KANSAS BOARD OF REGENTS
ACADEMIC AFFAIRS STANDING COMMITTEE
MEETING AGENDA
MAY 28, 2025
10:00 a.m. – 11:30 a.m.

The Board Academic Affairs Standing Committee (BAASC) will meet virtually via Zoom. You can listen to the meeting at the Board offices, located at 1000 SW Jackson, Suite 520, Topeka, Kansas 66612.

I.	**Call to Order**	Regent Mendoza, Chair	
	A. Roll Call and Introductions		
	B. Approve Minutes from May 14, 2025 Meeting		p. 3
II.	**Board Consent Items**		
	A. Request for Approval AAS in Food & Feed Manufacturing	Jesse Mendez, KSU	p. 5
	B. Request for Approval BS in Nuclear Engineering and Request to Exceed 120 hours	Jesse Mendez, KSU	p. 36
III.	**Board Discussion Agenda Items**		
	A. KU, KUMC, & KSU Annual Program Review	Rusty Monhollon	
	B. Changes to Qualified Admissions	Jesse Mendez, KSU	
IV.	**Other Matters**		
	A. First 15	Rusty Monhollon	
	B. Academic Affairs Updates	Academic Affairs Staff	p. 48
V.	**Announcements**		
	Next BAASC Meeting – June 11, 2025		
VI.	**Adjournment**		

BOARD ACADEMIC AFFAIRS STANDING COMMITTEE

Four Regents serve on the Board Academic Affairs Standing Committee (BAASC), established in 2002. The Regents are appointed annually by the Chair and approved by the Board. BAASC meets virtually approximately two weeks before each Board meeting. The Committee also meets on the morning of the first day of the monthly Board meeting. Membership includes:

Diana Mendoza, Chair

Alysia Johnston

Neelima Parasker

Kathy Wolfe Moore

Board Academic Affairs Standing Committee

AY 2025 Meeting Schedule

BAASC Academic Year 2024- 2025 Meeting Dates			
Meeting Dates	**Location**	**Time**	**Agenda Materials Due**
September 4, 2024	Virtual Meeting	10:00 a.m.	August 14, 2024
September 18, 2024	Topeka	11:00 a.m.	August 28, 2024
November 6, 2024	Virtual Meeting	10:00 a.m.	October 16, 2024
November 20, 2024	Kansas State University	11:00 a.m.	October 30, 2024
December 4, 2024	Virtual Meeting	10:00 a.m.	November 13, 2024
December 18, 2024	Topeka	11:00 a.m.	November 25, 2024
January 2, 2025	Virtual Meeting	10:00 a.m.	December 11, 2024
January 15, 2025	Topeka	11:00 a.m.	December 24, 2024
January 29, 2025	Topeka	11:00 a.m.	January 8, 2025
February 12, 2025	Topeka	11:00 a.m.	January 22, 2025
February 26, 2025	Virtual Meeting	10:00 a.m.	February 5, 2025
March 12, 2025	Topeka	11:00 a.m.	February 19, 2025
April 2, 2025	Virtual Meeting	10:00 a.m.	March 12, 2025
April 16, 2025	Pittsburg State University	11:00 a.m.	March 26, 2025
April 30, 2025	Virtual Meeting	10:00 a.m.	April 9, 2025
May 14, 2025	Topeka	11:00 a.m.	April 23, 2025
May 28, 2025	Virtual Meeting	10:00 a.m.	May 7, 2025
June 11, 2025	Topeka	11:00 a.m.	May 21, 2025

Please note that virtual meeting times are 10:00 a.m. and Board Day meetings are 11:00 a.m., unless otherwise noted.

KANSAS BOARD OF REGENTS
BOARD ACADEMIC AFFAIRS STANDING COMMITTEE
MINUTES
MAY 14, 2025

Regent Diana Mendoza called the May 14, 2025, Board Academic Affairs Standing Committee meeting to order at 11:00 a.m. The meeting was held in the Kathy Rupp conference room, located in the Curtis State Office Building, 1000 S.W. Jackson, Suite 520, Topeka, KS 66612.

MEMBERS PRESENT: Regent Diana Mendoza
Regent Alysia Johnston
Regent Kathy Wolfe Moore

INTRODUCTIONS

Provost Bichelmeyer introduced Vice Provost Jen Roberts, and Provost Mendez introduced Vice Provost of Academic Affairs and Innovation Margaret Mohr-Schroeder.

APPROVAL OF MINUTES

Regent Johnston moved that the minutes of the April 30, 2025, meeting be approved. Regent Kathy Wolfe Moore seconded, and the motion carried unanimously.

BOARD DISCUSSION AGENDA ITEMS

ALL STAR HIGH SCHOOL AWARD RECOGNITIONS

Associate Director for Academic Affairs Mistie Knox provided a brief overview of the All Star High School Award Recognitions, which will be presented during the Board meeting. To be eligible, schools were required to host three events: an Apply Kansas Application Completion Event, a FAFSA Completion Event, and a Senior Signing, Decision, or Celebration Event. A total of 217 schools met the criteria and will be recognized for their achievement.

KU, KUMC, & KSU ANNUAL PROGRAM REVIEW

Provost Bichelmeyer from KU indicated that a detailed report about KU and KUMC's academic program review process, policies, and action plans was provided in February and said that today's presentations will provide a more in-depth overview of the policies and processes for the institution's academic program review process, as well as an update on the low-enrolled programs. Provost Bichelmeyer then introduced Vice Chancellor for Academic and Student Affairs Robert Klein to provide the presentation for KUMC.

Vice Chancellor Klein provided an overview of the program review process at KUMC, which consists of departments conducting self-study between January and July, the program review committee reviewing and meeting with all the departments in the fall, and a final review report is shared with departments in December. All of KUMC's undergraduate programs meet the identified minima; one master's program will be moved from the School of Nursing to the Department of Health Information Management in the School of Health Professions, and one program has been phased out. KUMC has recommended continuing all other programs. He also shared examples of improvement from the review for specific programs at KUMC.

Vice Provost at KU, Jen Roberts, provided an overview of the program review process at KU and how they are working to align KBOR priorities and KU's Strategic Plans with the Academic Program Review. Their program review process involves reviewing the KBOR data, which kicks off KU's four-year review cycle. The Academic Affairs team meets with the Deans and Chairs, and action plans are integrated into the internal review process. Internally, KU reviews approximately a quarter of its programs annually. The departments of these programs review their data, prepare self-study reports, and set goals in the fall, which are then reviewed by the Dean in early

Spring, who provides endorsements. A team then reviews the self-study report and meets with the departments. In the summer, the Provost and the Academic Affairs team provide feedback to the Deans. The program lifecycle at KU has instituted a multi-stage review of all new program proposals. KU has updated policies to refine and streamline program offerings and has worked on increasing transferability into Bachelor's degree programs.

As a result of this year's Program Review, the recommendations are to discontinue two programs, merge two programs, and place five on action plans. KU also continues to monitor twenty other programs that were previously meeting minima prior to COVID. These programs are trending upward, but will continue to be monitored. A few programs are not anticipated to ever meet the minima, but serve unique needs for other specific programs.

Regent Johnston asked if the process for reviewing administrative efficiencies at KU, particularly for the low-enrolled programs, could be looked at more formally, and a report be provided to KBOR on the specific findings. Regent Mendoza requested that the report be presented in December 2025, when the reports for the programs that are on action plans will be presented.

Provost Jesse Mendez started the overview of the program review process at KSU by reviewing the evolution of changes in the Office of the Provost and enrollment trends for the last few years. He then introduced Vice Provost Margaret Mohr-Schroeder, who presented details on the program review process and revitalization goals. Currently, all programs undergo an extensive review process annually. This includes a review and discussion of data, assessment of the previous year's actions, establishment of new action plans, applications for strategic investment, and then identifying programs for further review. She shared examples of their continuous improvement process, which included moving to a four-year in-depth review cycle, continued yearly review of student learning outcomes, enrollment, and retention, and continued strategic investment in program revitalization.

Currently, KSU is focusing on growing 112 programs through marketing and expansion, sixty programs are focused on sustaining, and forty programs are being monitored for progress and improvement plans. Recommendations include phasing out two programs and placing another program on an action plan. Vice Provost Mohr-Schroeder gave an update on the two programs that were placed on action plans last year, the bachelor's in geography and the bachelor's in music. She also shared that KSU has created internal reports that provide information on students transferring in, including a Community College Report that has helped drive conversations on transfer. She also shared some strategic program investments. Finally, she indicated that KSU also has some niche programs that are not expected to meet minima but are offered in an obligation to create opportunity and access as a land-grant institution.

Regent Mendoza requested that a more in-depth report be provided in December's presentations on the steps being taken to increase enrollment, specifically for the master's and doctoral programs that are not meeting minima.

ANNOUNCEMENTS

Regent Mendoza stated that all other agenda items would be postponed until the next BAASC meeting on May 28, 2025.

ADJOURNMENT

Regent Mendoza adjourned the meeting at 12:19 p.m.

Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process. The Kansas Association of Community Colleges has sent a letter outlining concerns with the proposal (Appendix IV) and K-State has provided a response (Appendix V). The Technical Education Authority (TEA) has also provided a letter outlining concerns with the proposal, which is included as Appendix VI.

May 28, 2025

I. General Information

A. Institution Kansas State University

B. Program Identification

Degree Level:	Associate
Program Title:	Food and Feed Manufacturing
Degree to be Offered:	Associate of Applied Science
Responsible Department or Unit:	College of Agriculture/Department of Grain Science and Industry
CIP Code:	1.1002 Food Technology and Processing
Modality:	Hybrid
Proposed Implementation Date:	Fall 2025

Total Number of Semester Credit Hours for the Degree: 60

II. Clinical Sites: Does this program require the use of Clinical Sites? No

III. Justification

The demand for a skilled workforce to fill supervisory, operational, and technical roles in the milling, baking, feed, and pet food industries is immense, and no other institution in the United States is meeting this need comprehensively. Currently, Kansas State University trains leaders for these industries. However, the creation of an Associate of Applied Science (AAS) degree in food and feed manufacturing would directly address the industry's labor shortages by providing practical, targeted education.

This program would serve two important demographics. First, it would offer a pathway for existing industry professionals seeking to enhance their knowledge and skills while maintaining their current employment. With the flexibility of an online AAS program and core courses designed as five-week online courses or one-week in-person practicums, these professionals can advance their careers with minimal disruption to their work schedules. Second, the program would appeal to students who prefer to enter the workforce quickly through a two-year technical degree, rather than pursuing a traditional four-year degree. These graduates would be well-prepared to step into the workforce immediately, filling critical roles in feed manufacturing and related fields.

Having more educated and highly qualified employees directly benefits the industry. A more skilled workforce leads to greater operational efficiency, innovation, and overall success for companies in this sector.

IV. Program Demand

A. Survey of Student Interest

A survey was not conducted to address student demand. However, an industry survey was conducted to seek guidance on the development of this program. The survey received 78 responses across the Feed, Pet Food,

Milling, Baking, and Grain Elevator industries. The industry response provided support for this program in training areas of industry knowledge, quality, management, leadership, equipment identification/operation, basic/applied math, ingredient identification, written communication, oral communication, computer application, data management, supervision, employee safety, regulatory, equipment & facility maintenance, food/feed safety. See Appendix I for industry support letters.

B. Market Analysis

The industry market analysis report was conducted by the K-State Market Intelligence & Analysis Team. The data in this report is from Lightcast™, a labor market analytics company that curates and maintains comprehensive labor market data sets. The degree completion data are from IPEDS, reported by CIP code. Labor data is from Quarterly Census of Employment Wages from the Bureau of Labor Statistics and Bureau of Economic Analysis. The regions analyzed include: Arkansas, Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, Oklahoma, and Texas. To provide further analysis in food and feed manufacturing, we used five metrics:

- Regional Unique Job Postings (2019-2023)
- Projected Industry Growth (2023-2032) • Top Ten Job Titles (2023)
- Top Ten Companies by Unique Job Postings (2023)
- Example Job Postings with Company, Location, and Salary Information (2023)

The five industries reviewed are:

1. Grain Processing Industry
2. Flour and Grain Milling Industry
3. Feed Industry
4. Baking Industry
5. Pet Food Industry

Completions for associate-level programs in grain/feed processing increased nationwide from 2013 to 2022 (IPEDS). Nationally, total completions fluctuated but increased over 350% during that time. Outside of 2016, there were zero online program completions nationwide and within the nine-state region. Although total nationwide completions are growing, the same is not true for the nine-state region (Arkansas, Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, Oklahoma, Texas) which decreased 66.7% from 2013 to 2022. In 2022, associate degrees accounted for 27 completions, while there were 56 bachelor's completions and 86 awards of less than one year. Only one institution in Kansas, Garden City Community College, reported associate degree completions in 2022 under the 01.0401 CIP code.

