostructures**
- **Composites**

OCCUPATIONS
- **Aerospace Engineering & Operations Technologists & Technicians**
- **Aircraft Structure, Surfaces, Rigging, & Systems Assemblers**
- **Electrical & Electronic Engineering Technologists & Technicians**
- **Electro-Mechanical & Mechatronics Technologists & Technicians**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Moderate-Term On-the-Job Training	
*Aircraft Structure, Surfaces, Rigging, & Systems Assemblers	$57,970

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS
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- Program Alignment (kansasregents.org)
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RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Advanced Manufacturing Career Cluster (onetoonline.org)
- Advanced Manufacturing Advance CTE (careertech.org)
- Careers in Advanced Manufacturing (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Pilot (HirePaths.com)

STUDENT ORGANIZATION
- Skills USA Kansas
- Technology Student Association

Engineering & Design
Pathway

"Building and Moving"

This pathway generally prepares individuals to apply mathematical and scientific principles to solve a wide variety of practical problems in industry, social organization, public works, and commerce. It includes instruction in undifferentiated and individualized programs in engineering.

INTRODUCTORY LEVEL COURSES
- **Production Print Reading I**
- **Introduction to Engineering**

TECHNICAL LEVEL COURSES
- **Engineering Design**
- **Robotics**
- **Drafting/CAD**
- **Foundations of Electronics**
- **Principles of Applied Engineering**
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **Engineering Design Capstone**
- **Digital Electronics**
- **Computer Integrated Manufacturing**
- **Civil Engineering & Architecture**
- **Aerospace Engineering**
- **Engineering & Design Work Based Learning**
- **Advanced Engineering & Design Work Based Learning**
- **Project Management**
- **Materials Science in Engineering**
- **Advanced Drafting/CAD**
- **Advanced Electronics**
- **Engineering Systems**

OCCUPATIONS
- **Aerospace Engineers**
- **Electrical Engineers**
- **Engineering Teachers** (Postsecondary)
- **Engineers** (All Other)
- **Industrial Engineers**
- **Mechanical Engineers**

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
* **Engineers** (All Other)	**$69,210**
* **Mechanical Engineers**	**$91,770**
* **Industrial Engineers**	**$96,650**
* **Electrical Engineers**	**$97,680**
* **Aerospace Engineers**	**$126,640**

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **Autodesk: User, Professional, Specialist**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS
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- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Advanced Manufacturing Career Cluster (onetoonline.org)
- Advanced Manufacturing Advance CTE (careertech.org)
- Careers in Advanced Manufacturing (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Electrical Process Engineer (HirePaths.com)
- Cool Careers: Robotics and Automation Engineer (HirePaths.com)
- Cool Careers: Drone Pilot (HirePaths.com)
- International Society of Certified Electronics Technicians – Education Through Certification

STUDENT ORGANIZATION
- Skills USA Kansas
- Technology Student Association

Manufacturing
Pathway

"Building and Moving"

A program that prepares individuals to apply technical knowledge and skills to fabricate and modify metal parts in support of other manufacturing, repair or design activities, or as an independent business..

INTRODUCTORY LEVEL COURSES
- **Introduction to Manufacturing**
- **Introduction to Welding**
- **Production Print Reading I**
- **Introduction to Skilled Trades**

TECHNICAL LEVEL COURSES
Supportive Courses
- **Entrepreneurship**
- **Production Methods I**
- **Robotics I**
- **Drafting/CAD**
- **Production Print Reading II**
- **Hand & Power Tools**

Welding Production Strand
- **Agricultural Welding I**
- **Cutting Processes**
- **Welding Processes I**

Machine Tool Technology Strand
- **Machine Tool Technology**
- **Computer-Aided Machining (CAM) I**

APPLICATION-LEVEL COURSES
Supportive Courses
- **Manufacturing Work Based Learning**
- **Advanced Manufacturing Work Based Learning**
- **Production Methods II**
- **Advanced Materials & Fabrication**

APPLICATION-LEVEL COURSES
Welding Production Strand
- **Agricultural Welding II**
- **Welding Processes II**
- **SMAW I**
- **SMAW II**
- **GMAW I**
- **GMAW II**
- **GTAW I**
- **GTAW II**

Machine Tool Technology Strand
- **Machine Tool Technology II**
- **Computer Integrated Manufacturing**
- **Computer-Aid Machining (CAM) II**

OCCUPATIONS
- **Computer Numerically Controlled Tool Operators**
- **First-Line Supervisors of Production & Operating Workers**
- **Industrial Production Managers**
- **Inspectors, Testers, Sorters, Samplers, & Weighers**
- **Machinists**
- **Mixing & Blending Machine Setters, Operators, & Tenders**
- **Occupational health and Safety Specialists**
- **Weighers, Measurers, Checkers, Samplers, Recordkeeping**
- **Welders, Cutters, Solderers, & Brazers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Moderate-Term On-the-Job Training	
Production Workers, all other	$36,590
Miscellaneous Assemblers & Fabricators	$41,280
Cutting, Punching, Press Machine Setters, Operators, and Tenders, Metal and Plastic	$42,680
Packaging & Filling Machine Operators & Tenders	$43,030
*Mixing & Blending Machine Setters, Operators, & Tenders	$47,450
*Computer Numerically Controlled Tool Operators	$47,540
*Weighers, Measurers, Checkers, & Samplers, Recordkeeping	$47,680
*Machinists	$48,490
*Welders, Cutters, Solderers, & Brazers	$49,040
*Inspectors, Testers, Sorters, Samplers, & Weighers	$55,930
Less than 5 years Work Experience	
*First-Line Supervisors of Production & Operating Workers	$72,500
Bachelor's Degree	
*Occupational Health & Safety Specialists	$78,480
*Industrial Production Managers	$122,700

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

Manufacturing

Pathway (continued)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **AHRI: HVAC Certifications**
- **American Design Drafting Association (ADDA): Certified Drafter**
- **American Welding Society: SENSE Certification** (Level 1)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **EPA: Section 608 - Handling & Buying Refrigerants**
- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **MSSC: Certified Production Technician (CPT)**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NCCER: Core & Sheet Metal Level 1**
- **NIMS: Metal Forming I**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **ASME: Section 9 Standards** (6G level)
- **American Welding Society: Certification** (Level 1)
- **HVAC Excellence: Core & Air Conditioning, Gas Heat & Electrical**
- **HVAC Excellence: Core & Light Commercial Air Conditioning, Gas Heat & Electrical**
- **HVAC Excellence: Core & Light Commercial Refrigeration & Electrical**
- **ICE: Core & Commercial Refrigeration**
- **ICE: Core & Light Commercial Air Conditioning & Heating**
- **ICE: Core & Residential Air Conditioning & Heating**
- **NATE: Core & Air Conditioning**
- **NATE: Core & Air Distribution**
- **NATE: Core & Air to Air Heat Pumps**
- **NATE: Core & Gas or Oil Furnaces**
- **NATE: Core & Light Commercial/Commercial Refrigeration**
- **NCCER: Core & Electrical Level 1**
- **NCCER: Core & HVAC Levels 1 & 2**
- **NCCER: Core & Industrial Maintenance Level 1**
- **NCCER: Core & Plumbing & Pipefitting Level 1**
- **NIMS: Machining Level 1**
- **SMRP: Certified Maintenance & Reliability Technician**

POSTSECONDARY CREDITS

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- Program Alignment (kansasregents.org)
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RESOURCES

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- Advanced Manufacturing Advance CTE (careertech.org)
- Careers in Advanced Manufacturing (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Sheet Metal Mechanic (HirePaths.com)
- International Society of Certified Electronics Technicians (ISCET)
- National Center for Construction Education & Research – NCCER
- AWS SENSE Program (senseonline.org)

