

Career and Technical Education Service Areas and Career Clusters

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2023-2024

Career Pathway: Agriculture



A career in agriculture, food, and natural resources requires certain skills and education depending on job requirements. Skills include promotion, processing, marketing, distribution, financing, and development of agricultural commodities including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Exposure Pathways

High School Courses

Introduction to Ag., Food & Nat. Resources	Animal & Plant Biotechnology
Aquaculture Science	Agricultural Power and Technology
Principles of Ag. Science-Animal	Ag. Business Foundations
Principles of Ag. Science-Plant	Ag. Research & Development
Natural Resources & Ecology	AP Environmental Science
Environmental Science Issues	Environmental Sustainability
Food Science & Safety	

Job Shadows & Internships

Ag Mechanic	Landscaper
Agriculture Sales	Microbiologist
Agronomist	Naturalist
Botanist	Veterinarian Tech
Conservationist	Wastewater Mngt.
Floral Designer	Park Ranger
Geologist	Pet Groomer
Golf Course & Turfgrass Management	Veterinarian
GPS/GIS Specialist - Agriculture	



Learn more & apply

Venture Academics

Venture Environmental Science (AP Environmental Science, Venture Environmental Science)
Venture Earth Science (Earth Science, Rhetoric, Venture Earth Science)
Venture Biology (General Biology, Venture Biology)

High School Clubs & Organizations

FFA

Pursuit Pathways

Certificates/Diplomas

Ag Production	Water Environmental Technology
Pet Grooming	Water Treatment Specialist
Golf Course & Athletic Turfgrass Mgmt	Wastewater Specialist
Veterinary Asst	Ag Geospatial Technology
Animal control Asst	Water Environmental Technology
Landscape Construction & Dsgn	

Careers & Median Salary Information

Animal Care Worker \$54,000	Recycling Coordinator \$56,000
Food Science Technician \$46,000	Geothermal Technician \$38,000
Agricultural Inspector \$45,000	Heavy Equipment Mechanic: \$51,000

Associate Degrees

Ag Geospatial Technology	Veterinary Technology
Ag Business	Humane Officer
Ag Production Mgmt	Landscape Construction & Dsgn
Diesel Ag Technology	Parks & Natural Resources
Golf Course & Athletic Turfgrass Mgmt	Water Environmental Technology

Careers & Median Salary Information

Veterinary Technologist \$33,500	Chemical Technician \$41,500
Landscaping & Groundskeeping \$40,100	

Bachelor Degrees

Environmental Studies
Food Science
Animal Science

Careers & Median Salary Information

Food Scientist \$62,500	Greenhouse Manager \$42,000
Aquacultural Manager \$42,000	Environmental Scientist \$68,000



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2023-2024



Career Pathway: *Architecture*



A career in architecture and construction requires certain skills and education depending on job requirements. Skills include designing, planning, managing, building, and maintaining the built environment.

Exposure Pathways

High School Courses

Mechanical Drawing	Metals
Residential Construction 1	Building Trades
Residential Construction 2	PLTW Civil Engineering & Architect
Woods	Design
Cabinetmaking	Interior Design

High School Clubs & Organizations

Robotics

Job Shadows & Internships

Civil Engineer	Project Engineer
Construction	Project Management
Pre-Fabrication	CAD Design
Architecture	



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Experience Pathways

College CTE Courses in High School

Civil Engineering and Architectural Design

Kirkwood Career Academies

[Architecture, Construction & Engineering \(ACE\) Academy](#)

Pursuit Pathways

Certificates/Diplomas

CAD/Mechanical Engineering Tech.	Construction Estimator
Carpentry	Construction Supervision Certificate
HVAC Installer	
Plumbing Pre-Apprenticeship	

Careers & Median Salary Information

Solar Energy Installation \$60,000	Pipe Fitter & Steamfitter \$55,700
Plumber \$55,700	Crane Operator \$53,600