Job postings were filtered to include data on Feed Mill Operators, Feed Mill Managers, and Feed Mill Supervisors, the three job titles that we found were most relevant. The nationwide job postings growth for these positions has been over 41% since 2019, but the overall number of jobs is not very high. Feed Mill Operators was the job title with the most postings, tallying 493 last year. Feed Mill Operators also had the largest percent growth (66.6%) in postings from 2019 to 2023. The top employers recruiting for these types of positions include cattle feeders and large companies in the food industry like Tyson Foods, Con Agra, and Smithfield Foods.

A data point of note is that Iowa had the most job postings in the U.S. in 2023, with the rest of the Central U.S. showing demand for these workers, as well. Some of the top requested skills within job postings include agriculture, milling, warehousing and automation. A few of the top growing skills from 2023 revolve around workplace safety. They included hazard analysis and critical control points, preventative maintenance, and safety culture.

There were no associate degrees in grain science, milling, or a combination of the two in the market research scan of similar programs in the nation. The list of similar programs includes three certificates, one minor, and a Career Studies Certificate program. Of these five programs, four of them are in feed milling and only one is offered online. Based on this scan, there is little to no competition in the associate's degree programs in grain or milling science.

V. Projected Enrollment for the Initial Three Years of the Program

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	10	20	150	120
Year 2	20	30	300	180
Year 3	35	40	525	240

VI. Employment

Data from the K-State Market Intelligence & Analysis team using Lightcast Analyst tool determined the current employment opportunities for Unique Job Postings within a 9-state region from 2019-2023. Unique job postings were searched for soybean and other oilseed processing, fats and oils refining and blending, flour milling, rice milling, wet corn milling, breakfast cereal manufacturing, animal food manufacturing, dog or cat food manufacturing, bread and bakery product manufacturing. Across these unique job postings within a 9-state region there were 1,074 jobs posted in 2023.

- For the grain processing industry (soybean and other oilseed processing and fats and oils refining and blending), in 2023 there were 80 total unique postings with +122.2% change in 5-year regional postings and a median salary of $64,800. Example employment opportunities included industrial technicians and operations assistant.
- For the flour and grain milling industry (flour milling, rice milling, wet corn milling, breakfast cereal manufacturing), in 2023 there were 111 total unique postings with +311% change in 5-year regional postings and a median salary of $58,900. Example employment opportunities included maintenance technician-millwright and maintenance control specialist.
- For the feed industry (animal food manufacturing), in 2023 there were 459 total unique postings with +59.4% change in 5-year regional postings and a median salary of $59,600. Example employment opportunities included Millwright/maintenance mechanic, processing technician, and laboratory technician.
- For the pet food industry (dog or cat food manufacturing), in 2023 there were 124 total unique postings with +359.3% change in 5-year regional postings and a median salary of $57,300. Example employment opportunities included filler operator, laboratory technician, and automation controls technician.
- For the baking industry (bread and bakery product manufacturing), in 2023 there were 300 total unique postings with +10% change in 5-year regional postings and a median salary of $64,300. Example employment opportunities included production supervisors, maintenance lead, mechanical/electrical technician.

VII. Admission and Curriculum

A. Admission Criteria

Qualified Admission criteria are used, as this program does not have separate admission requirements.

B. Curriculum

The 61-credit AAS in Food and Feed Manufacturing program is designed to equip students with the knowledge and skills necessary for a successful career in the grain, food, and feed industries. The curriculum prepares learners for both entry-level and supervisory positions in these rapidly advancing sectors. In addition to offering a solid technical foundation in areas such as ingredient purchasing, equipment maintenance, and operation, and facility oversight, the program emphasizes invaluable hands-on learning experiences.

This curriculum accommodates two types of learners: 1) current industry professionals seeking to earn their degree online while maintaining their jobs, and 2) traditional students aiming to complete a two-year technical degree to quickly enter the food and feed manufacturing or grain processing workforce. To support these

diverse needs, core classes are structured in 5-week, one-hour modules, allowing for greater flexibility.

Beyond technical training, our curriculum addresses additional skills that industry surveys indicate employers seek in candidates. Applied skills and professional specialization are emphasized, particularly through courses focusing on employee safety, food and feed safety, computer applications, and specialized areas relevant to food and feed manufacturing, including agronomy, animal science, agricultural safety, mechanical systems, entomology, food science, and others. Flexibility is also built into the specialization electives to allow for high school students to take advantage of completing targeted courses for free while in high school to help meet degree requirements. The flexible "Specialization Electives" component reflects the diverse areas within modern food and feed manufacturing, ensuring that our approach is tailored to the various career possibilities available to AAS graduates.

The program requires a total of 18 credits in core Food and Feed Manufacturing (FFM) major courses, supplemented by three sections within the major support courses: 9 credits focused on specialization, 6 credits dedicated to major support (computer applications and employee safety), and 12 credits in management electives. The content needed for the 18 credit hours of core FFM major courses currently resides within the Department of Grain Science and Industry at Kansas State University. This content will be retooled for online delivery and to focus on the key pieces of technical education needed for this target audience.

Recognizing the importance of business operations and management skills, we require students to complete 12 credits in "Management Electives." Additionally, effective communication and applied mathematics are critical skills sought by employers, leading to requirements in the KBOR general education curriculum, including courses in English, Communication, and Math.

The remaining credits consist of 4-5 credits in Natural Science and Physical Sciences and 3 credits in Arts and Humanities or Social and Behavioral Science, providing a well-rounded education. These courses lay a solid foundation in basic science and the humanities while allowing students to explore a wide range of topics that can significantly influence their career trajectories.

In addition to the AAS FFM degree, FFM certificates will be in place by Fall 2025. These certificates are designed to provide students with a credential they can present to employers even before completing their associate's degree. This is particularly valuable for students who may need to pause their education or want to demonstrate their skills to prospective employers partway through their studies. Additionally, all course requirements for the certificate will apply directly toward the completion of the Associate of Applied Science (AAS) degree. Offering these certificates strengthens the stackable credential pathway (see Appendix II), recognized by the Kansas Board of Regents (KBOR), helping students build their academic and professional profiles step-by-step. For the non-traditional place-bound student, we also hope to develop microcredentials in the future that will not only enhance skills in their current position through professional development, but that will also provide a pathway of stackable credentials (see Appendix III) that could lead to a certificate or ultimately an associate’s degree.

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH
CORE 1	K-State CORE 1 – English - Select 1 course from the list (i.e. ENGL 100 - Expository Writing I)	3
CORE 3	K-State CORE 3 - Mathematics & Statistics - Select 1 course from the list (i.e. STAT 225 - Intro to Statistics)	3
ASMS 120	Intro to Food & Feed Manufacturing Employee Safety	1
ASMS 220	Employee Safety in Grain Handling Facilities	1
ASMS 221*	Safety Applications Practicum	1
FFM 101	Orientation to Food & Feed Manufacturing	1
FFM 110	Intro to Grain & Food Manufacturing Industries	1
FFM 111	Intro to Feed & Pet Food Manufacturing Industries	1
FFM 120	Ingredient ID & Quality: Cereal Grains	1

FFM 121	Ingredient ID & Quality: Oil Seeds & Legumes	1
FFM 122	Ingredient ID & Quality: Co-products & Additives	1
Select 1 course:		
FFM 159*/169*/179*	Practicum: Intro to Milling/Intro to Baking/Intro to Feed & Pet Food	1

Year 1: Spring

Course #	Course Name	SCH
CORE 2	K-State CORE 2 - Communication - Select 1 course from the list (i.e. COMM 106 - Public Speaking I)	3
CORE 5 or CORE 6	K-State CORE 5 - Social & Behavioral Science *or* K-State CORE 6 - Arts & Humanities - Select 1 course from the list	3
CA Elective	Computer Applications Elective - ASI 290 or CIS	1-3
Select 1 group:		3
FFM 150/151/152	Milling: Preparing Grains/Milling Process/Milling Specialty Grains	
FFM 160/161/162	Baking: Bakery Ingredients/ Bakery Processes/Baking Products	
FFM 170/171/172	Feed & Pet Food: Feed Processing/Pet Food Processing/ Finished Feed and Pet Food Quality Assurance	
Specialization Elective Course	See Departmental List**	3

Year 2: Fall

Course #	Course Name	SCH
CORE 4	K-State CORE 4 - Natural & Physical Sciences - Select 1 course, with lab, from the list (i.e. AGRON 120 & 121, Crop Science)	4
LEAD 212 *or* MANGT 220	Introduction to Leadership Concepts or Principles of Management	3
FFM 210	Food & Feed Manufacturing Equipment Maintenance	1
Select 1 course:		
FFM 215/216/217	Maintenance Programs: Milling Specific/Baking Specific /Feed & Pet Food Specific	1
Select 1 course:		
FFM 225*/226*/227*	Equipment Maintenance Practicum: Milling/Baking/Feed	1
Specialization Elective Course	See Departmental List**	3
Management Elective Course	See Departmental List**	3

Year 2: Spring

Course #	Course Name	SCH
FFM 250	Advanced Food & Feed Manufacturing Management	1
Select 1 course:		
FFM 251/261/271	Advanced Management: Milling/Baking/Feed & Pet Food	1
Select 1 course:		
FFM 252*/262*/272*	Advanced Manufacturing Management Practicum: Milling/Baking/Feed & Pet Food	1
FFM 280	Intro to Food & Feed Safety	1
Select 1 course:		

FFM 285/287	Food Safety Principles in Milling and Baking/Advanced Feed & Pet Food Safety	1
Specialization Elective Course	See Departmental List**	3
Management Elective Course	See Departmental List**	3
Management Elective Course	See Departmental List**	3
Free Electives	If needed to reach 60 total hours	0-2

Total Number of Semester Credit Hours 60

**** Departmental List:**

Management Electives:		**12**
Select 1 Course:		
LEAD 212	Intro to Leadership Concepts	3
MANGT 220	Principles of Management	3
Select 9 Hours:		
ACCTG AGEC BUS ENTRP FINAN LEAD MANGT MIS MKTG SALES		
Specialization Electives:		**9**
Select 9 Hours:		
AGRON AGTEC ASI ASMS ATM ECET ENTOM FDSCI FFM FNDH GRSC IMSE MET		

VIII. Core Faculty

Note: *** Next to Faculty Name Denotes Director of the Program, if applicable
FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Dr. Chad Paulk***	Associate Professor	PhD	Y	Feed Science, Monogastric Nutrition, Ingredient Quality and Safety	0.17
New Program Coordinator	Instructor	TBD	N	Online Course Delivery	1.0
Jason Watt	Instructor	BS	N	9 yrs experience in milling education; 7 yrs practical milling industry experience	0.17
Aaron Clanton	Instructor	MBA	N	5 yrs experience teaching at K-State; 20 yrs experience - bakery industry; 13 yrs experience teaching all aspects of AIB Internationals baking curriculum.	0.04
Fran Churchill	Instructor	MS	N	12 yrs experience milling education; 20 yrs practical milling industry experience	0.13
Huseyin Dogan	Instructor	BS	N	Associate Engineer, 21 yrs	0.08

				experience teaching for Department of Grain Science. Mechanical Engineer - 30 yrs experience - project management, design, power distribution, & trouble shooting.	
Dr. Julia Pezzali	Assistant Professor	PhD	Y	Pet Food Processing, Pet Food Nutrition	0.04
Paul Blodget	Instructor/Flour Mill Manager	BS	N	Current Instructor and Program Manager - Hal Ross Flour Mill. Over 20 yrs practical milling experience	0.21
Dr. Mitch Ricketts	Professor	PhD	Y	Agriculture Safety & Health; Board Certified Safety Professional - over 30 yrs experience in safety, health, & environmental management	0.10
Bakery Science Faculty	TBD	TBD	Y/N	A core Bakery Science Faculty member will have FTE repartitioned to account for this additional teaching responsibility.	0.29
Feed Science Faculty	TBD	PhD	Y	A core Feed Science Faculty member will have FTE repartitioned to account for this additional teaching responsibility.	0.21
Pet Food Science Faculty	TBD	PhD	Y	A core Pet Food Science Faculty member will have FTE repartitioned to account for this additional teaching responsibility	0.08

Number of graduate assistants assigned to this program **0**

IX. Expenditure and Funding Sources

A. EXPENDITURES	First FY	Second FY	Third FY
Personnel – Reassigned or Existing Positions			
Faculty	$104,000		
Administrators *(other than instruction time)*		$65,000	$65,000
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*		$21,450	$21,450
Other Personnel Costs			
Total Existing Personnel Costs – Reassigned or Existing	$104,000	$86,450	$86,450
Personnel – New Positions			
Faculty			
Administrators *(other than instruction time)*	$65,000		
Graduate Assistants			
Support Staff for Administration (*e.g., secretarial*)			
Fringe Benefits *(total for all groups)*	$21,450		
Other Personnel Costs			

Total Existing Personnel Costs – New Positions	$86,450		
Start-up Costs - One-Time Expenses			
Library/learning resources			
Equipment/Technology			
Physical Facilities: Construction or Renovation			
Other			
Total Start-up Costs			
Operating Costs – Recurring Expenses			
Supplies/Expenses	$12,500	$12,500	$12,500
Library/learning resources			
Equipment/Technology			
Travel			
Other	$103,700	$103,700	$103,700
Total Operating Costs	$116,200	$116,200	$116,200
GRAND TOTAL COSTS	$306,650	$202,650	$202,650

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$109,291	$194,294	$309,657
Student Fees				
Other Sources				
GRAND TOTAL FUNDING		$109,291	$194,294	$309,657
C. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		- $197,359	- $8,356	$107, 007

X. Expenditures and Funding Sources Explanations

A. Expenditures

Personnel – Reassigned or Existing Positions

The Department of Grain Science and Industry has 10 faculty with various extension and teaching responsibilities that adequately cover the diverse discipline. Therefore, all FFM course offerings are offered as part of current appointments. Percent time dedication varies with faculty member roles and ranges from 0.08 to 0.29 FTE.