STUDENT ORGANIZATION

- Skills USA Kansas

- Technology Student Association

DESIGN, PRODUCTION, & REPAIR INDUSTRY

Construction

Construction & Design

"Building and Moving"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Long-Term On-the-Job Training	
Cabinetmakers and Bench Carpenters	$38,800
Construction Laborers	$44,810
Painters, Construction and Maintenance	$44,890
Highway Maintenance Workers	$45,170
Maintenance and Repair Workers, General	$46,590
Operating Engineers and Other Construction *Equipment Operators	$50,600
*Cement Masons and Concrete Finishers	$50,640
*Construction and Building Inspectors	$61,850
H.S. Diploma & Apprenticeship	
*Sheet Metal Workers	$50,920
*Carpenters	$51,550
*Electricians	$61,830
*Plumbers, Pipefitters, and Steamfitters	$62,820
First-Line Supervisors of Construction Trades *and Extraction Workers	$75,730
Postsecondary Nondegree Award or Long-Term On-the-Job Training	
Heating, Air Conditioning, and Refrigeration *Mechanics and Installers	$56,750
Associates Degree	
Civil Engineering Technologists and *Technicians	$58,700
Bachelor's Degree or Postsecondary Degree	
*Civil Engineers	$86,780
*Cost Estimators	$72,600
*Construction Managers	$103,760
*Architectural and Engineering Managers	$147,020

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Construction & Design
Pathway

Careers emphasizing the critical initial stages of construction and development projects, including preconstruction activities, property development, and land use planning. Careers focused on skilled work that is essential to constructing, maintaining, and repairing buildings and infrastructure including carpentry; welding; masonry; electrical; plumbing; and heating, ventilation, air conditioning, and refrigeration (HVAC).

INTRODUCTORY LEVEL COURSES
- **Drafting/Print Reading**
- **Production Print Reading I**
- **Introduction to Skilled Trades**

TECHNICAL LEVEL COURSES
Entrepreneurship

Design Strand
- **Interior Design I**
- **Interior Design II**
- **Architectural Design I**
- **Drafting/Architecture I**
- **Drafting/CAD**

Construction Strand
- **General Carpentry I**
- **Woodworking Principles**
- **Mechanical/Electrical/Plumbing (MEP) I**

APPLICATION-LEVEL COURSES
- **Construction & Design Work-Based Learning**
- **Advanced Construction & Design Work-Based Learning**

Design Strand
- **Research & Design for Preconstruction**
- **Drafting/Architecture II**
- **Interior Architectural Design**
- **Architectural Design II**

Construction Strand
- **Sheet Metal Technology**
- **Research & Design in Building Trades**
- **Remodel & Building Maintenance**
- **HVAC Technology**
- **Plumbing Technology**
- **Electrical Technology**
- **General Carpentry II**
- **Advanced Materials & Fabrications**

OCCUPATIONS
- **Architectural & Engineering Managers**
- **Carpenters**
- **Cement Masons & Concrete Finishers**
- **Civil Engineering Technologists and Technicians**
- **Civil Engineers**
- **Construction & Building Inspectors**
- **Construction Managers**
- **Cost Estimators**
- **Electricians**
- **First-Line Supervisors of Construction Trades & Extraction Workers**
- **Heating, Air Conditioning, & Refrigeration Mechanics & Installers**
- **Operating Engineers & Other Construction Equipment Operators**
- **Plumbers, Pipefitters, & Steamfitters**
- **Sheet Metal Workers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short to Long-Term On-the-Job Training	
Cabinetmakers and Bench Carpenters	$38,800
Construction Laborers	$44,810
Painters, Construction and Maintenance	$44,890
Highway Maintenance Workers	$45,170
Maintenance and Repair Workers, General	$46,590
*Operating Engineers and Other Construction Equipment Operators	$50,600
*Cement Masons and Concrete Finishers	$50,640
*Construction and Building Inspectors	$61,850
H.S. Diploma & Apprenticeship	
*Sheet Metal Workers	$50,920
*Carpenters	$51,550
*Electricians	$61,830
*Plumbers, Pipefitters, and Steamfitters	$62,820
*First-Line Supervisors of Construction Trades and Extraction Workers	$75,730
Postsecondary Nondegree Award or Long-Term On-the-Job Training	
*Heating, Air Conditioning, and Refrigeration Mechanics and Installers	$56,750
Associates Degree	
*Civil Engineering Technologists and Technicians	$58,700
Bachelor's Degree or Postsecondary Degree	
*Civil Engineers	$86,780
*Cost Estimators	$72,600
*Construction Managers	$103,760
*Architectural and Engineering Managers	$147,020

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Construction & Design

Pathway (continued)

"Building and Moving"

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **AHRI: Variety of HVAC Related Areas**
- **American Design Drafting Association: Certified Drafter**
- **Autodesk: User, Professional, Specialist**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **EPA: Section 608 - Handling & Buying Refrigerants**
- **International Code Council: Building Construction**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NCCER: Core & Carpentry Level 2**
- **NCCER: Core & Concrete Finishing**
- **NCCER: Core & Construction Laborer**
- **NCCER: Core & Masonry Level 1**
- **NCCER: Core & Sheet Metal Level 1**
- **Solid Works: Software**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **HVAC Excellence: Core & Air Conditioning, Gas, Heat & Electrical**
- **HVAC Excellence: Core & Light Commercial Air Conditioning, Gas Heat & Electrical**
- **HVAC Excellence: Core & Light Commercial Refrigeration & Electrical**
- **ICE: Core & Commercial Refrigeration**
- **ICE: Core & Light Commercial Air Conditioning & Heating**
- **ICE: Core & Residential Air Conditioning & Heating**
- **NATE: Core & Air Conditioning**
- **NATE: Core & Air Distribution**
- **NATE: Core & Air to Air Heat Pumps**
- **NATE: Core & Gas or Oil Furnaces**
- **NATE: Core & Light Commercial/Commercial Refrigeration**
- **NCCER: Core & Carpentry Level 1**
- **NCCER: Core & Electrical Level 1**
- **NCCER: Core & HVAC Levels 1 & 2**
- **NCCER: Core & Plumbing & Pipefitting Level 1**

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- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Architecture & Construction Career Cluster (onetoonline.org)
- Architecture & Construction Advance CTE (careertech.org)
- Careers in Architecture & Construction (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Carpenter (HirePaths.com)
- Cool Careers: Welder (HirePaths.com)
- Cool Careers: Plumber (HirePaths.com)
- National Center for Construction Education & Research - NCCER

STUDENT ORGANIZATION

- Skills USA Kansas

- Technology Student Association

DESIGN, PRODUCTION, & REPAIR INDUSTRY

Supply Chain & Transportation

Aviation Maintenance
Vehicle Maintenance & Repair

"Building and Moving"

Occupation Overview

Occupations & Degrees	Median Annual Wage
Short-Term to Moderate On-the-Job Training	
Shuttle Drivers and Chauffeurs	$33,120
Automotive and Watercraft Service Attendants	$34,670
Tire Repairers and Changers	$36,570
Cleaners of Vehicles and Equipment	$38,130
Light Truck Drivers	$42,620
Driver/Sales Workers	$43,380
Bus Drivers, School	$44,720
*Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	$47,500
*Industrial Truck and Tractor Operators	$48,120
H.S. Diploma & Long-Term On-the-Job Training	
*Automotive Body and Related Repairers	$50,200
*Bus and Truck Mechanics and Diesel Engine Specialists	$58,650
*Maintenance Workers, Machinery	$59,180
*Mobile Heavy Equipment Mechanics, Except Engines	$61,680
H.S. Diploma & Work Experience or Nondegree Award	
*Automotive Service Technicians and Mechanics	$47,010
*Heavy and Tractor-Trailer Truck Drivers	$56,940
*Aircraft Mechanics and Service Technicians	$78,480
*Transportation, Storage, and Distribution Managers	$103,730

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Aviation Maintenance and Operations

Pathway

"Building and Moving"

This pathway generally prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of aircraft powerplant and related systems. It includes instruction in engine inspection and maintenance, lubrication and cooling, electrical and ignition systems, carburetion, fuels and fuel systems, propeller and fan assemblies.