Associate Degrees

Architecture Technology	Construction Management
CAD/Mechanical Engineering Tech.	Interior Design

Careers & Median Salary Information

Electronic Drafter \$57,000	Survey Technician \$51,000
Mechanical Drafting \$54,000	

Bachelor Degrees

Architecture	Industrial Engineer
Civil Engineering	Construction Management
Industrial Design	

Careers & Median Salary Information

Commercial & Industrial Designer \$60,000	Commercial Designer \$60,000
Surveyor \$54,500	Landscape Architect \$46,700



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2023-2024

Career Pathway: *Arts, Audio/Visual Technology, and Communications*



A career in arts, audio/visual technology and communications requires certain skills and education depending on job requirements. Skills include designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Exposure Pathways

High School Courses

Design: Art Basics	Exploration in Ceramic	Journalism
Beginning Painting	Technique	Creative Writing
Beginning Drawing	Digital Photography	College Grammar
Beginning Ceramics	Graphics One	Intro to College Writing
3-D Mixed Media	Graphics Two	Speech
Expressive Drawing	Advanced Art	Acting
Construction in Clay	Interior Design	Media Inf. Literacy
2-D Mixed Media	Fashion & Sewing	
Drawing in Style	Advanced Sewing	

High School Clubs & Organizations

Art Club	Student Newspaper
Anime Club	LMTV
Yearbook	

Venture Academics

Venture Digital Design & Communications (Graphics One, Graphics Two, Digital Photography, Venture)
Venture English (English III, Venture English)

Job Shadows & Internships

Graphic Designer	Photography
Events Assistant	News & Broadcast
Production Assistant	Radio
Marketing	Writing
Sports	Community Engagement

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Experience Pathways

College CTE Courses in High School

Art Appreciation	Fundamentals of Oral Comm.
Composition 1	Mass Media
Composition 2	Popular Culture

Pursuit Pathways

Certificates/Diplomas

Social Media Marketing	Web Design
Web Development	

Careers & Median Salary Information

Fine Artist \$19,200	Floral Designer \$26,000
Broadcast Technician \$31,660	Printing Press Operator \$32,700

Associate Degrees

Graphic Communication Technology	Web Design
Web Development	

Careers & Median Salary Information

Desktop Publisher \$40,000	Camera Operator \$28,800
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Bachelor Degrees

Broadcasting	Theater
English	

Careers & Median Salary Information

Proofreader \$24,500	Talent Director \$42,500
Stage Director \$42,500	Editor \$41,200



2023-2024



Career Pathway: *Business Management*



A career in business management and administration requires certain skills and education depending on job requirements. Skills include planning, organizing, directing, and evaluating business functions essential to productive business operations.

Exposure Pathways

High School Courses

Accounting	Economics
Advanced Accounting	Marketing
theROARstore	Business/Consumer Law
Introduction to Business	Entrepreneurship

High School Clubs & Organizations

FBLA (Future Business Leaders of America)
Student Council

Venture Academics

Venture Advanced Business (Business/Consumer Law, Entrepreneurship, Communications, Venture)
Venture Marketing Essentials (Marketing, Sports and Entertainment Marketing, Rhetoric, Venture)

Job Shadows & Internships

Business Management	Operations
Clerical Assistant	Publications
Hockey Operations	Safety & Loss
Hospital Administration	Administrative
Human Resources	Business Development
Marketing	



Learn more & apply

Experience Pathways

College CTE Courses in High School

Introduction to Business
Human Relations in Management

Pursuit Pathways

Certificates/Diplomas

Office Assistant	Entrepreneurship
Medical Coding	Human Resources
Medical Transcription	Project Management
Technical Accounting	Medical Transcription
Global Perspectives in Business	

Careers & Median Salary Information

Admin. Assistant \$35,800	Tax Preparer \$38,300
Data Entry \$32,500	Bookkeeping \$37,800
Payroll Clerk \$42,100	