- The First FY expense for $104,000 will be designated to cover the summer salary of 3 tenured track professors who are on 9-month appointments for course development. These will be a one-time expense.
- A total of 3 tenured track professors and 5 instructors will be reassigned to AAS FFM courses. With addition of the new workload policy at Kansas State University, there are gaps in teaching load responsibilities for these faculty that can be used to meet the AAS teaching needs. In addition, current online service courses, such as GRSC 101, will be removed and restructured as FFM 110, 111, 120,

121, 122.

Personnel – New Positions
One Program Coordinator will be hired as an administrator and content manager for the AAS in Food and Feed Manufacturing. The annual salary for the Program Coordinator will be $65,000. Fringe benefit of $21,450 were calculated at the standard university rate of 30%.

Start-up Costs – One-Time Expenses
As previously defined, the one-time expense will be related to personnel. A total of 3 tenured track professors and 5 instructors will be reassigned to AAS courses. With addition of the new workload policy at Kansas State University, there are gaps in teaching load responsibilities for these faculty that can be used to meet the AAS teaching needs. In addition, current online service courses, such as GRSC 101, will be removed and restructured as FFM 110, 111, 120, 121, 122.

Operating Costs – Recurring Expenses
We also require funds for supplies/expenses associated with office materials, instruction, IT support, and promotion and marketing activities ($12,500/yr). In addition, we will offer 10 practicum courses and this will require operation of the flour mill, baking lab, test kitchens, feed mill, and pet food processing labs. For each of these courses it will cost approximately $10,000 in operations and supplies (total $103,700 per year).

B. Revenue: Funding Sources

Student tuition revenue has been calculated at $404.78/credit hour – the standard in-state tuition rate for undergraduate courses. The total number of credit hours per year is based on the projected enrollment and anticipated credit hours for full-time and part-time students.

Fiscal year	Total credit hours	Cost per credit hour	Total revenue
First FY	270	$404.78	$109,291
Second FY	480	$404.78	$194,294
Third FY	765	$404.78	$309,657

C. Projected Surplus/Deficit

The projected surplus by year three reflects the difference between Total Funding and Total Expenses.

XI. References

U.S. Bureau of Labor Statistics. (n.d.) *Quarterly census of employment and wages*. Available from https://www.bls.gov/cew/

U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2022). Available from https://nces.ed.gov/ipeds/datacenter.

Appendix I

Dr. Kyle Coble
Director of Nutritional Services
JBS Live Pork, LLC
Greeley, CO

August 18th, 2024

Associate of Applied Sciences (AAS) in Food and Feed Manufacturing
Kansas State University
Manhattan, KS

Dear Department and Faculty Member(s):

I am writing this letter in support of your proposed development of the academic program and curriculum for an Associates Degree of Applied Sciences (AAS) in Food and Feed Manufacturing. This extended learning opportunity for many in our industry is needed, desired, and essential to the continuation of adding skilled labor to the feed manufacturing workforce.

Nearly 4 years ago, Dr. Chad Paulk, Dr. Charles Stark, and I develop the "JBS Master Milling Course". It covers the areas of basic feed milling, quality control, maintenance and even some personal development in feed milling. This was developed out of necessity to create growth opportunities for our front-line workers who were thirsty for a chance to move up in the business and for a better future that would accompany them for their lives beyond.

This reality of need unfortunately came full force before the program was developed. Just weeks prior to moving this concept into a reality, an employee of mine whom had been at the company for 42 years at the same mill, even after building it, said "my father told me all I would ever be was a feed mill operator and that was all I ever was. No one ever cared enough to develop me or help me fulfill my potential in an industry I loved". While this person was proud of their tenure, they were not happy with the outcome of their career – it had become a job they did for decades. Only having overseen the Feed Operations for JBS Live Pork for less than a year and our company only owning that location for slightly longer, it shook me to the core. From that point forward, I vowed to never put our employees in that position and born was the JBS Master Milling Course.

The course overall has been a success, but it has not been without its challenges. While post graduate trained and completing a PhD, I am not a trained educator and at times the development has struggled to keep pace. The demands of an industry job tug at time and priorities to keep the business going versus personal development is a reality. Students need prompt replies and consistent engagement. When we have had up to 25 students across 3 classes at one time, they need a professional that is an educator in the area of milling science and a program whose focus and core is exactly what this AAS would provide. To top this all, even after a monetary bonus was provided for class completions, most did not want to do "without getting a college degree".

Selfishly, I cannot explain in words what this would mean to JBS Live Pork's Feed Milling Team. It would expand our established program into an option that students and industry professionals could carry on with and add academic merit to their futures that allow them to turn a job into a career. This program would be one of a kind in our industry, and no one is better at that than Kansas State Grain Science.

I thank you for reading this letter and hearing our position as you deeply consider the futures and careers of not only our employees, but the industry and families they are made of.

Sincerely,
Kyle Coble
Dr. Kyle Coble

1770 Promontory Circle · Greeley, CO 80634 · 970-506-8000 · jbsfoodsgroup.com

November 1, 2024

Faculty and Administration
Kansas State University
Manhattan, KS 66506

RE: Support for the Associate of Applied Sciences (AAS) in Food and Feed Manufacturing

Dear Faculty and Administration,

We are writing to express our strong support for the proposed development of the Associate of Applied Science (AAS) in Food and Feed Manufacturing curriculum at Kansas State University. This initiative will provide opportunities for potential students looking to enter the grain milling industry as a future career.

As both the food and feed manufacturing sectors continue to grow, a significant need has emerged for professionals adept in both technical and operational sides of running a mill. The AAS program aligns with this demand and provides instruction and experience in grain milling, preparing a pool of skilled employees ready to contribute effectively early in their careers.

Hill's Pet Nutrition acknowledges the potential this program holds. By offering this targeted training, current and future employees will be able to bring expertise to mills throughout Kansas, reflective of the state's position as a grain production leader.

Furthermore, the program supports local economies by sustaining the long-term viability of Kansas-based grain mills and other related food and feed manufacturing businesses. It provides students with pathways to gain education and hands-on experience, retaining talent within the state and providing a continuous pipeline of skilled workers.

Thank you for your consideration of this addition to Kansas State University's educational offerings. We eagerly anticipate the success of the AAS in Food and Feed Manufacturing program and are confident in the substantial impact it will have on the industry.

Sincerely,

Nicholas L. Rozzi, Ph.D.
Vice President, Product Development
Hill's Pet Nutrition
1035 NE 43rd Street
Topeka KS 66617

Dr. Chad Paulk
Associate Professor
Feed Science and Management in the Department of Grain Science and Industry
Kansas State University
Shellenberger 313
Manhattan KS, 66506

Proposed AAS in Food and Feed Manufacturing Program

Dear Dr. Paulk,

Founded in 1909, the American Feed Industry Association (AFIA), based in Arlington, Va., is the world's largest organization devoted exclusively to representing the business, legislative and regulatory interests of the U.S. animal food industry and its suppliers. The organization's membership is comprised of over 650 domestic and international companies that represent the total feed industry—manufacturers of commercial and integrated feed and pet food, ingredient suppliers, pharmaceutical companies, industry support and equipment manufacturers. AFIA's members manufacture more than 75% of the feed and 70% of the non-whole grain ingredients used in the country.

The AFIA was thrilled to hear that you are proposing to develop an Associate of Applied Sciences (AAS) in Food and Feed Manufacturing. An AAS degree in feed manufacturing will help meet some current needs in our industry labor requirements. There are existing industry professionals seeking to earn a degree online while maintaining their current employment. This type of program will help those individuals increase their knowledge base and advance their careers. There are also students that would like to complete a two-year technical degree and enter the workforce quickly rather than pursue a traditional four-year degree. The type of degree program that you are proposing to develop will help provide highly qualified potential employees to work in our feed manufacturing facilities. A more educated employee always equates to a more qualified employee. A more qualified labor force is good for our industry.

The AFIA whole-heartedly supports the development of this program!

Yours Sincerely,

Gary Huddleston
Director of Feed Manufacturing and Regulatory Affair

Our Industry. Our Passion. Our Voice.

American Feed Industry Association • 2101 Wilson Blvd., Suite 810, Arlington VA 22201 USA
T: (703) 524-0810 • F: (703) 524-1921 • afia@afia.org • afia.org

NORTH AMERICAN MILLERS' ASSOCIATION

The Link Between Grain and Goodness

August 30, 2024

Department of Grain Science and Industry
Kansas State University
Suite 201 Shellenberger Hall
1301 Mid-Campus Dr
Manhattan, KS 66506

Dear Department of Grains Science and Industry:

I am writing on behalf of the North American Millers' Association (NAMA) in support of the Kansas State University Department of Grain Science and Industry application to offer an Associate of Applied Science (AAS) in Food and Feed Manufacturing

NAMA represents millers of wheat, corn, oats, and rye across the continental United States, Puerto Rico, and Canada. Our members take raw grain and, through grinding and crushing, create flour and other products that are used to make favorite foods.

Kansas State University currently offers the only Bachelor of Science degree in milling in the United States. Our industry fully supports the current program, but we also recognize that the needs of today's learners and employers are broader than four-year degree programs.

As the only fully operational training center in the United States, Kansas State has a unique opportunity to utilize existing resources and staff to expand its mission and enrollment. Our hope is that currently working employees will be able to advance their careers by earning an AAS degree while working full-time. The program would also offer students from Kansas and around the country specialized training for jobs with excellent compensation and professional growth opportunities.

The milling industry, like other manufacturers located in rural America, must look at new ways to expand our talent pipeline. An AAS in Food and Feed Manufacturing offered by Kansas State could play an important role in workforce development for the future.

Sincerely,

Jane DeMarchi
President

1400 Crystal Drive, Suite 650 · Arlington, VA 22202

TEL: 202.484.2200 · namamillers.org · generalinfo@namamillers.org

Cargill Helping the world thrive

October 4, 2024

Chad Paulk
Associate Professor, Department of Grain Science and Industry
Kansas State University

Dr. Paulk,

We appreciate the chance to express our support for the proposed Associate of Applied Science in Food and Feed Manufacturing (AAS). At Cargill, our values--do the right thing, put people first and reach higher--guide us in all aspects of our business. These values guide how we attract and retain the talent that we employ in our production facilities. We believe that it is in the best interest of our current and future team members to have access to a wide variety of educational opportunities. As we look at our talent in our food and feed production facilities, we recognize that not every supervisory and management position would require a traditional four-year degree. We do still value the investment that our team members make in their education and will continue to seek out employees with four-year degrees. At the same time, we also recognize the importance of education options that fit the life circumstances of our employees who do not wish or are not able to invest in a four-year degree.

The AAS program that you are proposing will be a valuable addition to the education options of our current and future employees. We could certainly see this as a degree track that would help us to meet the demands for entry level supervisory employees in our production facilities. We also appreciate the fact that this could be a great option for some of our current employees to further their education as they continue their employment. We appreciate the work that you and your department have done to propose this AAS program. Cargill is supportive of the development of such programs, and they will help to improve the ability of our team members to prepare for future roles and to grow in existing roles at Cargill.

Thank you for consideration of these comments and please let us know if you need anything else to support your efforts.