INTRODUCTORY LEVEL COURSES

- **Production Print Reading I**
- **Introduction to Skilled Trades**

TECHNICAL LEVEL COURSES

- **Foundations of Electronics**
- **Hand & Power Tools**
- **Aviation Fundamentals**
- **Aircraft Systems**
- **AMT General I**
- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Small Uncrewed Aircraft Systems (sUAS)**
- **Aviation Maintenance & Operations Work-Based Learning**
- **Advanced Aviation Maintenance & Operations Work-Based Learning**
- **AC Electronics**
- **DC Electronics**
- **AMT General II**
- **AMT General III**
- **AMT General IV**
- **Private Pilot Ground School**

OCCUPATIONS

- **Aircraft Mechanics & Service Technicians**
- **Aircraft Structure, Surfaces, Rigging, & Systems Assemblers**

Occupations & Degrees	Median Annual Wage
Postsecondary Nondegree Award	
*Aircraft Mechanics & Service Technicians	$78,480

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Federal Aviation Administration (FAA): General Exam & Aviation Maintenance Technician Airframe**
- **Federal Aviation Administration (FAA): General Exam & Aviation Maintenance Technician Powerplant**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Supply Chain & Transportation Career Cluster (onetoonline.org)
- Supply Chain & Transportation Advance CTE (careertech.org)
- Careers in Supply Chain & Transportation (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- International Society of Certified Electronics Technicians (ISCET)

STUDENT ORGANIZATION

- Skills USA Kansas

SkillsUSA

- Technology Student Association

TSA TECHNOLOGY STUDENT ASSOCIATION

Logistics & Supply Chain *Pathway*

"Building and Moving"

This pathway generally prepares individuals to apply technical knowledge and skills in logistics and supply chain management. Careers in the Logistics & Supply Chain Pathway include the planning, coordination, and movement of goods and services from producers to consumers. All industries rely on efficient supply chains to ensure products are delivered accurately and on time. This field also integrates specialized areas such as transportation, warehousing, inventory control, and distribution, and is increasingly influenced by advancements in technology, including data analytics, automation, and global tracking systems.

INTRODUCTORY LEVEL COURSES

- **Business Essentials**
- **AP Introduction to Business**

TECHNICAL LEVEL COURSES

- **Supply Chain Management**
- **Business Management**
- **Business Communications**
- **Entrepreneurship**
- **Accounting**
- **Business Law**

Logistics I

- **Hazardous Materials for the First Responder**

APPLICATION-LEVEL COURSES

- **Logistics II**
- **CDL – Entry Level Driver Training**
- **Logistics & Supply Chain Management Work-Based Learning**
- **Advanced Logistics & Supply Chain Management Work-Based Learning**

OCCUPATIONS

- **Couriers and Messengers**
- **Packers and Packagers, Hand**
- **Stockers and Order Fillers**
- **Laborers and freight, stock, and material movers, hand**
- **Shipping, Receiving, and Inventory Clerk**
- **Dispatchers, except police, fire, and ambulance**
- **Production, Planning, and Expediting clerks**
- **First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors**
- **Logisticians**

Occupations & Degrees	Median Annual Wage
Short-Term on-the-job Training	
Packers and Packagers, Hand	$35,660
Stockers and Orde Fillers	$35,830
Laborers and Freight, Stock, and Material Movers, Hand	$39,960
Shipping, Receiving, and Inventory Clerks	$42,150
Moderate-term on-the-job Training	
*Dispatchers, except police, fire, and ambulance	$45,8000
*Production, planning, and expediting clerks	$54,990
*First-line supervisors of transportation and material moving workers, except aircraft cargo handling supervisors	$62,670
Bachelor's Degree	
*Logisticians	$51,430

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Updates coming soon**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Commercial Driver's License**
- **Supply Chain Management**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Supply Chain & Transportation Career Cluster (onetoonline.org)
- Supply Chain & Transportation Advance CTE (careertech.org)
- Careers in Supply Chain & Transportation (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- International Society of Certified Electronics Technicians (ISCET)

STUDENT ORGANIZATION

- Future Business Leaders of America

FBLA

- Skills USA Kansas

SkillsUSA

Vehicle Maintenance & Repair *Pathway*

"Building and Moving"

This pathway generally prepares individuals to apply technical knowledge and skills in mechanic and repair technologies. Careers in the Vehicle Maintenance & Repair Pathway include the maintenance, repair , and servicing of vehicles. All transportation relies on equipment which must function as designed, whenever needed. This field also integrates specialized areas such as auto body and engine repair and is increasingly influenced by advancements in technology, including the maintenance of electric vehicles and systems for autonomous driving.

INTRODUCTORY LEVEL COURSES

- **Business Essentials**
- **Introduction to Skilled Trades**
- **Basic Automotive Care & Information**

TECHNICAL LEVEL COURSES

- **General Service I**
- **Electronics & Electrical Systems I**
- **Brakes I**
- **Drive Train Technology**
- **Diesel & Heavy Equipment Technology I**
- **Engine Performance I**
- **Steering & Suspension I**
- **Mobile HVAC**
- **Auto Collision I**
- **Auto Refinishing**

Optional Supportive Courses

- **Entrepreneurship**
- **Alternative Power**
- **Small Engine & Powertrains I**
- **Engine Mechanical Repair**

APPLICATION-LEVEL COURSES

- **General Service II**
- **General Service III**
- **Electronics & Electrical Systems II**
- **Brakes II**
- **Engine Performance II**
- **Steering and Suspension II**
- **Diesel & Heavy Equipment Technology II**
- **Diesel & Heavy Equipment Technology III**
- **CDL – Entry Level Driver Training**
- **Vehicle Maintenance & Repair Work-Based Learning**
- **Advanced Vehicle Maintenance & Repair Work-Based Learning**
- **Auto Collision II**
- **Auto Refinishing II**

Optional Supportive Courses

- **Small Engines & Powertrains II**

OCCUPATIONS

- **Automotive Body & Related Repairers**
- **Automotive Service Technicians & Mechanics**
- **Bus & Truck Mechanics & Diesel Engine Specialists**
- **First-Line Supervisors of Mechanics, Installers, & Repairers**
- **Heavy and Tractor-Trailer Truck Drivers**
- Industrial Truck and Tractor Operators
- **Mobile Heavy Equipment Mechanics** (except Engines)
- **Maintenance Workers, Machinery**
- **Transportation, Storage, & Distribution Managers**

Occupations & Degrees	Median Annual Wage
Short-Term to Moderate On-the-Job Training	
Shuttle Drivers and Chauffeurs	$33,120
Automotive and Watercraft Service Attendants	$34,670
Tire Repairers and Changers	$36,570
Cleaners of Vehicles and Equipment	$38,130
Light Truck Drivers	$42,620
Driver/Sales Workers	$43,380
Bus Drivers, School	$44,720
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	$47,500
*Industrial Truck and Tractor Operators	$48,120
H.S. Diploma & Long-Term On-the-Job Training	
*Automotive Body and Related Repairers	$50,200
*Bus and Truck Mechanics and Diesel Engine Specialists	$58,650
*Maintenance Workers, Machinery	$59,180
*Mobile Heavy Equipment Mechanics, Except Engines	$61,680
H.S. Diploma & Work Experience or Nondegree Award	
*Automotive Service Technicians and Mechanics	$47,010
*Heavy and Tractor-Trailer Truck Drivers	$56,940
*Transportation, Storage, and Distribution Managers	$103,730

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Vehicle Maintenance & Repair

Pathway (continued)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **ASE: Student Certification** (2 areas)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **EPA: Section 609 - Servicing Motor Vehicle Air Conditioners & For Buying Refrigerant**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **ASE: Automobile Service Technician**
- **ASE: Maintenance & Light Repair**
- **ASE: Master Automobile Service Technician**
- **ASE: Mechanical & Electrical**
- **ASE: Non-Structural Analysis & Damage Repair**
- **ASE: Painting & Refinishing**
- **ASE: Structural Analysis & Damage Repair**
- **ASE: Student Certification** (4 areas)
- **ASE: Student Certification Diesel** (4 areas)
- **I-CAR: Refinish Technician** (ProLevel 1)
- **KS Dept. of Revenue: Commercial Driver's License**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Supply Chain & Transportation Career Cluster (onetoonline.org)
- Supply Chain & Transportation Advance CTE (careertech.org)
- Careers in Supply Chain & Transportation (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Heavy Equipment Technician (HirePaths.com)
- Cool Careers: Distribution Support Specialist (HirePaths.com)
- Automotive Service (ASE) Entry Level Student Certification
- Automotive Service Excellence (ASE)
- Inter-Industry Conference on Auto Collision Repair (I-CAR)

