

# KANSAS AGRICULTURE SKILLS & COMPETENCIES CERTIFICATE

The Kansas Agriculture Skills and Competencies Certificate will document skills and competencies gained by student participation in agriculture education. The program is an opportunity to quantify and qualify skills learned through completion of all three segments of the agriculture 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 (KDA) is pleased to sponsor this certificate program for Kansas FFA members. The certificate is listed as a qualifying certificate for Kansas' Career Technical Education (CTE) Initiative. The certificate has been endorsed by the Kansas agriculture community, including; Kansas FFA Association, Kansas Farm Bureau, Kansas Grain & Feed Association, Kansas Livestock Association and other industry organizations and employers.

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In order to be eligible for the Kansas Agriculture Skills & Competencies Certificate the following requirements must be met. Please 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 high school agriculture education courses.
- Must have been an FFA member for at least twenty-four months at time of application.
- Complete either of the following Supervised Agricultural Experience (SAE) documentation:
  - Submitted district level proficiency award application
  - Earned State FFA Degree
- Cumulative GPA of 2.5 or higher in all classes, not just agriculture education courses.
- Participate in one FFA leadership event or Career Development Event (CDE) and one technical FFA CDE, above the chapter level, listed on the Qualifying Competencies support document.
- 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 also be asked to complete a brief essay describing at least five, but up to ten, Agriculture, Food & Natural Resources Pathways skills they have gained through their participation in 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.

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Name (Printed)

Name (Signature)

Date

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 is dedicated to providing 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 are in compliance with those laws. In this process, the department aims to minimize excessive rules and regulation.

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## APPLICATION CHECKLIST

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Official transcript

One of the following two 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.

All sections of the application must be completed

Agriculture Education Courses

FFA Membership

SAE Documentation

GPA Verification

FFA Leadership Event/CDE and Technical FFA CDE Participation above the chapter level

cPass Comprehensive Agriculture Assessment passage and verification

Skills identified in a brief essay referencing Agriculture, Food & Natural Resources Pathways skills

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

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## 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 postmarked by May 1**. For an electronic application, please visit [agriculture.ks.gov/ageducation](http://agriculture.ks.gov/ageducation) – under the Kansas Agriculture Skills & Competencies Certificate list.

Applications may **only** be mailed to the following address:

Kansas Department of Agriculture  
c/o Education & Event Coordinator  
1320 Research Park Drive  
Manhattan, KS 66502

In order for an application to be considered eligible, all sections of the application form must be completed.  
**No handwritten applications will be accepted.**

# KANSAS AGRICULTURE SKILLS & COMPETENCIES CERTIFICATE

Please complete the following sections in full prior to submitting your application. Please contact the Kansas Department of Agriculture Education & Events Coordinator at Robin.Blume@ks.gov or at (785) 564-6756 with any questions.

## AGRICULTURE EDUCATION COURSES

Please list the agriculture education courses you have completed. In order to receive the certificate, you must have completed at least three courses.

Please list any agriculture education courses you are currently enrolled in and anticipate completing prior to graduation.

## FFA MEMBERSHIP

Please list the academic years in which you were an active FFA member. A minimum of twenty-four months of active membership is required.

Year One:

Year Two:

Year Three:

Year Four:

## SUPERVISED AGRICULTURAL EXPERIENCE (SAE) DOCUMENTATION

In order to receive the certificate, your SAE must meet one of the following requirements:

- 1) Submitted district proficiency award application
- 2) Earned State FFA Degree

### **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.

Please indicate which requirement you have completed:

- Submitted district proficiency award application
- Earned State FFA Degree

In the space below, 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 agriculture education courses} :

Weighed GPA {if applicable}:

## CAREER DEVELOPMENT EVENT (CDE) DOCUMENTATION

Please show documentation of one FFA leadership event/CDE and one technical FFA 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 Leadership Event/CDE above the Chapter Level

Event/

CDE:

Date:

Location:

### FFA Technical CDE above the Chapter Level

CDE:

Date:

Location:

## cPASS COMPREHENSIVE AGRICULTURE ASSESSMENT

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

## SKILLS & COMPETENCIES GAINED

In a brief essay, describe 5-10 major skills, competencies and knowledge (e.g. marketing, safety, personal skills development) that best describe what you gained technically and personally from your agriculture education curriculum. Skills should be selected from the competency profiles for technical courses from your selected Agriculture, Food & Natural Resources Pathway(s).

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

# SIGNATURE DOCUMENTATION

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## Agriculture Education Instructor and FFA Advisor

As the agriculture 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 agriculture education work, been an active FFA member for a minimum of two years, participated in the FFA events/CDE's documented above and taken the cPass Comprehensive Agriculture Assessment test.

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Name (Printed)

Name (Signature)

Date

## 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)

Name (Signature)

Date

# 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 [ksde.org/default.aspx?tabid=449](http://ksde.org/default.aspx?tabid=449) 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.