My Regards,

Scott J. Eilert

Scott J. Eilert, Ph.D.
VP, Responsible Sourcing Program Director
Cargill Protein and Salt

825 E. Douglas *Wichita, KS 67202* *316-291-2119*

Josh Flohr, Ph.D.

To the Department of Grain Science and Industry,

Seaboard Foods is a leading integrated food company in the United States, producing premium pork and other protein products for domestic and international markets. With our deep roots in the Midwest, particularly in Kansas, where many of our operations are based, we are committed to fostering strong relationships within the state. Our facilities in Kansas play a vital role in our supply chain, making it one of our key production hubs.

We are pleased to hear about your proposal to develop an Associate of Applied Sciences (AAS) in Food and Feed Manufacturing. This AAS degree will help address the current labor market needs in our industry, particularly by providing targeted education and hands-on training for students who are eager to join the workforce. Many individuals in the industry are seeking opportunities to advance their careers by enhancing their knowledge while continuing their employment. This program would be an excellent resource for such professionals to upskill and contribute even more effectively to their organizations.

Additionally, as a company with strong ties to Kansas, this program is especially valuable to us. By creating opportunities for Kansas students and professionals to receive technical education close to home, the program will help sustain a robust local labor force that can support the continued growth of the state's food and feed manufacturing industries. Furthermore, this program offers a valuable pathway for students aiming to quickly enter the workforce with a two-year technical degree. The skills and qualifications gained through this degree will prepare them to succeed in various roles within the feed manufacturing sector, ensuring that we have access to well-trained and educated employees ready to thrive in our Kansas facilities.

Seaboard Foods fully supports the development of this program. A better-educated workforce will directly benefit both our company and the broader Kansas economy. We are confident that this initiative will enhance the availability of qualified employees and contribute to the overall success of food and feed manufacturing operations across the country and within our state.

Sincerely,

Josh Flohr

Senior Director of Technical and Veterinary Services

Seaboard Foods

WAYNE SANDERSON FARMS
TOGETHER, WE MAKE CHICKEN AMAZING

August 29, 2024

To whom it may concern:

This letter is written in support of the proposed Associate of Applied Sciences in Food and Feed Manufacturing at Kansas State University. This proposed program offers the potential to positively impact and influence livestock, grain and feed manufacturing industries.

There is a large void in our industry of professionals that already possess technical skills and knowledge of grain and feed manufacturing. Therefore, it's difficult to easily find and place supervisory or managerial roles in mills. This program offers a great opportunity to offer additional training to current employees, as well as greater pool of talent in our industries.

I fully support the proposed program and the potential impact it will have.

Thanks,

Chance Williams, PhD
Senior Nutritional Services Director
Wayne-Sanderson Farms

4110 Continental Drive, Oakwood, Georgia 30566 | 800.392.0844 | waynesandersonfarms.com

Ardent Mills

August 26, 2024

Kansas Board of Regents
1000 SW Jackson Street, Suite 520
Topeka, KS 66612

Dear Members of the Kansas Board of Regents,

I am writing to express Ardent Mills' enthusiastic support for the proposed Associate of Applied Science (AAS) in Food and Feed Manufacturing program being proposed by the Department of Grain Science at Kansas State University. As a leading flour milling company with a long-standing commitment to the state of Kansas, we recognize the significant benefits that this program will bring to both the local workforce and the industry as a whole.

Kansas has a storied history in flour milling and agriculture, and it is imperative that we continue to nurture and develop this vital sector. The AAS in Food and Feed Manufacturing aligns perfectly with the needs of our industry and the opportunities available to Kansas students. This program will serve as a critical bridge between education and industry, addressing the growing demand for skilled professionals in the food and feed manufacturing sector.

The benefits of this program are manifold:

1. **Enhancing Workforce Skills:** The AAS program will provide current and future employees with specialized training that is directly applicable to their roles within the industry. By equipping them with advanced knowledge and practical skills, the program ensures that our workforce remains competitive and adept in a rapidly evolving field.

2. **Fulfilling Industry Needs:** As the food and feed manufacturing sector continues to grow, there is an increasing need for trained professionals who understand both the technical and operational aspects of the industry. This program will help fill that need by developing a pool of highly qualified candidates ready to contribute effectively from day one.

3. **Supporting Local Economies:** By fostering a skilled workforce, the AAS program will support the long-term viability of Kansas flour mills and other food and feed manufacturing businesses. This not only helps our company but also strengthens the overall economic health of the state.

4. **Creating Pathways for Students:** The program offers a valuable opportunity for Kansas students to gain relevant education and hands-on experience, which can lead to rewarding careers within the state. By providing a clear pathway from education to employment, the

program will help retain talent within Kansas and ensure a steady pipeline of skilled workers for the future.

At Ardent Mills, we are committed to supporting educational initiatives that align with our industry's needs and contribute to the growth of the local economy. We believe that the AAS in Food and Feed Manufacturing is a significant step forward in achieving these goals and are proud to lend our support to this initiative.

Thank you for considering this valuable addition to the educational landscape of Kansas. We are confident that the program will make a lasting impact and look forward to witnessing its success.

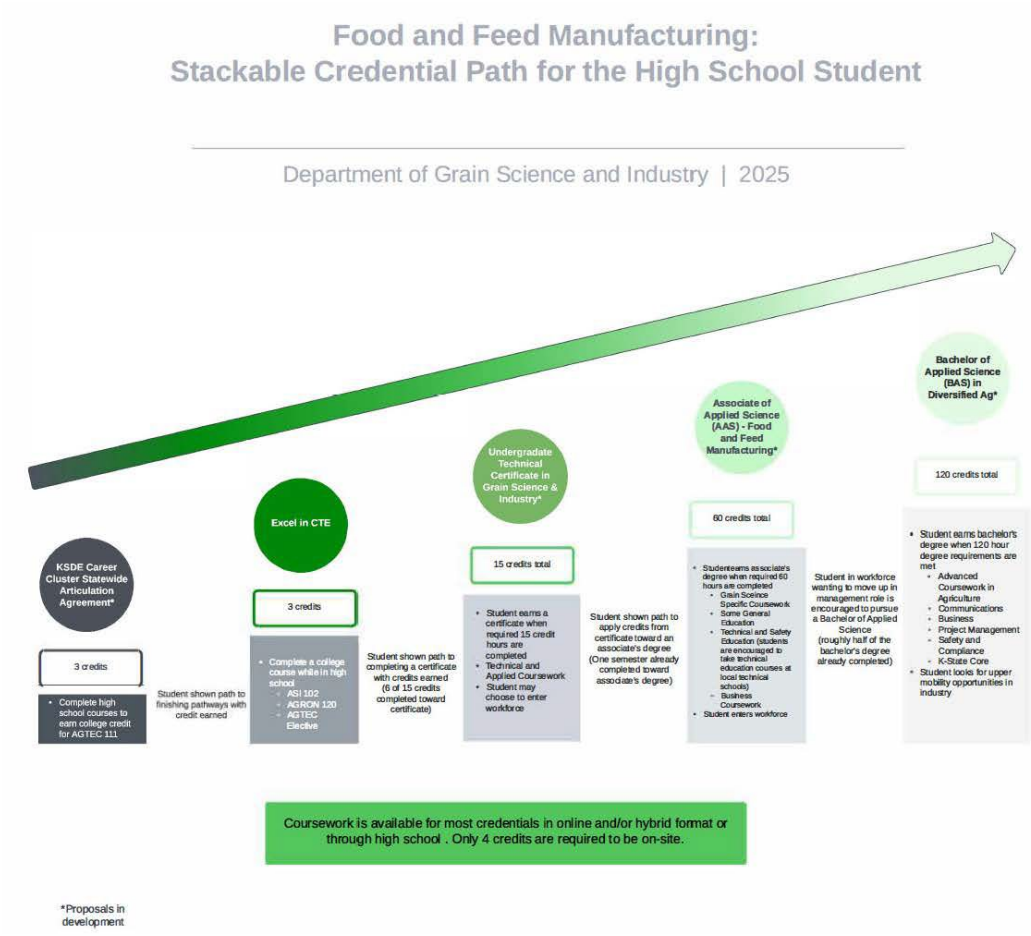
Sincerely,

Troy Anderson
Vice President | *Operations*
Cell: 316-200-2041

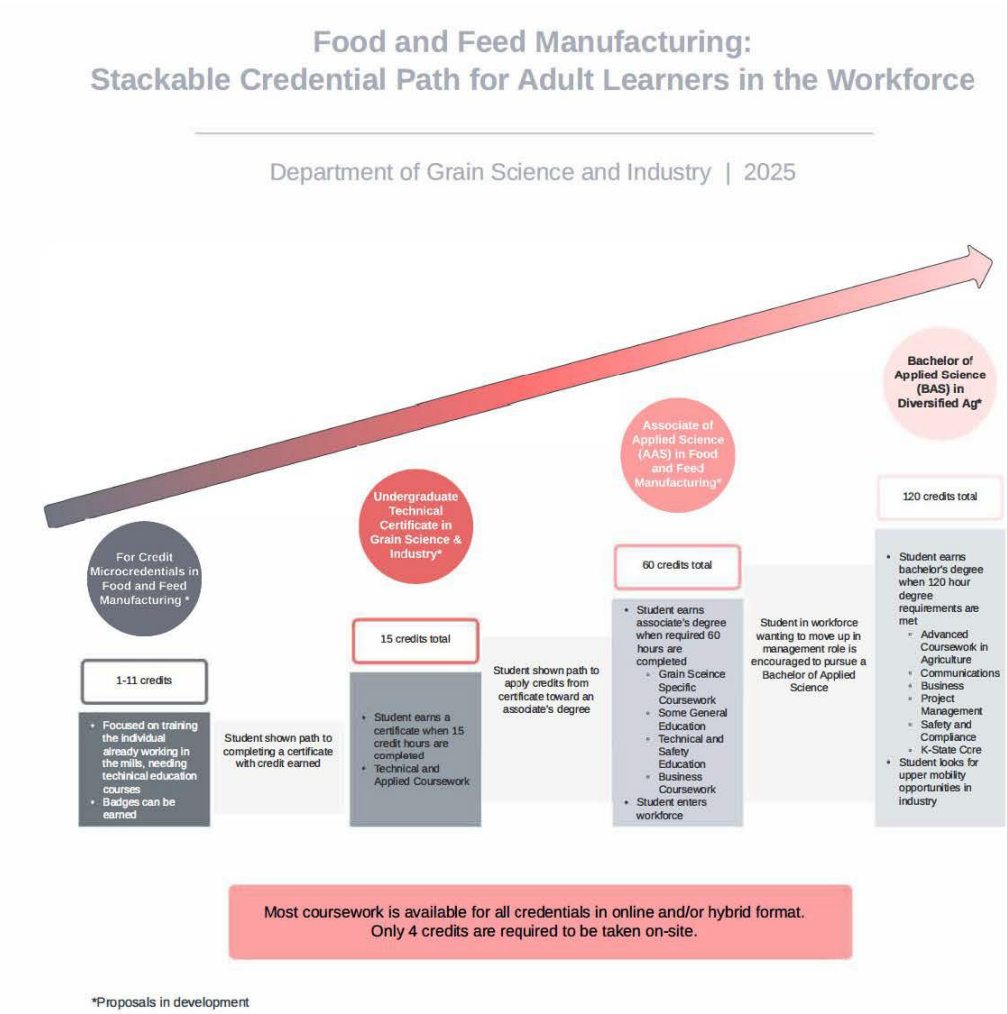
ardentmills.com

Ardent Mills
Nourishing what's next

Appendix II:


Food and Feed Manufacturing:
Stackable Credential Path for the High School Student
Department of Grain Science and Industry | 2025
KSDE Career Cluster Statewide Articulation Agreement*
3 credits
Complete high school courses to earn college credit for AGTEC 111
Student shown path to finishing pathways with credit earned
Excel in CTE
3 credits
Complete a college course while in high school
ASI 102
AGRON 120
AGTEC Elective
Student shown path to completing a certificate with credits earned (6 of 15 credits completed toward certificate)
Undergradate Technical Certificate in Grain Science & Industry*
15 credits total
Student earns a certificate when required 15 credit hours are completed
Technical and Applied Coursework
Student may choose to enter workforce
Student shown path to apply credits from certificate toward an associate's degree (One semester already completed toward associate's degree)
Associate of Applied Science (AAS) - Food and Feed Manufacturing*
60 credits total
Studentearns associate's degree when required 60 hours are completed
Grain Science Specific Coursework
Some General Education
Technical and Safety Education (students are encouraged to take technical education courses at local technical schools)
Business Coursework
Student enters workforce
Student in workforce wanting to move up in management role is encouraged to pursue a Bachelor of Applied Science (roughly half of the bachelor's degree already completed)
Bachelor of Applied Science (BAS) in Diversified Ag*
120 credits total
Student earns bachelor's degree when 120 hour degree requirements are met
Advanced Coursework in Agriculture
Communications
Business
Project Management
Safety and Compliance
K-State Core
Student looks for upper mobility opportunities in industry
Coursework is available for most credentials in online and/or hybrid format or through high school . Only 4 credits are required to be on-site.
*Proposals in development