STUDENT ORGANIZATION

- Skills USA Kansas

- Technology Student Association



Agriculture

- Agriculture
- Energy & Natural Resources

AGRICULTURE INDUSTRY

Agriculture

Agricultural Technology & Mechanical Systems
Animal Science, Health & Related Industries
Diversified Agricultural Science
Food Products & Processing Systems
Plant Science & Industry Operations

"Cultivating Resources"

Occupation Overview

Occupations & Degrees	Median Annual Wage
Short-Term On-the-Job Training	
Animal Caretakers	$27,970
Farmworkers, Farm, Ranch, & Aquacultural Animals	$36,940
Farmworkers & Laborers, Crop, Nursery, & Greenhouse	$33,530
Landscaping & Groundskeeping Workers	$37,790
Meat, Poultry, and Fish Cutters & Trimmers	$46,020
*Slaughterers & Meat Packers	$47,310
Veterinary Assistants & Laboratory Animal Caretakers	$32,670
Moderate to Long-Term On-the-Job Training	
Butchers & Meat Cutters	$35,800
*Farm Equipment Mechanics & Service Technicians	$49,450
Agricultural Equipment Operators	$44,510
Bachelor's Degree or H.S. Diploma & Work Experience	
Veterinary Technologists & Technicians	$39,070
*First-Line Supervisors of Landscaping, Lawn Service, & Groundskeeping Workers	$58,440
*Farmers, Ranchers, & Other Agricultural Managers	$79,280

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

AGRICULTURE INDUSTRY | AGRICULTURE

Agricultural Technology & Mechanical Systems

Pathway

"Cultivating Resources"

Careers at the intersection of agriculture and technology, focusing on the design and operation of agricultural equipment and systems; repair and maintenance of agricultural equipment; and agricultural engineering, mechanics, and automation processes. This Pathway includes innovative farming methods such as precision, urban, and vertical farming to increase efficiency, productivity, and sustainability in agriculture.

INTRODUCTORY LEVEL COURSES

- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES

- **Agriscience**
- **Agricultural Mechanics**
- **Agricultural Welding I or Welding Processes I**
- **Small Power Systems**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Advanced Agricultural Mechanics**
- **Agricultural Construction**
- **Agricultural Welding II or Welding Processes II**
- **Agricultural Fabrication**
- **Advanced Agricultural Power**
- **Agricultural Engineering & Technology**
- **Agricultural Technology & Mechanical Systems Work-based Learning**
- **Advanced Agricultural Technology & Mechanical Systems Work-based Learning**

OCCUPATIONS

- **Agricultural Equipment Operators**
- **Agricultural Sciences Teachers** (Postsecondary)
- **Farm Equipment Mechanics & Service Technicians**
- **Farmers, Ranchers, & Other Agricultural Managers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Moderate to Long-term On-the-Job Training	
Agricultural Equipment Operators	**$43,160**
***Farm Equipment Mechanics & Service Technicians**	**$49,450**
Bachelor's Degree or H.S. Diploma & Work Experience	
***Farmers, Ranchers, & Other Agricultural Managers**	**$76,570**

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **American Welding Society: SENSE Certification** (Level 1)
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NSTMOP: Tractor Safety**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- KS Dept. of Agriculture: KS Agriculture Skills & Competencies
- **KS Dept. of Revenue: Commercial Driver's License**

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Agriculture Career Cluster (onetoonline.org)
- Agriculture Advance CTE (careertech.org)
- Careers in Agriculture (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention

AGRICULTURE INDUSTRY | AGRICULTURE

Animal Science, Health & Related Industries

Pathway

"Cultivating Resources"

Careers that both promote the health and well-being of animals, including companion, livestock, and exotic animals, and facilitate the efficient production of animal-related products within the food system. For livestock and poultry, professionals in this field aim to optimize the production of meat, dairy, eggs, and other animal products. Careers in this field also include veterinary and other services to manage the care, breeding, behavior, enrichment, and management of animals. This Pathway also incorporates genetics, nutrition, biotechnology, and pharmaceuticals to improve animal welfare and production efficiency.

INTRODUCTORY LEVEL COURSES

- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES

- **Agriscience**
- **Animal Science**
- **Plant & Animal Science**
- **Agricultural Food Science**
- **Agricultural Biotechnology**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Small Animal Care**
- **Advanced Animal Science**
- **Equine Science**
- **Animal Health**
- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Advanced Plant & Animal Science**
- **Animal Science, Health and Related Industries Work-based Learning**
- **Advanced Animal Science, Health and Related Industries Work-based Learning**

OCCUPATIONS

- **Animal Caretakers**
- **Farmworkers, Farm, Ranch, & Aquacultural Animals**
- **Farmers, Ranchers, & Other Agricultural Managers**
- **Veterinary Assistants & Laboratory Animal Caretakers**
- **Veterinary Technologists & Technicians**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short-Term On-the-Job Training	
Animal Caretakers	**$27, 970**
Farmworkers, Farm, Ranch, & Aquacultural Animals	**$36, 940**
Veterinary Assistants & Laboratory Animal Caretakers	**$32,670**
Bachelor's Degree or H.S. Diploma & Work Experience	
Veterinary Technologists & Technicians	**$39,070**
***Farmers, Ranchers, & Other Agricultural Managers**	**$79,280**

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **Dog Handler**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **Youth for the Quality Care of Animals: YQCA**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- KS Dept. of Agriculture: KS Agriculture Skills & Competencies

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Agriculture Career Cluster (onetoonline.org)
- Agriculture Advance CTE (careertech.org)
- Careers in Agriculture (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention

Diversified Agricultural Science
Pathway

"Cultivating Resources"

This pathway focuses on the general principles and practice of agricultural research and production and that may prepare individuals to apply this knowledge to the solution of practical agricultural problems. It includes instruction in basic animal, plant, and soil science; animal husbandry and plant cultivation; soil conservation; and agricultural operations such as farming, ranching, and agricultural business.

INTRODUCTORY LEVEL COURSES
- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES
- **Agriscience**
- **Horticulture**
- **Plant & Soil Science**
- **Animal Science**
- **Plant & Animal Science**
- **Agricultural Food Science**
- **Agricultural Biotechnology**
- **Agricultural Mechanics**
- **Agricultural Welding I or Welding Processes I**
- **Small Power Systems**
- **Natural Resource Management**

Optional Supportive Courses:
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **Capstone in Agriculture**
- **Small Animal Care**
- **Equine Science**
- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Advanced Plant & Animal Science**
- **Sustainable/Alternative Agriculture**
- **Agricultural Construction**
- **Agricultural Fabrication**
- **Agricultural Engineering & Technology**
- **Diversified Agricultural Science Work-based Learning**
- **Advanced Diversified Agricultural Science Work-based Learning**

OCCUPATIONS
- **Agricultural Sciences Teachers** (Postsecondary)
- **Farmworkers, Farm, Ranch, & Aquacultural Animals**
- **Slaughters & Meat Packers**
- **Farm Equipment Mechanics & Service Technicians**
- **First-Line Supervisors of Landscaping, Lawn Service, & Groundskeeping Workers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short-Term On-the-Job Training	
Farmworkers, Farm, Ranch, & Aquacultural Animals	$36, 940
* Slaughterers & Meat Packers	$47,310
H.S. Diploma & Moderate to Long-Term On-the-Job Training	
* Farm Equipment Mechanics & Service Technicians	$49,450
Bachelor's Degree or H.S. Diploma & Work Experience	
* First-Line Supervisors of Landscaping, Lawn Service, & Groundskeeping Workers	$58,440
* Farmers, Ranchers, & Other Agricultural Managers	$79,280

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **KS Livestock Association: Beef Quality Assurance**
- **KS Restaurant & Hospitality: ServSafe** (Food Handlers)
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NSTMOP: Tractor Safety**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- KS Dept. of Agriculture: KS Agriculture Skills & Competencies
- **KS Dept. of Agriculture: Pesticide Applicator** (Personal or Commercial)
- **KS Dept. of Revenue: Commercial Driver's License**

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Agriculture Career Cluster (onetoonline.org)
- Agriculture Advance CTE (careertech.org)
- Careers in Agriculture (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION
- Kansas FFA
- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention

AGRICULTURE INDUSTRY | AGRICULTURE

Food Products & Processing Systems

Pathway

"Cultivating Resources"

Careers centered on applying scientific and technological principles to the development, enhancement, processing, and usability of agricultural food products. Professionals in this field work with fruit, vegetable, grain, and meat processing, ensuring that these products are nutritious and safe for consumption. This Pathway is crucial in maintaining quality control and nutritional value, enhancing product freshness, and meeting consumer and regulatory standards.

