

# KANSAS AGRICULTURE SKILLS & COMPETENCIES CERTIFICATE

**Updated January 2024**

The Kansas Agriculture Skills and Competencies Certificate will document skills and competencies gained by student participation in agricultural education. The program is an opportunity to quantify and qualify skills learned through completion of all three segments of the agricultural education model.

The United States Department of Agriculture reported over 59,000 annual job openings are expected in food, agriculture, renewable natural resources, and the environment between 2020 and 2025. Agriculture is responsible for 11 percent of our nation's employment and more than 5 percent of our nation's gross national product. However, each year more than 20,000 jobs in agriculture go unfilled because of a lack of qualified graduates.

The Kansas Department of Agriculture sponsors the certificate program for Kansas FFA members. The certificate is listed as a qualifying certificate for Kansas' Career Technical Education Initiative. The certificate has been endorsed by the Kansas agriculture community, including the Kansas FFA Association, Kansas Farm Bureau, Kansas Grain & Feed Association, Kansas Livestock Association and other industry organizations and employers.

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To be eligible for the Kansas Agriculture Skills & Competencies Certificate the following requirements must be met. Refer to the Qualifying Competencies and Examples of Pathway Skills support documents for eligible competencies and examples of Agriculture, Food & Natural Resources Pathways skills.

- Must have completed three full-year high school agricultural education courses. College courses taken as part of an approved Agricultural Pathway would count toward this requirement.
- Must be an FFA member for at least two academic years, including the current academic year.
- Complete one of the following Supervised Agricultural Experiences or work-based learning experience with documentation:
  - Submitted district level proficiency award application
  - Earned State FFA Degree
  - Agriculture related work-based learning experience, a minimum of 250 hours documented at the chapter level and/or documentation of an agriculturally related entrepreneurial enterprise in which the student has invested and earned at least \$890.
- Cumulative GPA of 2.5 or higher in all classes, not just agricultural education courses.
- Participate in one state-recognized FFA Leadership Event (Leader Lab, State/National Convention, etc.) or a Leadership Development Event (LDE) and one state-recognized Career Development Event (CDE) above the chapter level. The FFA member may substitute four FFA Educational Exhibits at the Kansas State Fair for one of the above requirements.
- Satisfactorily complete the cPass Comprehensive Agriculture Assessment. Level to be considered satisfactory will be determined by the Kansas State Department of Education's Education Program Consultant, in consultation with KDA.
- As part of the application, students will complete a brief essay (500 words or less) describing five Agriculture, Food & Natural Resources Pathways skills they have gained through their participation in the above activities as reviewed by their advisor.

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I hereby confirm that I have honestly and accurately met the certificate requirements listed above and are reflected in this application for the Kansas Agriculture Skills & Competencies Certificate.

Name (Printed) \_\_\_\_\_

X  
\_\_\_\_\_  
Full Name

Name (Signature)

Home Address: \_\_\_\_\_

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The Kansas Department of Agriculture is the state agency devoted to the total support of agriculture. The department works for the entire Kansas agriculture sector, including farmers, ranchers, food establishments and agribusinesses. The department provides support and assistance to make Kansas businesses successful and encouraging more farms, ranches, and other agriculture business to expand in or relocate to Kansas.

Within this role, the Kansas Department of Agriculture also fulfills its statutory responsibility of regulating business functions in accordance with state law. The department works to ensure businesses know what laws affect them and how they can ensure they follow those laws. In this process, the department aims to minimize excessive rules and regulation.

# APPLICATION CHECKLIST

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- Official transcript

One of the following three must be completed and attached to application:

- District proficiency application signature page, signed by the chapter advisor.

OR

- State FFA Degree application signature page, signed by chapter advisor.

OR

Agriculture related work-based learning experience, a minimum of 250 hours documented at the chapter level and/or documentation of an agriculturally related entrepreneurial enterprise in which the student has invested and earned at least \$890.

All sections of the application must be completed:

- Agricultural Education Courses

- FFA Membership

- SAE Documentation

- GPA Verification

- Participate in one state-recognized FFA Leadership Event (Leader Lab, State/National Convention, etc.) or a

Leadership Development Event (LDE) and one state-recognized Career Development Event (CDE) above the chapter level.

The FFA member may substitute four FFA Educational Exhibits, at the Kansas State Fair, for one of the above requirements.

- cPass Comprehensive Agriculture Assessment passage and verification.