Appendix III:



KANSAS STATE UNIVERSITY

Complete as of 9/16/2024

Degree: Associate of Applied Science
Major: Food and Feed Manufacturing

Distinctive Requirements for Degree Program
To Declare Major:

To Prepare for First Semester:

First Year

SEMESTER 1		Critical	Recommended	Kansas State Core	CREDITS
Requirement #1 English	Select 1 course from the list (i.e. ENGL 100 - Expository Writing I)			010	3
Requirement #3 Mathematics & Statistics	Select 1 course from the list (i.e. STAT 225 - Intro to Statistics)			030	3
ASMS 120	Intro to Food & Feed Manufacturing Employee Safety				1
ASMS 220	Employee Safety in Grain Handling Facilities				1
ASMS 221*	Safety Applications				1
FFM 100	Orientation to Food & Feed Manufacturing				1
FFM 110	Intro to Grain & Food Manufacturing Industries				1
FFM 111	Intro to Feed & Pet Food Manufacturing Industries				1
FFM 120	Ingredient ID & Quality: Cereal Grains				1
FFM 121	Ingredient ID & Quality: Oil Seeds & Legumes				1
FFM 122	Ingredient ID & Quality: Co-products & Additives				1
Select 1 course:					
FFM 159*/169*/179*	Practicum: Intro to Milling/Intro to Baking/Intro to Feed & Pet Food				1
	Total Credits				**16**

SEMESTER 2		Critical	Recommended	Kansas State Core	CREDITS
Requirement #2 Communication	Select 1 course from the list (i.e. COMM 106 - Public Speaking I)			020	3
Requirement #5 Social & Behavioral Science or #6 Arts & Humanities	Select 1 course from the list			050 or 060	3
Computer Applications Course	Select 1 course: AS1290 or CIS				1-3
Select 1 group:					3
FFM 150/151/152	Milling: Preparing Grains/Milling Process/Milling Specialty Grains				
FFM 160/161/162	Baking: Bakery Ingredients/Bakery Processes/Bakery Products				
FFM 170/171/172	Feed & Pet Food: Feed Processing/Pet Food Processing/Finished Feed & Pet Food Quality Assurance				
Specialization Elective Course	See Departmental List				3
	Total Credits				**13-15**

Second Year

SEMESTER 1		Critical	Recommended	Kansas State Core	CREDITS
Requirement #4 Natural & Physical Sciences	Select 1 course from the list (i.e. AGRON 120 & 121, Crop Science)			040	4
LEAD 212 or MANGT 220	Introduction to Leadership Concepts or Principles of Management				3
FFM 210	Food & Feed Manufacturing Equipment Maintenance				1
Select 1 course:					
FFM 215/216/217	Preventative & Predictive Maintenance: Milling Specific/Baking Specific/Feed & Pet Food Specific				1
Select 1 course:					
FFM 225*/226*/227*	Equipment Maintenance Practicum: Milling/Baking/Feed & Pet Food				1
Specialization Elective Course	See Departmental List				3
Management Elective Course	See Departmental List				3
					16

SEMESTER 2		Critical	Recommended	Kansas State Core	
FFM 250	Advanced Food & Feed Manufacturing Management				1
Select 1 course:					
FFM 251*/261*/271*	Advanced Management: Milling/Baking/Feed & Pet Food				1
Select 1 course:					
FFM 252/262/272	Advanced Manufacturing Management Practicum: Milling/Baking/Feed & Pet Food				1
FFM 280	Intro to Food & Feed Safety				1
Select 1 course:					
FFM 285/287	Food Safety Principles in Milling and Baking/Advanced Feed & Pet Food Safety				1
Specialization Elective Course	See Departmental List				3
Management Elective Course	See Departmental List				3
Management Elective Course	See Departmental List				3
Free Elective	If needed to reach 60 total hours				0-2
	Total Credits				**14-16**
	Program Total Credits:				**60**

*On-Site Course

Appendix IV

KANSAS ASSOCIATION OF
COMMUNITY COLLEGES

April 14, 2025

Dr. Blake Flanders
President and CEO
Kansas Board of Regents

Dear Dr. Flanders,

The 19 Kansas community colleges are grateful for the opportunity to share our thoughts regarding Kansas State University's (K-State) proposal to offer an Associate of Applied Science (AAS) degree in Food and Feed Manufacturing. For decades, awarding Associate Degrees has been the purview of Kansas community colleges. This proposal is different from the last few proposals for Associates degrees in that this degree is not intended to be a transfer degree. It is an AAS, which will generally not transfer, and be applicable to a Bachelor's degree. The community and technical college's mission is squarely in the area that K-State is trying to stray into. The community colleges would be happy to explore adding this program if demand exists at both the local and state level, as is required by KBOR program proposals (KBOR Policy Manual p. 25). While letters of support were submitted for this proposal, most of the letters had a common theme which could be described as stating that the company was pleased to hear about the program. There was no strong mention anywhere in any letter that there was a demand for an AAS degree, no numbers of employees that would be hired, and many of the letters were from out-of-state companies.

Community colleges became aware of K-State's effort to bring this program forward about a year ago. Immediately, Executive Director Heather Morgan reached out to K-State for a conversation and expressed concern that K-State would advance this proposal without discussing how to partner with community colleges prior to advancing this program. That conversation happened with Executive Vice President Marshall Stewart who connected her with an Assistant Dean of Agriculture. At that time, the Assistant Dean at K-State expressed that there was industry demand, that they were open to partnerships, and that they would initiate further discussions as the program developed and prior to going to the faculty senate for approval. **However, after this conversation there was no further communication.** During the initial conversation with K-State significant industry demand was stated repeatedly as the reason they wanted to start this program. However, during the period after our conversation, in which more "industry feedback" was being sought by K-State, community colleges noted that feedback for this program was sought through a post on LinkedIn. They also noticed that the feedback was being solicited through a survey that was open to anyone for a response. If robust industry demand had already been obtained, as was stated in preliminary discussions, this would be an unusual practice and certainly not a disciplined survey approach

required by KBOR policy. This type of industry feedback is not the formal process most programs go through, nor is it accepted for any AAS degree that would be approved through the Technical Education Authority (TEA) and KBOR for a community or technical college AAS degree. Additionally, the Technical Education Authority requires actual letters of support stating how the company will hire, interview, or work with graduates, and the colleges must also reach out to collaborate with other colleges prior to bringing the program forward. In this case, it appears that none of this occurred.

The community colleges unanimously oppose this program and are disappointed collaboration from K-State did not come to fruition. This situation will impact the trust between the colleges and K-State in future potential partnerships. Multiple community colleges have programs or courses similar to what is being proposed. Most community colleges could deliver many of the courses outlined in the proposal submitted to KBOR. Community colleges who have similar programs or were in areas where this may be of demand in the state expressed a desire and willingness to develop additional courses and work in partnership with K-State on any 200-level specialty courses needed where K-State believes they have specific expertise.

In closing, from a community college perspective, we believe it is important for colleges to seek collaborations and efficiencies in areas that allow students access to the knowledge needed to advance their careers in the least expensive and most accessible formats possible. K-State should not be allowed to enter the AAS space but should be encouraged to partner with community colleges to offer an AAS in this area if industry demand exists. We stand ready to partner and hope that this situation serves as an example for future new programs that collaboration is required rather than just creating new programs when existing resources could be deployed to meet the students' needs in specific content areas.

Sincerely, on behalf of Kansas Community College Presidents and Trustees,

Heather Morgan

Heather Morgan, Executive Director
Kansas Association of Community Colleges

Seth Macon Carter

Seth Macon Carter, Ed.D., President
Colby Community College

Appendix V

KANSAS STATE UNIVERSITY | Office of the Provost and Executive Vice President

May 4, 2025

Dr. Blake Flanders
President and CEO
Kansas Board of Regents

Dear Dr. Flanders,

Kansas State University offers the following response to the letter from Heather Morgan and Dr. Seth Macon Carter on behalf of the Kansas Association of Community Colleges, dated April 14, 2025.

The new Associate of Applied Science in Feed and Food Manufacturing developed by K-State was a direct response to a request from the Feed Manufacturing industry. K-State is one of only a few universities nationally with teaching and research programs in milling and feed and pet food manufacturing. While we are striving to increase the number of Bachelor of Science graduates in Milling Science and Management and Feed and Pet Food Science, the industry has also asked that we develop an associate's degree to meet their needs for additional highly skilled employees with specific training in feed milling. Some companies have indicated they intend to immediately enroll some of their current employees at company expense.

The College of Agriculture has no interest in developing associate's degree programs that duplicate existing offerings, or that Kansas community colleges could develop. K-State is uniquely positioned to offer the proposed associate's degree because of our unique infrastructure and human capital in this area.

For example, our Bioprocessing and Industrial Value-Added Products Innovation Center has unique, commercial-scale equipment such as extruders used in manufacturing of fish diets and pet food. K-State's Hal Ross Flour Mill, completed in 2006 at a cost of $12 million, and O.H. Kruse Feed Technology Innovation Center, completed in 2013 at a cost of $16 million, are unique, commercial-scale teaching and research facilities found nowhere else in the state. In fact, no universities in neighboring states have these types of feed or flour mills, designed specifically for teaching and research.

In addition, K-State's Department of Grain Science and Industry has eighteen faculty with specialized, unique training in all aspects of feed and food manufacturing. No other university in the nation has this capacity and expertise. Our International Grains Program

108 Anderson Hall, Manhattan, KS 66506-0113 | (785) 532-6224 | fax: (785) 532-6507 | k-state.edu/provost

offers short courses in milling and feed processing attended by industry professionals from all over the world, because no other institution has the same capacity for education in this area.

The only other U.S. universities with any capacity to deliver a program such as the one proposed are North Carolina State University, North Dakota State University, and Iowa State University. If the proposed program is not approved, industry stakeholders have indicated they will work with one of those universities to develop a similar associate's degree program. North Carolina State University already offers associate's degrees in agriculture, so they would be the most likely partner. It's worth noting that our facilities and our faculty are funded by the very companies who are requesting this new program. If we can not deliver on their workforce needs, they will likely direct their financial support to universities that can.

Regarding communication, Dr. Dan Moser, Associate Dean in the K-State College of Agriculture, spoke by Zoom about the program with Ms. Morgan in May of 2024. During that visit, Dr. Moser offered to join a meeting of the Kansas Association of Community Colleges, to share information about the program under development. No invitation was extended, but the offer to meet with the group still stands. If community colleges wish to develop equivalent courses to any of those developed for program, we can certainly accept them in the program. However, it's unlikely that the unique faculty or facility needs of those courses will be available at community colleges as they currently are at K-State.

We greatly value our partnership with Kansas community colleges, and in no way want to duplicate their efforts. This is a one-time unique program which leverages existing facilities and expertise to serve an industry which is a significant part of the Kansas economy, and has generously supported K-State.

Sincerely,

Jesse Perez Mendez
Provost and Executive Vice President
Kansas State University

108 Anderson Hall, Manhattan, KS 66506-0113 | (785) 532-6224 | fax (785) 532-6507 | k-state.edu/provost

Appendix VI

KANSAS BOARD OF REGENTS

May 15, 2025

Director Samantha Christy-Dangermond
Kanas Board of Regents – Academic Affairs Unit
1000 SW Jackson Street, Suite 520
Topeka, KS 66612

Director Christy-Dangermond,

As Chair of the Kansas Postsecondary Technical Education Authority (TEA), please accept this letter as my opposition to the proposed Associate of Applied Science (AAS) degree in Food and Feed Manufacturing submitted by Kansas State University (KSU).

This opposition is based on three primary concerns:

1. Board Policy Regarding associate degree Offerings by Universities
2. Compliance with AAS Program Criteria
3. Lack of TEA Involvement in the Program Development and Review Process

Board Policy on associate degree Offerings by State Universities
Board policy (Chapter II, Section 7, Subsection i) clearly states: "The roles of the state universities and the state's community colleges and technical colleges should be clearly differentiated. Therefore, with the exception of an associate degree as detailed in Chapter II.A.7.i.ii, the Board of Regents discourages the state universities from offering associate degrees in academic or technical programs where the baccalaureate is available…"

KSU currently offers four baccalaureate degrees within its Department of Grain Science and Industry. Approving an AAS program in the same field is inconsistent with the policy's intent to preserve program differentiation between university and technical/community college sectors.