INTRODUCTORY LEVEL COURSES

- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES

- **Agriscience**
- **Horticulture**
- **Plant & Soil Science**
- **Animal Science**
- **Agricultural Food Science**
- **Food Science**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Advanced Food Science**
- **Food Products & Processing Systems Work-based Learning**
- **Advanced Food Products & Processing Systems Work-based Learning**

OCCUPATIONS

- **Food Batchmakers**
- **Meat, Poultry, & Fish Cutters & Trimmers**
- **Slaughterers & Meat Packers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma and Short to Long-Term On-the-Job Training	
Food Batchmakers	**$41,830**
Meat, Poultry, & Fish Cutters & Trimmers	**$46,020**
***Slaughterers & Meat Packers**	**$47,310**

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **KS Restaurant & Hospitality: ServSafe** (Food Handlers)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- KS Dept. of Agriculture: KS Agriculture Skills & Competencies

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Agriculture Career Cluster (onetoonline.org)
- Agriculture Advance CTE (careertech.org)
- Careers in Agriculture (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Kansas FFA
- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention

Plant Science & Industry Operations

Pathway

"Cultivating Resources"

Careers involving the study and management of plant growth, soil health, and pest management, focusing on sustainable crop production for both food, goods and landscapes. This Pathway includes careers in agronomy, horticulture, timber and plant fiber harvesting, and soil science that are aimed at enhancing crop yields, preserving soil resources, developing advanced production practices, and enhancing landscape features.

INTRODUCTORY LEVEL COURSES

- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES

- **Agriscience**
- **Horticulture**
- **Plant & Soil Science**
- **Plant & Animal Science**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Horticulture, Floriculture & Greenhouse Management**
- **Nursery & Landscape Operations**
- **Crop & Range Management**
- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Advanced Plant & Animal Science**
- **Plant Science & Industry Work-based Learning**
- **Advanced Plant Science & Industry Work-based Learning**

OCCUPATIONS

- **Farmworkers & Laborers, Crop, Nursery, & Greenhouse**
- **Landscaping & Groundskeeping Workers**
- **First-Line Supervisors of Landscaping, Lawn Service, & Groundskeeping Workers**
- **Farmers, Ranchers, & Other Agricultural Managers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma and Short to Long-Term On-the-Job Training	
Farmworkers & Laborers, Crop, Nursery, & Greenhouse	$33,530
Landscaping & Groundskeeping Workers	$37,790
* First-Line Supervisors of Landscaping, Lawn Service, & Groundskeeping Workers	$58,440
* Farmers, Ranchers, & Other Agricultural Managers	$79,280

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **NC3: Data Analytics/Harnessing the Power of Data**
- **NSTMOP: Tractor Safety**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- KS Dept. of Agriculture: KS Agriculture Skills & Competencies
- **KS Dept. of Agriculture: Pesticide Applicator** (Personal or Commercial)

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Agriculture Career Cluster (onetoonline.org)
- Agriculture Advance CTE (careertech.org)
- Careers in Agriculture (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Kansas FFA
- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention

AGRICULTURE INDUSTRY

Energy & Natural Resources

Energy

Natural Resources & Environmental Sustainability

"Cultivating Resources"

Occupational Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Work Experience or Nondegree Award	
*First-Line Supervisors of Mechanics, Installers, & Repairers	$76,380
*First-line Supervisors of Construction Trades & Extraction Workers	$75,730
Moderate to Long-Term On-the-Job Training	
Installation, Maintenance, & Repair Workers	$46,680
*Water & Wasteland Treatment Plant & System Operators	$47,950
*Electrical Power-line Installers & Repairers	$102,400
Bachelor's Degree	
*Electrical Engineers	$97,680

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

Energy
Pathway

"Cultivating Resources"

This pathway prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of energy generation, storage, conversion, and distribution systems. It includes instruction in conventional and alternative/renewable energy systems, electrical power systems, and electrical system design.

INTRODUCTORY LEVEL COURSES
- **Introduction to Energy**
- **Introduction to Environmental Science**

TECHNICAL LEVEL COURSES
- **Meteorology**
- **AP Environment Science**
- **Mechanical Power Transmission Systems**
- **Foundations of Electronics**
- **Energy Industry Fundamentals**
- **Energy, Power, & Society**
- **Wind Energy Operations**
- **Fundamentals of Electricity & Electronics**
- **Principles of Applied Engineering**

Optional Supportive Courses:
- **Entrepreneurship**

APPLICATION-LEVEL COURSES
- **HVAC Technology**
- **Hydraulics & Pneumatics**
- **Advanced Electricity & Electronics**
- **Materials Science in Engineering**
- **Energy Work-based Learning**
- **Advanced Energy Work-based Learning**

OCCUPATIONS
- **First-Line Supervisors of Mechanics, Installers, & Repairers**
- **Installation, Maintenance, & Repair Workers**
- **Electrical Power-line Installers & Repairers**
- **Electrical Engineers**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Less Than 5 Years Work Experience or Long-Term On-the-Job Training	
*First-Line Supervisors of Mechanics, Installers, & Repairers	$76,380
Moderate to Long-term On-the-Jon Training	
Installation, Maintenance, and Repair Workers	$46,680
* Electrical Power-line Installers & Repairers	$102,400
Bachelor's Degree	
* Electrical Engineers	$97,680

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **Center for Energy Workforce Development: Energy Industry Fundamentals**
- **ISCET: Associate Level CET Exam**
- **ISCET: Electronics Systems Associate (ESA) Exam**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY CREDITS
Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.
- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Energy & Natural Resources Career Cluster (onetoonline.org)
- Energy & Natural Resources Advance CTE (careertech.org)
- Careers in Energy & Natural Resources (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Wind Turbine Technician (HirePaths.com)
- International Society of Certified Electronics Technicians – Education Through Certification
- Center for Energy Workforce Development (CEWD)

STUDENT ORGANIZATION
- Skills USA Kansas

SkillsUSA

- Technology Student Association

TSA TECHNOLOGY STUDENT ASSOCIATION

Natural Resources & Environmental Sustainability

Pathway

"Cultivating Resources"

This pathway focuses on the studies and activities relating to the natural environment and its conservation, use, and improvement. Includes instruction in subjects such as climate, air, soil, water, land, fish and wildlife, and plant resources; in the basic principles of environmental science and natural resources management; and the recreational and economic uses of renewable and nonrenewable natural resources.