Associate Degrees

Business Admin.: Accounting	Administrative Management
Business Admin.: Financial Services	Health Information Technology
Business Admin.: Management	Business Admin. w/ Transfer Option

Careers & Median Salary Information

Executive Secretary \$50,000	Legal Secretary \$35,900
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Bachelor Degrees

Business	Business Management
Business Administration	Human Resources
Business Information Systems	

Careers & Median Salary Information

Marketing Manager \$91,600	Technical Writer \$57,300
Search Marketing Strategist \$71,300	Human Resources Manager \$95,700



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2023-2024



Career Pathway: *Education & Training*



A career in education and training requires certain skills and education depending on job requirements. Skills include planning, managing, and providing education and training service, and related learning support services.

Exposure Pathways

High School Courses

Human Growth and Development	KCC Child Growth and Development
Introductory Psychology	Exploring Teaching
AP Psychology	

High School Clubs & Organizations

LM Buddies	TRY (Teens Reaching Youth)
Ok Without Drugs and Alcohol	Student Ambassadors

Venture Academics

Venture Behavioral Science (Intro to Psychology, Sociology, Rhetoric, Venture)

Job Shadows & Internships

Counselor	Librarian
Child Development Specialist	Teacher & Classroom Assistant
High School Athletic Director	Youth Ministry
Hockey Assistant Coaching	Tutorial Admin. Assistant



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Experience Pathways

College CTE Courses in High School

KCC Child Growth and Development	Intro to Human Services
Exploring Teaching	Behavior Management

Pursuit Pathways

Certificates/Diplomas

Early Childhood Paraeducator	Early Childhood Education
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Careers & Median Salary Information

Library Assistant \$22,400	Special Education Teacher \$44,400
Vocational Education Teacher \$73,150	Teacher Assistant \$26,400

Associate Degrees

Early Childhood Education	Liberal Arts: Ed. w/ Transfer Option
Exercise Science and Wellness	



Careers & Median Salary Information

Education Administrator,
Preschool & Childcare Center
\$31,200

Bachelor Degrees

Elementary Education	Organizational Leadership
Secondary Education	Athletic Training



Careers & Median Salary Information

Kindergarten Teacher \$63,100	Special Education Teacher \$57,300
Physical Education Teacher \$59,400	Middle School Teacher \$55,400



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Explore other Careers in the ICR Region

2023-2024

Career Pathway: *Finance*



A career in finance requires certain skills and education depending on job requirements. Skills include planning services for financial and investment planning, banking, insurance, and business financial management.

Exposure Pathways

High School Courses

Personal Finance	Marketing
Accounting	Business/Consumer Law
Advanced Accounting	Entrepreneurship
Economics	Agriculture Business Foundations
AP Microeconomics	Introduction to Business
The ROAR store	

Venture Academics

Venture Business Foundations
(Intro to Business, Marketing, Communications, Venture)

Venture Advanced Business
(Business/Consumer Law, Entrepreneurship, Rhetoric, Venture)

Job Shadows & Internships

Accounting Finance & Sales
Finance



High School Clubs & Organizations

FBLA (Future Business Leaders of America)

Experience Pathways

College CTE Courses in High School

Mathematics and Society
Personal Finance
Introduction to Business

Pursuit Pathways

Certificates/Diplomas

Technical Accounting

Careers & Median Salary Information

Statement Clerk \$40,200	Loan Counselor \$33,000
Bill & Account Collector \$36,000	Bank Teller \$28,200

Associate Degrees

Business Administration: Accounting
Business Administration: Financial Services

Careers & Median Salary Information

Insurance Appraiser
\$34,200

Bachelor Degrees

Accounting Financial Counseling and Planning
Finance

Careers & Median Salary Information

Financial Analyst \$73,800	Budget Analyst \$70,300
Financial Examiner \$73,000	Actuary \$83,800



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Explore other Careers in the ICR Region