The application cites industry demand as the driver of this program. However, it indicates that much of this demand originates in Iowa. Review of Lightcast data, using the occupation codes (19-1012 and 19-4013) associated with the provided CIP Code (01.1002), identified only three unique job postings in Kansas over the past five years. Additionally, Cowley Community College was approached by industry in 2019 to develop a milling program, which has already graduated 39 students in the last three years—further demonstrating that capacity exists within the current system to meet demand.

Program Alignment with AAS Degree Criteria
Board policy (Chapter III, Section 9, Subsection c) defines an associate in applied science degree as requiring:

- A total of 60 to 68 credit hours.
- At least 15 credit hours of general education; and
- A minimum of 30 credit hours of specialized technical content.

The program proposal presented to the Council of Chief Academic Officers on May 14, 2025, includes only 27 credit hours of technical coursework—18 in core content and 9 in the area of specialization. The proposal itself acknowledges that only 9 credit hours constitute specialized content, falling short of the 30-credit-hour requirement. This indicates the program is not yet in alignment with board-defined AAS standards.

Lack of TEA Involvement in University Technical Program Development
Per K.S.A. 74-32,402, the TEA is delegated the authority to: "Coordinate state-wide planning for postsecondary technical education, new postsecondary technical education programs, and contract training…"

This includes collaboration with state agencies, federal bodies, and Kansas business and industry. However, recent trends show that technical programs developed by universities are often moving forward without input from the TEA, community colleges, or technical colleges. I do not believe this is a deliberate exclusion, but rather a gap in evolving procedures that requires attention and coordination moving forward.

In summary, I oppose the proposed AAS in Food and Feed Manufacturing at KSU for the following reasons:

- It contradicts Board policy discouraging associate degree offerings at universities where related baccalaureates exist.
- It does not meet the credit hour requirements defined for AAS degrees.
- It was developed without sufficient coordination with the TEA or relevant stakeholders in the technical education system.

I urge the Board to uphold the integrity of established policies and processes that foster collaboration and system-wide alignment.

Thank you for your time and thoughtful consideration of these concerns.

Ray Frederick

Ray Frederick,
Chair, Kansas Postsecondary Technical Education Authority

Cc: Dr. Blake Flanders

Kansas State University – AAS in Food & Feed Manufacturing
Program & Employment Analysis – Provided by Board Staff

1. Market Share Figures

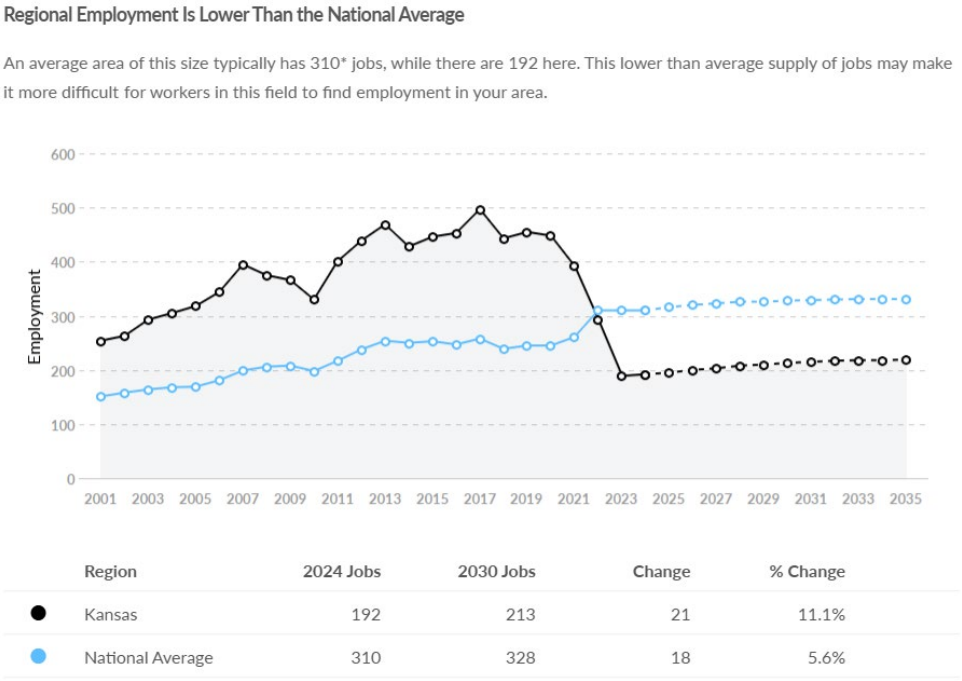
There are no other associate programs in the state that share the same Classification of Instructional Program (CIP) code (01.1002) as this proposed program. However, Cowley Community College offers **certificate programs** with this specific CIP. Numbers of completers are shared below.

Number of Certificates in Food Technology & Processing Completers by Year						
Institution	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Cowley Community College	N/A	N/A	8	6	4	18

2. State & National Projections for Employment Linked to the Proposed Degree Program

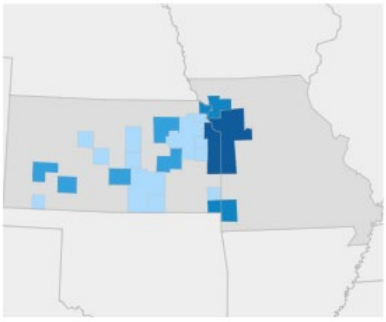
There are two "target occupations" as identified by Lightcast for this program of study:

1. Food Scientists & Technologists
2. Food Science Technicians



3. Kansas Geographical Information on Projected Employment Linked to the Degree Program Proposal

Regional Breakdown

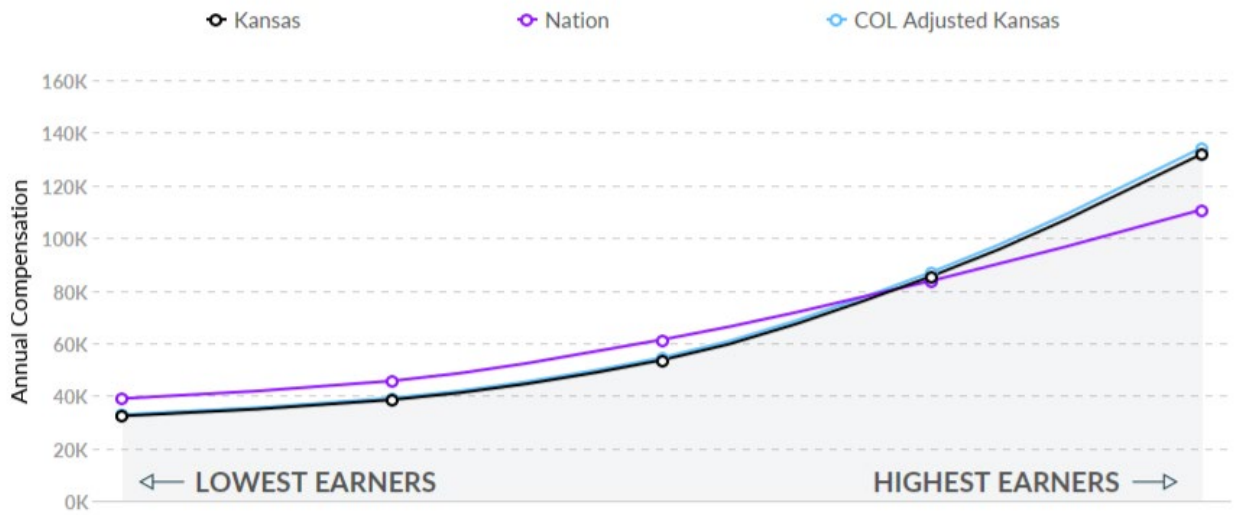


MSA	2024 Jobs
Kansas City, MO-KS	132
St. Joseph, MO-KS	30
Joplin, MO-KS	28
Manhattan, KS	17
Hutchinson, KS	12

4. 2023 Regional & National Employment Wage Information Linked to the Degree Program Proposal

Regional Compensation Is 13% Lower Than National Compensation

For your occupations, the 2023 median wage in Kansas is $53,483, while the national median wage is $61,246.



5. Minimum Education Breakdown for Jobs Posted March 2024 – March 2025

Minimum Education Breakdown

Minimum Education Level	Unique Postings (minimum)	Unique Postings (max advertised)	% of Total (minimum)
High school or GED	6	0	5%
Associate's degree	11	0	9%
Bachelor's degree	63	3	50%
Master's degree	6	25	5%
Ph.D. or professional degree	5	13	4%

6. References

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Lightcast. (n.d.). *Job Posting Analytics*. Retrieved April 14, 2025, from https://analyst.lightcast.io/analyst/?t=4p8dq#h=6QjAljOhjNGGzou0QWubcZCp0Vd&page=postings_report&vertical=standard&nation=us

Program Approval

Summary

Universities may apply for approval of new academic programs following the guidelines in the Kansas Board of Regents Policy Manual. Kansas State University has submitted an application for approval and the proposing academic unit has responded to all of the requirements of the program approval process. ***Please note, K-State is requesting to require 123 hours for this program.***

May 28, 2025

I. General Information

A. Institution	Kansas State University
B. Program Identification	
Degree Level:	Bachelor's Program
Program Title:	Nuclear Engineering
Degree to be Offered:	Bachelor of Science in Nuclear Engineering
Responsible Department or Unit:	Alan Levin Department of Mechanical and Nuclear Engineering
CIP Code:	14.2301
Modality:	Face-to-Face
Proposed Implementation Date:	Fall 2025

Total Number of Semester Credit Hours for the Degree: 123

II. Clinical Sites: Does this program require the use of Clinical Sites? No.

III. Justification

Kansas State University (KSU) has a rich tradition in the field of nuclear engineering. In 1952, KSU established a nuclear engineering curriculum in the Department of Chemical Engineering, followed in 1958 by the creation of a dedicated Department of Nuclear Engineering. In 1964, KSU's nuclear engineering program was the first in the nation to gain accreditation. Over the next 30 years, KSU graduated many nuclear engineers who went on to become national and world leaders in the field. Due to a nationwide decline in perceived demand for nuclear engineers, KSU joined many other universities in discontinuing its Bachelor of Science (BS) in Nuclear Engineering (NE) program in 1996. However, KSU preserved nuclear engineering education at the undergraduate level by creating the NE Option, a subplan for the BS in Mechanical Engineering (ME) program. The NE Option presently consists of four technical elective courses in the junior and senior years: Radiation Protection and Shielding, Principles of Radiation Detection, Nuclear Reactor Theory, and Nuclear Reactor Laboratory. All students pursuing the BS ME degree are required to take an introductory course in nuclear engineering, and an elective course on nuclear reactor operations is available for students who wish to gain experience with the KSU Research Reactor, a federally licensed non-power reactor facility. **KSU has the only nuclear engineering program at any level in the State of Kansas.**

Demand for the NE Option has increased considerably in recent years, likely driven by availability of generous academic scholarships, student and parent recognition of degree versatility, and employer demand. In the period 2017-2024, an average of 10 students per year graduated after completing the NE Option subplan. An average of 22 students were enrolled each semester in the first course of the NE Option, Radiation Protection and Shielding, with 30 students enrolled in Fall 2024. Estimates based on the number of students who have declared the NE Option indicate a BS NE student body of between 70 and 90 students in AY 2025-2026, with further growth fueled by dedicated recruiting that is not presently available to the NE Option and increased employer demand as nuclear power takes a more prominent role in the US energy mix.

In response to feedback from the Mechanical and Nuclear Engineering Industrial Advisory Board, input from NE

Option graduates, and informal discussions with current students, nuclear engineering faculty explored the possibility of modifying the existing NE Option subplan to produce a KBOR-compliant, ABET-accreditable BS NE program. Minor modifications to the NE Option subplan of the BS ME degree were required, mainly to meet program specific requirements imposed by ABET. In the process, two credit-hours were eliminated from the curriculum, reducing the required number of credit-hours to complete the degree from 125 to 123. **Most importantly, the proposed BS NE program requires no additional faculty and conservative estimates indicate that the program will be immediately profitable for KSU.**

It is also important to note that BS NE and BS ME degree programs include some similar coursework, which is typical for these degrees at other universities. Under existing BS ME program policies and proposed BS NE program policies, a student could obtain the BS ME and BS NE in as few as 131 credit-hours and in four years. **Therefore, students will have a clear path to obtaining the BS ME degree while also obtaining the BS NE degree. This is likely to be of increased interest to students prior to BS NE degree ABET accreditation, which is anticipated to occur in 2029.**

IV. Program Demand: Market Analysis

The primary customers for this major are expected to be on-campus students who plan to enter the nuclear engineering workforce in Kansas or at other locations in the United States. **KSU has the only nuclear engineering program in Kansas at any level and is poised to become a regional leader in undergraduate nuclear engineering education**. Similar undergraduate programs exist at Colorado School of Mines (n.d.) and Missouri University of Science and Technology (n.d.), but there are no colleges or universities offering BS NE degrees in Nebraska, South or North Dakota, Minnesota, Iowa, Oklahoma, or Arkansas. Oklahoma State University (n.d.) and the University of Texas-Austin offer a nuclear engineering minor (n.d.). Texas A&M University offers the BS NE degree (n.d.), but many students from Texas to seek engineering degrees at Kansas State University for various reasons. The University of New Mexico offers a BS NE degree (n.d.), as well.