INTRODUCTORY LEVEL COURSES

- **Introduction to Agriculture**
- **Agriculture Explorations I**
- **Agriculture Explorations II**

TECHNICAL LEVEL COURSES

- **Agriscience**
- **Wildlife & Recreation Management**
- **Natural Resources Management**

Optional Supportive Courses:

- **Entrepreneurship**

APPLICATION-LEVEL COURSES

- **Agribusiness Management**
- **Agricultural Entrepreneurship**
- **Agricultural Leadership & Communications**
- **Research in Agriculture**
- **Sustainable/Alternative Agriculture**
- **Environmental Resources & Ecology**
- **Natural Resources & Environmental Sustainability Work-based Learning**
- **Advanced Natural Resources & Environmental Sustainability Work-based Learning**

OCCUPATIONS

- **First-line Supervisors of Construction Trades & Extraction Workers**
- **Water & Wastewater Treatment Plant & System Operators**

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Work Experience 5+ Years	
*First-line Supervisors of Construction Trades & Extraction Workers	$45,960
H.S. Diploma and Long-Term On-the-Job Training	
*Water & Wastewater Treatment Plant & System Operators	$75,730

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **cPass: Comprehensive Agriculture Assessment**
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- KS Dept. of Agriculture: KS Agriculture Skills & Competencies
- **KS Dept. of Agriculture: Pesticide Applicator** (Personal or Commercial)

POSTSECONDARY CREDITS

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- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Energy & Natural Resources Career Cluster (onetoonline.org)
- Energy & Natural Resources Advance CTE (careertech.org)
- Careers in Energy & Natural Resources (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Kansas FFA
- Kansas FFA
- KS State FFA Degree (Ag Ed Student Certification & Recognition)
- Supervised Agricultural Experience Grants & Student Scholarships
- Career & Leadership Development Events (Career & Workforce Readiness Experiences)
- Kansas State Fair Exhibits & Student Showcases
- Kansas State FFA Convention



Business

- Financial Services
- Hospitality, Events, & Tourism
- Management & Entrepreneurship
- Marketing & Sales

BUSINESS INDUSTRY

Financial Services

Business Finance

"Investing in the Future"

Occupation Overview

Occupations & Degrees	Median Annual Wage
H.S. Diploma & Short-Term On-the-Job Training	
Tellers	$36,340
Loan Interviewers & Clerks	$46,940
H.S. Diploma & Moderate to Long-Term On-the-Job Training	
Bill & Account Collectors	$40,800
*Payroll & Timekeeping Clerks	$50,020
*Insurance Sales Agents	$60,920
*Claims Adjusters, Examiners, & Investigators	$76,660
Bachelor's Degree	
*Accountants & Auditors	$76,400
*Loan Officers	$82,540
*Personal Financial Advisors	$100,810
*Financial & Investment Analysts	$82,070
*Financial Managers	$138,980

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

BUSINESS INDUSTRY | FINANCIAL SERVICES

"Investing in the Future"

Business Finance
Pathway

This pathway generally prepares individuals to plan, manage, and analyze the financial and monetary aspects and performance of business enterprises, banking institutions, or other organizations. It includes instruction in principles of accounting, financial instruments, capital planning, funds acquisition, asset and debt management, budgeting, financial analysis, and investments and portfolio management. The business finance function in a company is to manage policy and strategy for (and the implementation of) capital structure, budgeting, acquisition and investment, financial modeling and planning, funding, dividends, and taxation.

INTRODUCTORY LEVEL COURSES
- Business Essentials
- AP Introduction to Business

TECHNICAL LEVEL COURSES
- Accounting
- Business Communications
- Entrepreneurship
- Business Law
- Business Economics
- Applied Business Technology Applications

APPLICATION-LEVEL COURSES
- Banking & Finance
- Risk Management & Insurance
- Investing
- Advanced Accounting
- College Accounting
- Finance Work-Based Learning
- Advanced Finance Work-Based Learning

OCCUPATIONS
- Accountants & Auditors
- Appraisers of Personal & Business Property
- Bill & Account Collectors
- Billing & Posting Clerks
- Bookkeeping, Accounting, & Auditing Clerks
- Budget Analysts
- Business Teachers (Postsecondary)
- Buyers & Purchasing Agents
- Claims Adjusters, Examiners, & Investigators
- Compliance Officers
- Compensation, Benefits, & Job Analysts Specialists
- Credit Analysts
- Financial & Investment Analysts
- Financial Managers
- Insurance Sales Agents

OCCUPATIONS *(continued)*
- Loan Interviewers & Clerks
- Loan Officers
- Payroll & Timekeeping Clerks
- Personal Financial Advisors
- Property, Real Estate, & Community Association Managers
- Real Estate Agents
- Securities, Commodities, & Financial Services Sales Agents
- Tax Preparers
- Tellers

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- CareerSafe: OSHA Safety Certification (10 Hour)
- Fundamental Payroll Certification (FPC)
- Intuit: QuickBooks Certified User
- MBA Research (ASK): Concepts of Finance
- Microsoft (MOS): Access
- Microsoft (MOS) Excel
- Microsoft (MOS) PowerPoint
- Microsoft (MOS) Word
- NC3: Data Analytics/Harnessing the Power of Data

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.org)

Occupations & Degrees	Median Annual Wage
H.S. Diploma	
Tellers	$36,340
Tax Preparers	$44,810
Bill & Account Collectors	$40,800
Loan Interviewers & Clerks	$46,940
*Payroll & Timekeeping Clerks	$50,020
*Insurance Sales Agents	$60,920
*Property, Real Estate, & Community Association Members	$55,750
Billing & Posting Clerks	$45,150
*Real Estate Agents	$44,290
*Claims Adjusters, Examiners, & Investigators	$76,660
Some College & Moderate-Term Training	
Bookkeeping, Accounting, & Auditing Clerks	$45,920
Bachelor's Degree	
*Securities, Commodities, & Financial Services Sales Agents	$73,470
*Accountants & Auditors	$76,400
*Loan Officers	$82,540
*Personal Financial Advisors	$100,810
*Financial & Investment Analysts	$82,070
*Financial Managers	$138,980

- High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Common Career Technical Core & CTE Course Competencies
- Financial Services Career Cluster (onetoonline.org)
- Financial Services Advance CTE (careertech.org)
- Careers in Financial Services (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION
- Business Professionals of America

bpa | BUSINESS PROFESSIONALS of AMERICA Giving Purpose to Potential

- Kansas DECA

DECA

- Future Business Leaders of America

FBLA

BUSINESS INDUSTRY

Hospitality, Events, & Tourism

Restaurant & Event Management
Travel & Tourism

"Creating and Experiencing"

Occupation Overview

Occupations & Degrees	Median Annual Wage
Short-Term On-the-Job Training	
Food Preparation Workers	$29,410
Waiters & Waitresses	$31,560
H.S. Diploma or Moderate-Term On-the-Job Training	
Hotel, Motel, & Resort Desk Clerks	$29,360
Bakers	$33,190
Cooks, Restaurant	$34,200
H.S. Diploma & Work Experience	
*First-Line Supervisors of Housekeeping & Janitorial Workers	$50,170
*Chefs & Head Cooks	$58,290
*Food Service Managers	$62,490

* High Demand, High Wage

Source: Kansas Occupational Employment Demand (KDOL)

"Creating and Experiencing"

Restaurant & Event Management *Pathway*

Restaurant and Event Management careers dedicated to the service, operation, and management of establishments involved in the preparation and serving of food and drinks with significant emphasis on providing exceptional culinary experiences and delivering high-quality customer service. These establishments vary widely, encompassing independently owned restaurants, nationwide restaurant chains, noncommercial dining facilities, bakeries, and catering services. Professionals in this Sub-Cluster span all aspects and levels of food preparation, including beverage specializations, as well as restaurant management, operations support, and health and safety

INTRODUCTORY LEVEL COURSES

- **Business Essentials**
- **Introduction to Family & Consumer Sciences**
- **Career & Life Planning**

TECHNICAL LEVEL COURSES

- **Culinary Essentials**
- **Nutrition and Dietetics**

Event Planning & Management Strand

- **Foundations of Travel & Tourism**
- **Event Planning & Management**

Culinary Arts & Management Strand

- **Culinary Arts I**
- **Culinary Arts II**
- **Baking & Pastry I**
- **Baking & Pastry II**
- **Food Science**
- **Event Planning & Management**

Additional Courses

- **Entrepreneurship**
- **Principles of Marketing**

APPLICATION-LEVEL COURSES

- **Restaurant and Event Management Work Based Learning**
- **Advanced Restaurant and Event Management Work Based Learning**
- **Community Connections**
- **Applied Business Development**

OCCUPATIONS

- **Bakers**
- **Chefs & Head Cooks**
- **Cooks** (Restaurant)
- **First-Line Supervisors of Food Preparation & Serving Workers**
- **Food Preparation Workers**
- **Food Servers** (Non-restaurant)
- **Food Service Managers**
- **Hosts & Hostesses** (Restaurant, Lounge, & Coffee Shop)
- **Waiters & Waitresses**

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **AAFCS Pre-Pac: Broad Field Family & Consumer Sciences**
- **AAFCS Pre-Pac: Culinary Arts**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **KS Restaurant & Hospitality: ServSafe** (Food Handlers)
- **NC3: Data Analytics/Harnessing the Power of Data**

POSTSECONDARY ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **KS Restaurant & Hospitality Association: Pro-Start**
- **KS Restaurant & Hospitality: ServSafe** (Manger)

POSTSECONDARY CREDITS

Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.