- Skills identified in a brief essay (500 words or less) referencing Agriculture, Food & Natural Resources Pathways skills.

- Signatures *{both cover page and signatures documentation page}*

## SUBMITTING THE APPLICATION

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The Kansas Department of Agriculture will receive applications anytime during the academic year. All applications should be submitted upon completion but **must be emailed by April 20**. The electronic application can be found at: [agriculture.ks.gov/ageducation](http://agriculture.ks.gov/ageducation) – under the Kansas Agriculture Skills & Competencies Certificate list. Applications will only be accepted electronically to [FutureOfAg@ks.gov](mailto:FutureOfAg@ks.gov).

For an application to be considered eligible, all sections of the application form must be completed.

**No handwritten or mailed applications will be accepted.**

# KANSAS AGRICULTURE SKILLS & COMPETENCIES CERTIFICATE

Complete the following sections in full prior to submitting your application. Contact Dana Ladner at the Kansas Department of Agriculture at (785) 564-6660 or [FutureOfAg@ks.gov](mailto:FutureOfAg@ks.gov) with any questions.

## AGRICULTURAL EDUCATION COURSES

- List the agricultural education courses you have completed. To receive the certificate, you must have completed at least three full-year courses. College courses taken as part of an approved Agricultural Pathway would count toward this requirement.


List any agricultural education courses you are currently enrolled in and anticipate completing prior to graduation.


## FFA MEMBERSHIP

List the academic years in which you were an active FFA member. To apply you must be an FFA member for at least two academic years, including the current academic year.

Year One:	<input type="text"/>
Year Two:	<input type="text"/>
Year Three:	<input type="text"/>
Year Four:	<input type="text"/>

## SUPERVISED AGRICULTURAL EXPERIENCE DOCUMENTATION

To receive the certificate, your SAE must meet one of the following requirements:

- 1) Submitted district proficiency award application
- 2) Earned State FFA Degree
- 3) Agriculture related work-based learning experience, a minimum of 250 hours documented at the chapter level and/or documentation of an agriculturally related entrepreneurial enterprise in which the student has invested and earned at least \$890.

**District Proficiency Option**

Attach to this application packet a copy of the District Proficiency Award cover page, signed by your FFA advisor. The submission of this application to the district level will be verified by KDA on behalf of the Kansas FFA Executive Secretary who will obtain a list of students who have submitted a District Proficiency Award application following district selections each spring.

**State Degree Option**

Attach to this application packet a copy of the State FFA Degree cover page, signed by your FFA Advisor. The earning of your State FFA Degree will be verified by KDA on behalf of the Kansas FFA Executive Secretary who will submit a list of students who have earned their state degree following Kansas FFA Convention each spring.

**Agriculture related work-based learning experience, a minimum of 250 hours documented at the chapter level.**

Number of hours completed:

Date range:

Supervisor 1:

Supervisor 2:

Please indicate which requirement you have completed:

- Submitted district proficiency award application
- Earned State FFA Degree
- Agriculture related work-based learning, minimum of 250 hours documented at the chapter level.

In the space below, *in your own words*, give a brief overview of your **Supervised Agricultural Experience**:

**GPA DOCUMENTATION**

In addition to noting your overall high school GPA in the space below, attach a copy of your transcript to this application packet. A cumulative GPA of 2.5 or higher, in all courses, is required to obtain the certificate.

GPA {all classes, not just agricultural education courses}:

Weighed GPA {if applicable}:

**CAREER DEVELOPMENT EVENT DOCUMENTATION**

List the one state-recognized FFA leadership event and one state-recognized CDE above the chapter level and organized by FFA, in which you participated. The same CDE cannot be used for both requirements. Listing of acceptable CDEs and events is located on the Qualifying Competencies support document.

**FFA State-Recognized Leadership Event above the Chapter Level**

Event/  
CDE:  Date:

Location:

**FFA State-Recognized Career Development Event above the Chapter Level**

CDE:  Date:

Location:

**Kansas State Fair Exhibitor**

The FFA member may substitute four FFA Educational Exhibits, at the Kansas State Fair. Attach to this application packet a copy of your Kansas State Fair exhibitor submission forms in the FFA category. Confirmation of the member exhibiting at the Kansas State Fair will be verified by the Kansas State Department of Education program consultant.

**cPASS COMPREHENSIVE AGRICULTURE ASSESSMENT**

The Kansas State Department of Education program consultant, in consultation with KDA, will verify the cPass Comprehensive Agriculture Assessment has been completed satisfactorily. No further documentation is necessary.