Demand for nuclear engineering courses at KSU as judged by enrollment in the NE Option subplan has been substantially increasing over the last few years. From 2019-2021, an average of 35 students each academic year pursued the NE Option subplan. Over the last few years, that number has increased to 58 students in AY 2023-2024, representing an increase of more than 65%. This increase in students pursuing the NE Option is likely related to the availability of scholarships for nuclear engineering students, through professional organizations such as the American Nuclear Society (n.d.) and federal agencies such as the US Department of Energy (Nuclear Energy University Programs, n.d.), and the recent bipartisan recognition (U.S. Senate Committee on Environment & Public Works, 2024) that nuclear power must play a prominent role in baseload power generation as demand for electrical power continues to increase in the United States and across the world.

V. Projected Enrollment for the Initial Three Years of the Program

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	83	0	450	0
Year 2	87	0	468	0
Year 3	90	0	486	0

NE Option enrollment for students classified as juniors or seniors was 22 in 2021, 26 in 2022, and 41 in 2023. We expect that the growth trends would continue and then level off, with projected numbers of 50 in AY2026, 55 in AY2027, 58 in AY2028, and 60 in AY2029.

The total headcount in the proposed program in AY26, AY27, and AY28, was estimated by multiplying the projected numbers for these years based on junior/senior NE option students by a factor of 1.5. This factor accounts for freshmen and sophomore contributions to the headcount while conservatively accounting for students who

enter the program greater than freshman status due to transfer credits and current students who may elect to remain in the NE Option.

Only required NE courses were included in the calculation of total semester credit hours per year shown above. These values were calculated by assuming that 20% of the headcount takes each required NE course each year. This conservatively assumes an average time to graduation of 5 years. The proposed program is designed for students to complete the BS NE degree in 4 years with reasonable courseloads each semester.

VI. Employment

Nuclear engineering is a versatile discipline with graduates that work in the commercial power, government, defense, and health sectors of the economy. Within the State of Kansas and the greater Kansas City metropolitan area, nuclear engineers work for entities including Honeywell Kansas City National Security Campus, Wolf Creek Nuclear Operating Corporation, Evergy, Enercon, Kiewit, Burns and McDonnell, Kansas Department of Health and Environment, and Radiation Detection Technologies, Inc., a Manhattan, Kansas-based small business that was founded out of the KSU Semiconductor Materials and Radiological Technologies Laboratory. Across the country, nuclear engineering graduates from KSU work at NASA's Lyndon B. Johnson Space Center, Westinghouse, General Electric-Hitachi, Nebraska Department of Health and Human Services, Bettis Atomic Power Laboratory, Los Alamos National Laboratory, Idaho National Laboratory, Naval Information Warfare Systems Center Pacific, and Oak Ridge National Laboratory, among others.

The US Bureau of Labor and Statistics (BLS) Occupational Outlook Handbook (2023) indicates a small decline in the number of nuclear engineering positions over the next decade; however, the job outlook predicts about 700 openings for nuclear engineers per year on average over the period of 2023-2033, driven by retirements in the nuclear engineering workforce. BLS estimates do not account for the requisite expansion of nuclear power in the US to meet increasing demand, driven higher by data centers feeding the on-going AI boom. For example, **nuclear electric power generation jobs increased by nearly 1600 in 2023** alone (U.S. Department of Energy, 2024), far outpacing the BLS outlook. Furthermore, a recent US Department of Energy report (2024) on advanced nuclear power commercial deployment indicates that **a workforce of nearly 400,000 people is required to meet US Government nuclear energy production goals by 2050**. A large fraction of that workforce will consist of nuclear engineers who work on design, licensing, and operation of nuclear power plants. Nuclear engineers are well-compensated, with **2023 median pay of $125,460 per year for roles that typically require only a bachelor's degree and no work experience in a related occupation** (U.S. Bureau of Labor Statistics, 2023). In summary, demand for nuclear engineers is certain to remain strong and is likely to increase substantially over the next decade, and nuclear engineering salaries are likely to remain very high relative to other engineering disciplines.

VII. Admission and Curriculum

A. Admission Criteria

The admission criteria are the same as those of the KSU Carl R. Ice College of Engineering.

B. Curriculum

Year 1: Fall **SCH = Semester Credit Hours**

Course #	Course Name	SCH
ME 212	Engineering Graphics	2
MATH 220	Analytic Geometry and Calculus I (KSC 030)	4
DEN 160	Engineering Orientation	1
DEN 161	Engineering Problem Solving	1
CHM 210	Chemistry I	4
ENGL 100	Expository Writing I (KSC 010)	3
	Total Hours	15

Year 1: Spring

Course #	Course Name	SCH
MATH 221	Analytic Geometry and Calculus II	4
PHYS 213	Engineering Physics I (KSC 040)	5
CHE 354	Basic Concepts in Materials Science and Engineering	1
CHE 355	Fundamentals of Mechanical Properties	1
COMM 106	Public Speaking (KSC 020)	3
ENGL 200	Expository Writing II (KSC 010)	3
	Total Hours	17

Year 2: Fall

Course #	Course Name	SCH
CIS 209	Computer Programming for Engineers (Python)	3
MATH 222	Analytic Geometry and Calculus III	4
PHYS 214	Engineering Physics II	5
NE 495	Elements of Nuclear Engineering	3
	Total Hours	15

Year 2: Spring

Course #	Course Name	SCH
	Social & Behavioral Sciences Requirement (KSC 050) *	3
MATH 340	Differential Equations	4
CE 333	Statics	3
ME 513	Thermodynamics	3
NE 415	Introduction to Engineering Analysis	3
	Total Hours	16

Year 3: Fall

Course #	Course Name	SCH
	Social & Behavioral Sciences Requirement (KSC 050) *	3
CE 533	Mechanics of Materials	3
ME 512	Dynamics	3
ECE 519	Electric Circuits for Engineers	3
NE 690	Radiation Protection and Shielding	3
	Total Hours	15

Year 3: Spring

Course #	Course Name	SCH
	Arts & Humanities Requirement (KSC 060) **	3
	Restricted Technical Elective ***	3
ME 571	Fluid Mechanics	3
NE 650	Nuclear Fuel Cycles +	3
NE 612	Principles of Radiation Detection	3
	Total Hours	15

Year 4: Fall

Course #	Course Name	SCH
ME 573	Heat Transfer	3
ME 574	Interdisciplinary Industrial Design Project I	3

NE 640	Nuclear Reactor Thermal Hydraulics	3
NE 630	Nuclear Reactor Theory	3
	Free Electives {Institutionally Designated Area} (KSC 070)	3
	Total Hours	15

Year 4: Spring

Course #	Course Name	SCH
	Arts & Humanities Requirement (KSC 060) **	3
NE 585	Nuclear Engineering Design Projects +	3
NE 648	Nuclear Reactor Laboratory	3
	Free Electives {Institutionally Designated Area} (KSC 070)	3
	Nuclear Engineering Elective ++	3
	Total Hours	15

* Any two courses meeting KSC-5 requirements may be taken
** Any two courses meeting KSC-6 requirements may be taken
*** Any course from the restricted elective list may be taken
\+ New course not yet in undergraduate catalog
++ Any course from the nuclear engineering elective list may be taken

Total Number of Semester Credit Hours ……. 123

To graduate with a Bachelor of Science in nuclear engineering, students must have a ≥ 2.200 GPA in all ME/NE classes ≥ 400 level taken for undergraduate credit at Kansas State University. Course grades that have been removed by the K-State Retake policy will not apply to this GPA calculation.

*****List of restricted electives**

- NE at or above the 300 level
- ME at or above the 500 level (except ME 519)
- BAE at or above the 200 level
- BME at or above the 200 level
- CE at or above the 200 level (except CE 202, CE 212, CE 530)
- CHE at or above the 200 level
- CIS at or above the 200 level
- ECE at or above the 200 level
- ENVE at or above the 200 level
- IMSE at or above the 200 level
- MATH at or above the 500 level
- CHM at or above the 230 level
- PHYS at or above the 325 level
- BIOL at or above the 190 level
- BIOCH at or above the 250 level
- STAT at or above the 500 level
- GEOL at or above the 360 level

++List of nuclear engineering electives

- NE at or above the 600 level
- ME 777: Monte Carlo Methods
- ME 760: Engineering Analysis I

VIII. Core Faculty

Note: * Next to Faculty Name Denotes Director of the Program, if applicable
FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
Amir Bahadori *	Associate Professor	PhD	Y	Radiation Protection	0.1875
Ronnie Brockhoff	Teaching Associate Professor	PhD	N	Radiation Transport	0.25
Anna Iskhakova	Research Assistant Professor	PhD	N	Thermal Hydraulics Nuclear Fuels	0.125
Arsen Iskhakov	Assistant Professor	PhD	Y	Thermal Hydraulics	0.125
Douglas McGregor	University Distinguished Professor	PhD	Y	Radiation Detection Nuclear Materials	0.125
Walter McNeil	Associate Professor	PhD	Y	Radiation Detection Systems	0.125
Jeremy Roberts	Associate Professor	PhD	Y	Reactor Physics	0.4375

Number of graduate assistants assigned to this program ..... **1 (existing)**

IX. Expenditure and Funding Sources

A. EXPENDITURES	**First FY**	**Second FY**	**Third FY**
1. Personnel – Reassigned or Existing Positions			
Faculty	$ -	$ -	$ 155,900
Administrators *(other than instruction time)*	$ -	$ -	$ -
Graduate Assistants	$ -	$ -	$ 26,500
Support Staff for Administration (*e.g., secretarial*)	$ -	$ -	$ -
Fringe Benefits *(total for all groups)*	$ -	$ -	$ 55,200
Other Personnel Costs	$ -	$ -	$ -
Total Existing Personnel Costs – Reassigned or Existing	$ 224,000	$ 230,800	$ 237,600
2. Personnel – New Positions			
Faculty	$ -	$ -	$ -
Administrators *(other than instruction time)*	$ -	$ -	$ -
Graduate Assistants	$ -	$ -	$ -
Support Staff for Administration (*e.g., secretarial*)	$ -	$ -	$ -
Fringe Benefits *(total for all groups)*	$ -	$ -	$ -
Other Personnel Costs	$ -	$ -	$ -
Total Existing Personnel Costs – New Positions	$ -	$ -	$ -
3. Start-up Costs - One-Time Expenses			
Library/learning resources	$ -	$ -	$ -

Equipment/Technology	$ -	$ -	$ -
Physical Facilities: Construction or Renovation	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Start-up Costs	$ -	$ -	$ -
4. Operating Costs – Recurring Expenses			
Supplies/Expenses	$ -	$ -	$ -
Library/learning resources	$ -	$ -	$ -
Equipment/Technology	$ -	$ -	$ -
Travel	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Operating Costs	$ -	$ -	$ -
GRAND TOTAL COSTS	**$ 224,000**	**$ 230,800**	**$ 237,600**

B. FUNDING SOURCES *(projected as appropriate)*	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds		$ 216,000	$ 235,800	$ 257,100
Student Fees		$ 47,500	$ 49,400	$ 51,300
Other Sources		$ -	$ -	$ -
GRAND TOTAL FUNDING		$ 263,500	$ 285,200	$ 308,400
A. Projected Surplus/Deficit (+/-) (Grand Total Funding *minus* Grand Total Costs)		**$ 39,500**	**$ 54,400**	**$ 70,800**

X. Expenditures and Funding Sources Explanations

A. Expenditures

1. Personnel – Reassigned or Existing Positions

The faculty members identified in Section VIII, Core Faculty, will contribute the stated fractional FTE to the program. The cost to the program was estimated by multiplying the salary and associated fringe for each faculty member by the stated fractional FTE. For Ronnie Brockhoff, this number was multiplied by 0.2 to account for the fact that NE 495, Elements of Nuclear Engineering, will be taken by both BS ME and BS NE students for the foreseeable future, and approximately 20% of the students each year are anticipated to be BS NE students. All current salaries were inflated by 3% per year to account for cost-of-living adjustments, including for AY 2025-2026. Fringe was estimated as 33% of salary.