- Excel in CTE Initiative (kansasregents.org)
- Postsecondary Partnerships (ksde.org)

Occupations & Degrees	Median Annual Wage
Short-Term On-the-Job Training	
Food Servers (Non-restaurant)	**$29,410**
Hosts & Hostesses (Restaurant, Lounge, & Coffee Shop)	**$26,970**
Food Preparation Workers	**$29,410**
Cooks (Fast Food)	**$28,100**
Cooks (Institution and Cafeteria)	**$30,920**
Waiters and Waitresses	**$31,560**
Moderate-Term On-the-Job Training	
Bakers	**$33,190**
Cooks (Restaurant)	**$34,200**
H.S. Diploma & Work Experience	
First-Line Supervisors of Food Preparation & Serving Workers	**$37,910**
***Chefs & Head Cooks**	**$58,290**
***Food Service Managers**	**$62,490**

* High Demand, High Wage

Sources: Kansas Occupational Employment Demand (KDOL)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Career Ready Practices and CTE Course Competencies (ksde.gov)
- Hospitality and Tourism Career Cluster (onetoonline.org)
- Careers in Hospitality & Tourism (MyNextMove.org)
- Hospitality and Tourism Advance CTE (careertech.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Restaurant Manager (HirePaths.com)

STUDENT ORGANIZATION

- Family, Community and Career Leaders of America (FCCLA)

- Kansas DECA

"Creating and Experiencing"

Travel & Tourism
Pathway

This pathway prepares individuals to serve as general managers and directors of hospitality operations on a system-wide basis, including both travel arrangements and promotion and the provision of traveler facilities. It includes instruction in principles of operations in the travel and tourism, hotel and lodging facilities, food services, and recreation facilities industries; hospitality marketing strategies; hospitality planning; management and coordination of franchise and unit operations; business management; accounting and financial management; hospitality transportation and logistics; and hospitality industry policies and regulations.

INTRODUCTORY LEVEL COURSES
- **Business Essentials**
- **Introduction to Family & Consumer Sciences**
- **Career & Life Planning**

TECHNICAL LEVEL COURSES
- **Entrepreneurship**
- **Principles of Marketing**
- **Culinary Essentials**
- **Foundations of Hospitality & Lodging**
- **Foundations of Travel & Tourism**
- **Nutrition and Dietetics**
- **Event Planning & Management**

APPLICATION-LEVEL COURSES
- **Travel and Tourism Work Based Learning**
- **Advanced Travel and Tourism Work Based Learning**

OCCUPATIONS
- **Entertainment & Recreation Managers**
- **Events Manager/Planner**
- **Meeting Planner/Director**
- **First-Line Supervisors of Housekeeping & Janitorial Workers**
- **Food Service Managers**
- **Hotel, Motel, & Resort Desk Clerks**
- **Lodging Managers**
- **First-Line Supervisor of Entertainment and Recreation Workers**
- **Food Service Managers**

- SOURCES: Kansas Occupational Employment Demand (KDOL)

Occupations & Degrees	Median Annual Wage
Short-Term On-the-Job Training	
Recreation Workers	$30,370
Hotel, motel, and resort desk clerk	$29,360
H.S. Diploma & Work Experience	
*First-Line Supervisors of Housekeeping & Janitorial Workers	$50,070
First-Line Supervisor of Entertainment and Recreation Workers	$44,180
*Meeting, Convention, and Event Planners	$51,600
*Chefs and Head Cooks	$58,290

* High Demand, High Wage

Sources:
- Kansas Occupational Employment Demand (KDOL)

POSTSECONDARY PROGRAMS
- Kansas DegreeStats (ksdegreestats.org)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES
- Career Ready Practices and CTE Course Competencies (ksde.gov)
- Hospitality and Tourism Career Cluster (onetoonline.org)
- Careers in Hospitality & Tourism (MyNextMove.org)
- Hospitality and Tourism Advance CTE (careertech.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)
- Cool Careers: Restaurant Manager (HirePaths.com)

STUDENT ORGANIZATION
- Family, Community and Career Leaders of America (FCCLA)

- Kansas DECA

BUSINESS INDUSTRY

Management & Entrepreneurship

Business Management & Entrepreneurship

"Connecting and Supporting Success"

Occupation Overview

Occupations & Degrees	Median Annual Wage
Bachelor's Degree	
*Human Resources Specialists	$76,490
*Business Operations Specialists, All Other	$81,100
Bachelor's Degree & Less Than 5 Years Work Experience	
*Training & Development Specialists	$122,450
*Management Analysts	$81,130
*Administrative Service Managers	$106,140
Bachelor's Degree & More Than 5 Years Work Experience	
*General & Operations Managers	$85,600
*Human Resources Managers	$126,550
*Chief Executives	$154,700

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

"Connecting and Supporting Success"

Business Management & Entrepreneurship

Pathway

This pathway generally focuses on enterprise management and entrepreneurship. Instruction includes areas of planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. General Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

INTRODUCTORY LEVEL COURSES

- **Business Essentials**
- **AP Intro to Business**

TECHNICAL LEVEL COURSES

- **Business Communications**
- **Business Management**
- **Entrepreneurship**

OPTIONAL TECHNICAL LEVEL

Supportive Business and Entrepreneurship

- **Business Law**
- **IB Business and Management**
- **Accounting**
- **Business Economics**
- **Principles of Marketing**

APPLICATION-LEVEL COURSES

- **Business Management & Entrepreneurship Work-Based Learning**
- **Applied Business Development**
- **Advanced Business Management & Entrepreneurship Work-Based Learning**

OCCUPATIONS

- **Administrative Services Managers**
- **Business Operations Specialists** (All Other)
- **Chief Executives**
- **Counter & Rental Clerks**
- **Data Entry Keyers**
- **Executive Secretaries & Executive Administrative Assistants**
- **First-Line Supervisors of Office & Administrative Support Workers**
- **General & Operations Managers**
- **Human Resources Managers**
- **Human Resources Specialists**
- **Library Assistants, Clerical**
- **Management Analysts**
- **Managers** (All Other)
- **Office Clerks, General**
- **Receptionists & Information Clerks**
- **Secretaries & Administrative Assistants, except Legal, Medical, & Executive**
- **Training & Development Specialists**

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS

- **Adobe: Illustrator**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **Intuit: QuickBooks Certified User**
- **MBA Research (ASK): Concepts of Business Management**
- **MBA Research (ASK): Concepts of Entrepreneurship**
- **MBA Research (ASK): Fundamental Business Concepts Certification**
- **Microsoft (MOS): Access**
- **Microsoft (MOS) Excel**
- **Microsoft (MOS) PowerPoint**
- **Microsoft (MOS) Word**
- **NC3: Data Analytics/Harnessing the Power of Data**

Occupations & Degrees	Median Annual Wage
H.S. Diploma	
*First-Line Supervisors of Office & Administrative Support Workers	$62,400
*Executive Secretaries & Executive Administrative Assistants	$63,930
Data Entry Keyers	$37,710
Library Assistants, Clerical	$29,840
Office Clerks, General	$31,170
Receptionists & Information Clerks	$35,320
Secretaries & Administrative Assistants, except Legal, Medical, & Executive	$39,000
Bachelor's Degree	
*Human Resources Specialists	$76,490
Business Operations Specialists (All Other)	$81,100
Bachelor's Degree & Work Experience	
*Training and Development Specialists	$122,450
*Management Analysts	$81,130
*General & Operations Managers	$85,600
*Administrative Services Managers	$106,140
*Managers (All Other)	$118,310
*Human Resources Managers	$126,550
*Chief Executives	$154,700