## SKILLS & COMPETENCIES GAINED

In a brief essay, (500 words or less) describe five major skills, competencies and knowledge (e.g. marketing, safety, personal skills development) that best describe what you gained technically and personally **from your agricultural education curriculum**. Skills should be selected from the competency profiles for technical courses from your selected Agriculture, Food & Natural Resources Pathway(s). (*This should reflect your technical and personal growth from being in agricultural education.*)

Please refer to the Examples of Pathway Skills support document for examples of pathway skills.

## SIGNATURE DOCUMENTATION

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### Agricultural Education Instructor and FFA Advisor

As the agricultural education instructor and FFA advisor to this Kansas Agriculture Skills & Competencies certificate, I hereby verify that this student has completed a minimum of three courses of agricultural education work, been an active FFA member for at least two academic years, to include the current academic year, participated in the FFA events/CDE's/work-based learning documented above and taken the cPass Comprehensive Agriculture Assessment test.

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Name (Printed)

X

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Instructor Name

Name (Signature)

**School Administrator**

As the school administrator to this Kansas Agriculture Skills & Competencies certificate applicant, I hereby verify that all information provided in this certificate application is accurate.

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Name (Printed)

X

Administrator Name

Name (Signature)



# Kansas Agriculture Skills & Competencies Certificate – Support Document

## Examples of Pathway Skills

This list is not exhaustive

Below are examples of the application-level skills applicants describe when completing the Skills & Competencies Gained portion of the certificate application.

### Agriculture, Food & Natural Resources Pathways

#### College and Career Ready

- Develop a plan that includes specific goals for leadership and personal growth.
- Evaluate personal lifestyle as related to long-term health.
- Implement appropriate preparation plans for a career path based on passion, abilities, aptitude, opportunities.

#### Agribusiness Systems

- Differentiate types of ownership and outline the structure of AFNR businesses in a capitalistic economic system.
- Demonstrate entrepreneurship, including idea generation, opportunity analysis and risk assessment.
- Maintain accounting information needed to prepare an income statement, balance sheet and cash-flow analysis for an AFNR business.

#### Agriculture Science

- Compare ingredient tags from several different feeds and determine which feed is the best for certain situations
- Identify career options in agricultural sales and determine the specific entry requirements for a chosen field.
- Predict and manipulate the results of photoperiodism and plant growth regulators

#### Animal Science

- Diagnose illnesses and disorders of animals based on symptoms and problems caused by diseases, parasites and physiological disorders.
- Discuss procedures at the local, state and national levels to ensure biosecurity of the animal industry.
- Design programs that assure the welfare of animals and prevent abuse or mistreatment.

#### Biotechnology in Agriculture

- Assess the future impact agricultural biotechnology could have on world populations.
- Demonstrate advanced aseptic techniques in the biotechnology laboratory.
- Compare and contrast bioengineering and conventional pathways used in food processing.

#### Food Products & Processing Systems

- Perform basic equipment and facility maintenance in a food products and processing operation.
- Implement an HACCP program for a food products and processing facility.
- Perform sensory-testing and marketing functions to characterize and determine consumer preference and market potential.

#### Natural Resources & Environmental Systems

- Employ Global Positioning System and Geographic Information Systems technologies to inventory features in natural resource management.
- Evaluate the impact of recreational activities on natural resources and create an improvement plan.
- Explain management techniques used to reduce infection and spread of plant diseases in natural resources.

#### Plant Systems

- Perform soil tests and interpret results
- Describe the application of advanced propagation techniques: grafting, patch and T budding, mound and air layering, micro propagation and tissue culture
- Demonstrate proper methods of using rooting hormones

#### Power, Structural & Technical Systems

- Identify the basic components of a small engine and describe the function of each part.
- Demonstrates proper inspection and operation of equipment for each welding or thermal cutting process used.
- Calculate amperage, voltage, resistance, and power of series, parallel, and combination circuits

Complete lists of Pathway Knowledge and Skills for each pathway can be found at <https://www.ksde.org/Agency/Division-of-Learning-Services/Career-Standards-and-Assessment-Services/Content-Area-A-E/Agriculture-Food-Natural-Resources-CTE-Career-Cluster> under the title “Agriculture, Food, and Natural Resources Pathway Design Sheets with Competencies”. Please refer to these lists when completing the Skills & Competencies Gained portion of the certificate application.