2023-2024



Career Pathway: *Health Sciences*



A career in health sciences requires certain skills and education depending on job requirements. Skills include planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Exposure Pathways

High School Courses

Anatomy & Physiology	Chemistry I	Health II
General Biology	AP Biology	
Physics	AP Chemistry	

High School Clubs & Organizations

HOSA	Science Club
Red Cross Club	

Venture Academics

Venture Biomedical Science (PLTW Biomedical Science, Venture Biomedical Science)

Job Shadows & Internships

Chiropractic & Wellness	Oncology
Nursing	Optician
Dental	Physical Therapy
Dietary	Personal Trainer
Dermatology	Radiology
Occupational Therapy	Physician Assistant



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Experience Pathways

College CTE Courses in High School

Human Anatomy I	Medical Terminology
Human Anatomy II	Exploring Health Careers
Nutrition	

Kirkwood Career Academies

[Emergency Medical Tech.\(EMT\)](#) [Pre-Prof. Health Careers Academy](#)
[Patient Care Academy](#)
[Pharmacy Technician Academy](#)

Pursuit Pathways

Certificates/Diplomas

Dental Assisting	Pharmacy Technician
Medical Coding	Surgical Technology
Medical Assisting	Medical Transcription
Medical Transcription	Nurse Aide
Practical Nursing (LPN)	EMT

Careers & Median Salary Information

Licensed Practical & Licensed Vocational Nurse	Dental Lab Tech
\$42,100	\$41,200
Ophthalmic Medical Tech	Dental Assistant
\$41,500	\$40,300

Associate Degrees

Dental Assisting	Exercise Science & Wellness	Occupational Therapy
Dental Hygiene	Health Information Tech.	Paramedic
Dental Technology	Medical Assisting	Physical Therapy Assistant
Diagnostic Assistant (Rad. Tech.)	Medical Laboratory Tech.	Respiratory Therapist
Electroneurodiagnostic Tech.	Associate Degree Nursing, RN	Surgical Technology

Careers & Median Salary Inf.

Dental Hygienist	Registered Nurse
\$69,100	\$69,100
Diagnostic Medical Sonographer	Histotechnologist
\$62,800	\$48,400

Bachelor Degrees

Biology	Culinary Food Science,
Dietetics	Diet and Exercise
Healthcare Administration	Food Science & Global Health Studies
Nursing	

Careers & Median Salary Information

Clinical Research Coordinator	Natural Science Manager
\$111,800	\$111,700
Clinical Data Manager	Recreational Therapist
\$65,200	\$52,200



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Explore other Careers in the ICR Region

2023-2024

Career Pathway: *Government*



A career in government and public administration requires certain skills and education depending on job requirements. Skills include planning and performing government functions at the local, state, and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

Exposure Pathways

High School Courses

Law and Constitution	AP French
Government	Spanish 5
AP Government	Intermediate Spanish I
AP Comparative Government	Intermediate Spanish II
Business/Consumer Law	

High School Clubs & Organizations

Young Democrats	Model UN
Young Republicans	

Venture Academics

Venture Civics (Government, State and Local Government, Venture)

Job Shadows & Internships

City Clerk	Presidential Campaign
Congressional Campaign	Civil Rights



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Experience Pathways

College CTE Courses in High School

Introduction to Criminal Justice
Social Problems
Cultural Anthropology

Pursuit Pathways

Certificates/Diplomas

Office Assistant



Careers & Median Salary Information

Administrative Service Manager	Postmaster
\$83,900	\$49,900
Postal Service Mail Carrier	Meter Reader
\$50,000	\$36,000

Associate Degrees

Business Administration	Administrative Management
Business Administration: Management Water Environmental Technology	



Careers & Median Salary Information

Assessor
\$73,200

Bachelor Degrees

Urban Planning	Accounting
Public Administration	



Careers & Median Salary Information

Statistical Assistant	Legislator
\$51,100	\$22,100
Social and Community Service Manager	Financial Examiner
\$54,300	\$72,900



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