* High Demand, High Wage

Sources:

- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

POSTSECONDARY PROGRAMS

- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
- K-TIP Report (kansasregents.org)
- Program Alignment (kansasregents.org)
- Kansas Post-Secondary Exploration Guide (ksde.gov)

RESOURCES

- Common Career Technical Core & CTE Course Competencies
- Management & Entrepreneurship Career Cluster (onetoonline.org)
- Management & Entrepreneurship Advance CTE (careertech.org)
- Careers in Management & Entrepreneurship (MyNextMove.org)
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)
- Today's Occupations (ks.gov)

STUDENT ORGANIZATION

- Business Professionals of America

- Kansas DECA

- Future Business Leaders of America

BUSINESS INDUSTRY

Marketing & Sales

Marketing

"Connecting and Supporting Success"

Occupation Overview

Occupations & Degrees	Median Annual Wage
Short-Term On-the-Job Training	
Cashiers	$27,580
Retail Salesperson	$31,670
Customer Service Representatives	$38,330
H.S. Diploma & Moderate-Term On-the-Job Training	
*Sales Representatives of Services (except Advertising, Insurance, Financial Services, & Travel)	$61,690
*Wholesale & Manufacturing Sales Representatives (except Technical & Scientific Products)	$71,000
H.S. Diploma & Work Experience or Nondegree Award	
*Public Relations Specialists	$61,910
*Market Research Analysts & Marketing Specialists	$62,230
*Marketing Managers	$141,250
*Sales Managers	$151,440

* High Demand, High Wage

Source: Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)

"Connecting and Supporting Success"

Marketing
Pathway

This pathway generally prepares individuals to provide analytical descriptions of consumer behavior patterns and market environments to marketing managers and other business decision-makers. It includes instruction in survey research methods, research design, new product test marketing, exploratory marketing, consumer needs and preferences analysis, geographic analysis, and applications to specific products and markets. Employees in marketing research are concerned with understanding people and organizations. They collect and analyze many different types of information to design new products, to predict future sales and to position their own company's strategies against those of its competitors.

INTRODUCTORY LEVEL COURSES
- **Business Essentials**
- **AP Introduction to Business**

TECHNICAL LEVEL COURSES
- **Business Communications**
- **Principles of Marketing**
- **Web Design**
- **2D Animation**
- **Business Management**
- **Entrepreneurship**
- **IB Business & Management**
- **Accounting**
- **Business Economics**
- **Sports/Entertainment Marketing**
- **Principles of Advertising**
- **Graphic Design I**
- **Applied Business Technology Applications**
- **Digital Marketing**

APPLICATION-LEVEL COURSES
- **Marketing Applications**
- **Marketing Management**
- **Integrated Marketing Applications**
- **Marketing Research**
- **Marketing Work-Based Learning**
- **Advanced Marketing Work-Based Learning**
- **Marketing Communications**

OCCUPATIONS
- **Business Teachers** (Postsecondary)
- **Cashiers**
- **Counter & Rental Clerks**
- **Customer Service Representatives**
- **Driver/Sales Workers**
- **First-Line Supervisors of Retail Sales Workers**
- **Market Research Analysts & Marketing Specialists**

OCCUPATIONS *(continued)*
- **Buyers & Purchasing Agents**
- **Cashiers**
- **Customer Service Representatives**
- **First-Line Supervisors of Retail Sales Workers**
- **Marketing Managers**
- **Market Research Analysts & Marketing Specialists**
- **Merchandise Displayers & Window Trimmers**
- **Parts Salespersons**
- **Public Relations Specialists**
- **Retail Salespersons**
- **Sales Managers**
- **Sales Representatives of Services** (except Advertising, Insurance, Financial Services, & Travel)
- **Wholesale & Manufacturing Sales Representatives** (except Technical & Scientific Products)
- **Wholesale & Manufacturing Sales Representatives** (Technical & Scientific Products)

HIGH SCHOOL ASSESSMENTS, CREDENTIALS, OR CERTIFICATIONS
- **Adobe: Campaign Business Practitioner**
- **Adobe: Dreamweaver**
- **Adobe: Illustrator**
- **Adobe: Media Optimizer**
- **CareerSafe: OSHA Safety Certification** (10 Hour)
- **Facebook: Blueprint**
- **Google: Analytics**
- **Intuit: QuickBooks Certified User**
- **MBA Research (ASK): Fundamental Marketing Concepts**
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- **Microsoft (MOS) Word**
- **NC3: Data Analytics/Harnessing the Power of Data**

Occupations & Degrees	Median Annual Wage
H.S. Diploma	
Cashiers	**$27,580**
Retail Salespersons	**$31,670**
Merchandise Displayers & Window Trimmers	**$39,000**
Parts Salespersons	**$36,740**
Customer Service Representatives	**$38,330**
***First-Line Supervisors of Retail Sales Workers**	**$46,080**
***Sales Representatives of Services** (except Advertising, Insurance, Financial Services, & Travel)	**$61,690**
***Wholesale & Manufacturing Sales Representatives** (except Technical & Scientific Products)	**$71,00**
Bachelor's Degree	
***Public Relations Specialists**	**$61,910**
***Buyers & Purchasing Agents**	**$64,460**
***Market Research Analysts & Marketing Specialists**	**$62,230**
***Wholesale & Manufacturing Sales Representatives** (Technical & Scientific Products)	**$123,560**
***Marketing Managers**	**$141,250**
***Sales Managers**	**$151,440**

* High Demand, High Wage

Sources:
- Kansas Labor Information Center (KLIC) - Career Posters (ks.gov)
- Kansas Labor Information Center (KLIC) – High Demand Occupations (ks.gov)

POSTSECONDARY CREDITS
- **Under the Excel in Career Technical Education Initiative, Kansas high school students qualify for state-funded college tuition in approved technical courses offered by Kansas technical and community colleges.**
- Excel in CTE Initiative (kansasregents.org)
- Tiered Technical Courses (ksde.gov)

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- Kansas DegreeStats (ksdegreestats.org)
- Degree Stats Lesson (ksde.gov)
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Kansas State Board of Education

900 S.W. Jackson Street, Suite 600 | Topeka, Kansas 66612-1212 | (785) 296-3203 | www.ksde.gov/state-board

Vision

Kansas leads the world in the success of each student.

SUCCESS DEFINED

A successful Kansas high school graduate has the

- Academic preparation,
- Cognitive preparation,
- Technical skills,
- Employability skills and
- Civic engagement

to be successful in postsecondary education, in the attainment of an industry recognized certification or in the workforce, without the need for remediation.

District 1



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District 2



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Cathy Hopkins, *Chair*
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Dr. Beryl A. New
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District 8



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District 9

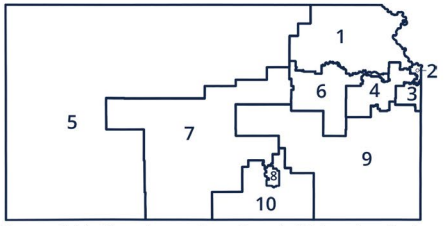


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Kansas divided into the ten State Board of Education districts.

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Kansas Commissioner of Education



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Deputy Commissioner
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Dr. Frank Harwood
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Deputy Commissioner
Division of Learning Services



Dr. Renee Nugent
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Deputy Commissioner
Division of Accountability and Technology



Dr. Zach Conrad
zach.conrad@ksde.gov

The Kansas State Board of Education does not discriminate on the basis of race, color, religion, national origin, sex, disability or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: KSDE General Counsel, Office of General Counsel, KSDE, Landon State Office Building, 900 S.W. Jackson, Suite 102, Topeka, KS 66612, (785) 296-3201.

May 27, 2026