One GTA with an AY 2025-2026 salary of $25,000 will be allocated to the program. This salary was inflated by 3% per year to account for cost-of-living adjustments. Fringe was estimated as 14% of salary for the GTA.

All values presented in the table were rounded to the nearest $100.

2. Personnel – New Positions

No new positions required for this program.

3. Start-up Costs – One-Time Expenses

No start-up costs required for this program.

4. Operating Costs – Recurring Expenses

No recurring expenses required for this program. Existing nuclear engineering laboratories are being maintained

by the Alan Levin Department of Mechanical Engineering using departmental funds.

B. Revenue: Funding Sources

The AY 2024-2025 base tuition rate for undergraduate students at KSU is $341.42 per credit hour for in-state status and $919.65 per credit hour for out-of-state status (Kansas State University, 2024). Engineering fees are $105.60 per credit hour for both in-state and out-of-state students (Kansas State University, 2024). For the purposes of computing tuition revenue, we assume that 80% of BS NE students have in-state status while 20% of BS NE students have out-of-state status, roughly corresponding to data from the most recent KSU Carl R. Ice College of Engineering fact book (Kansas State University College of Engineering, 2024).

An inflation rate of 5% is applied to base tuition, including for AY 2025-2026, corresponding to recent historical trends (Kansas State University College of Engineering, 2024). Engineering fees have not changed in recent years and are conservatively assumed to remain constant through the first three years of the program.

C. Projected Surplus/Deficit

Even under conservative assumptions, the proposed program will be immediately profitable, with a growing profit margin over the first three years. The return-on-investment is projected to grow from 18% in the first year to 30% in the third year. The program is projected to be profitable with a minimum enrollment of about 70 students.

XI. References

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Kansas State University – BS in Nuclear Engineering

Program & Employment Analysis – Provided by Board Staff

1. Market Share Figures

There are no other baccalaureate programs in the state that share the same Classification of Instructional Program (CIP) code (14.2301) as this proposed program.

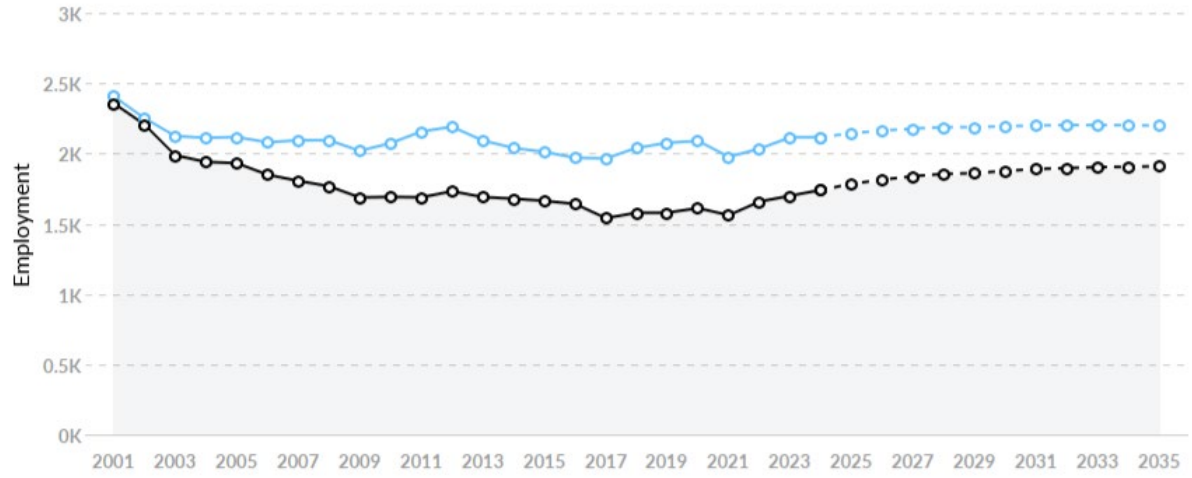
2. State & National Projections for Employment Linked to the Proposed Degree Program

There are two "target occupations" as identified by Lightcast for this program of study:

1. Architectural and Engineering Managers
2. Nuclear Engineers

Regional Employment Is Lower Than the National Average

An average area of this size typically has 2,116* jobs, while there are 1,741 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.

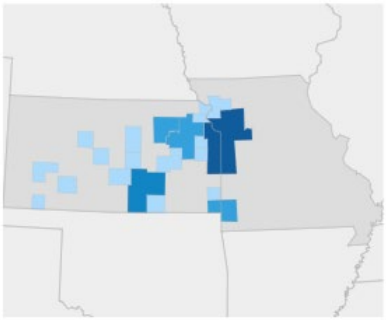


	Region	2024 Jobs	2030 Jobs	Change	% Change
●	Kansas	1,741	1,876	135	7.7%
●	National Average	2,116	2,194	78	3.7%

*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and Kansas. In other words, the values represent the national average adjusted for region size.

3. Kansas Geographical Information on Projected Employment Linked to the Degree Program Proposal

Regional Breakdown

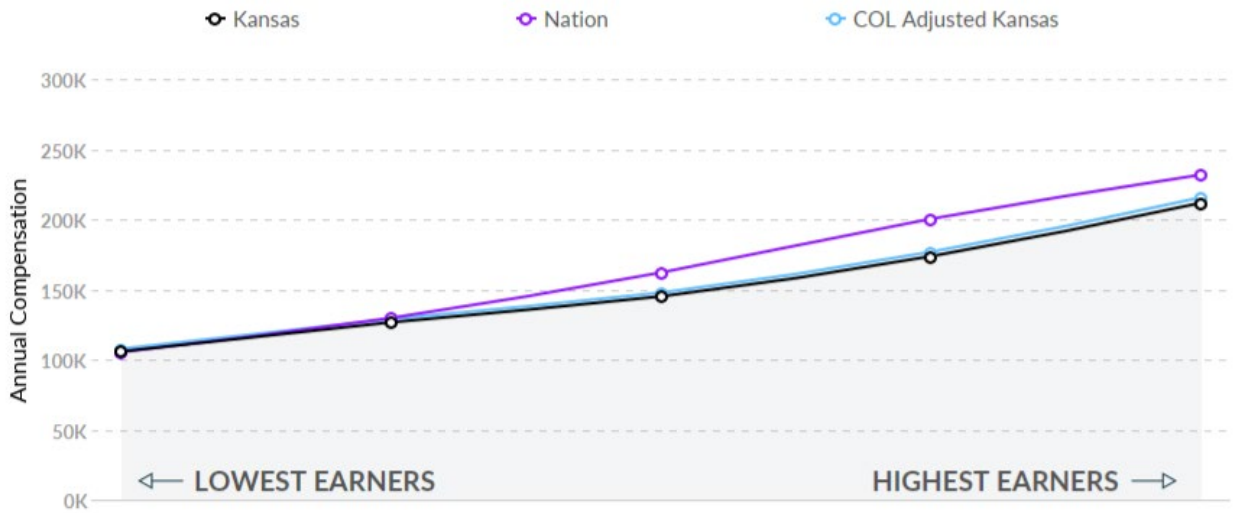


MSA	2024 Jobs
Kansas City, MO-KS	1,180
Wichita, KS	434
Joplin, MO-KS	70
Topeka, KS	52
Manhattan, KS	44

4. 2023 Regional & National Employment Wage Information Linked to the Degree Program Proposal

Regional Compensation Is 10% Lower Than National Compensation

For your occupations, the 2023 median wage in Kansas is $145,005, while the national median wage is $162,015.



5. Minimum Education Breakdown for Jobs Posted March 2024 – March 2025

Minimum Education Breakdown

Minimum Education Level	Unique Postings (minimum)	Unique Postings (max advertised)	% of Total (minimum)
High school or GED	52	0	4%
Associate's degree	35	1	2%
Bachelor's degree	959	58	67%
Master's degree	18	265	1%
Ph.D. or professional degree	6	29	0%

6. References

Lightcast. (n.d.). *Program Overview*. Retrieved April 22, 2025, from https://analyst.lightcast.io/analyst/?t=4pM1b#h=1xT8LrcjWxc.DCI.yPK5.2okHHZ&page=program_market_demand&vertical=standard&nation=us

Lightcast. (n.d.). *Occupation Overview*. Retrieved April 22, 2025, from https://analyst.lightcast.io/analyst/?t=4pM1b#h=47oQ57bjGVl.Zo9BdYJ7X0qgKvN&page=occupation_snapshot&vertical=standard&nation=us

Lightcast. (n.d.). *Job Posting Analytics*. Retrieved April 22, 2025, from https://analyst.lightcast.io/analyst/?t=4pM1b#h=4aephZXEgaVtaQQvnK35jtBimDH&page=postings_report&vertical=standard&nation=us

Summary

Kansas State University is proposing changes to Qualified Admissions for freshman applicants under the age of 21. K-State proposes to admit such students having a 21 or higher ACT score and a cumulative high school GPA of at least a 2.5, or students having a cumulative high school GPA of at least a 3.0, regardless of test score. Such applicants would still be required to have at least a 2.0 GPA on any college coursework taken while in high school. Board staff recommends approval. If the changes in admissions requirements are approved, regulatory amendments are required to effect such changes.

May 14, 2025

Background

In September of 2019, the Board approved changes to Qualified Admission criteria, removing the pre-college curriculum requirement for freshman applicants under the age of 21, and the option of ranking in the top one-third of the class, and adding the option for guaranteed admission with at least a 2.25 cumulative high school GPA for freshmen at Emporia State University, Fort Hays State University, Pittsburg State University, and Wichita State University, regardless of ACT score. These institutions will also admit freshmen under the age of 21 with an ACT score of at least 21. All the aforementioned options require a student to achieve at least a 2.0 GPA on any transferable college coursework taken while in high school. KU's new admissions criteria of a minimum 3.0 high school GPA regardless of test score or an ACT score of 24 with a minimum high school GPA of 2.5 of a 4.0 scale were approved during the Spring 2025 term, and will not go into effect before the fall semester of 2029. KU will also continue to require at least a 2.0 GPA on any transferable college coursework taken while in high school.

Currently, Kansas State University requires the following:

- minimum 3.25 high school GPA, or
- minimum of 21 on the ACT

Qualified Admissions Matrix

Admission is guaranteed for resident and non-resident freshmen applicants under the age of 21 if they meet either the GPA or ACT criteria outlined below unless otherwise specified.

	Cumulative High School GPA	Cumulative College Credit Hours GPA	Minimum ACT Composite Score
Emporia State University	2.25	2.00	21
Fort Hays State University	2.25	2.00	21
Pittsburg State University	2.25	2.00	21
Wichita State University	2.25	2.00	21
University of Kansas	3.00	2.00	24*
Kansas State University Current	3.25	2.00	21
Kansas State University Proposed	3.00	2.00	21**

**The University of Kansas will require a 24 minimum ACT and at least a 2.5 high school GPA for guaranteed admission. These changes were approved by the Board on February 12, 2025.*

***Kansas State University is proposing a 21 minimum ACT and at least a 2.5 high school GPA for guaranteed admission.*

Proposal

Kansas State is proposing the following guaranteed options for freshmen:

- minimum 3.0 high school GPA regardless of test score or with no test score, *or*
- minimum of 21 on the ACT and a minimum 2.5 high school GPA

Both above options would continue to require a student to achieve at least a 2.0 GPA on any transferable college coursework while in high school.

Timing
Kansas State would like the above options to be effective as soon as possible in accordance with K.S.A. 76-717. Should the Board approve these changes, the process of updating the associated regulations will begin, which typically requires nine to twelve months. Once that process is completed, the Board will need to act on the regulations. Further, per K.S.A. 76-717,

> *Rules and regulations adopted pursuant to this subsection that are more rigorous than those set forth in subsection (a) shall not be effective prior to the first day of the fourth academic year following the year in which the rules and regulations are adopted.*

Paraphrasing subsection (a) of the statute, each resident graduating from an accredited high school (under the age of 21) must achieve one of the following:

- completion of pre-college curriculum (or functional equivalent) with a minimum 2.0 high school GPA, **OR**
- minimum of 21 on ACT, **OR**
- rank in top one-third of high school class

K-State's proposed admission requirements for a resident graduating from an accredited high school include one of the following:

- minimum 3.0 high school GPA regardless of test score or with no test score, *or*
- minimum of 21 on the ACT and a minimum 2.5 high school GPA

The proposed requirements appear more rigorous than those set forth in subsection (a) of K.S.A. 76-717. **Given the levels of approval required and the waiting period required by state statute, the soonest the proposed requirements could go into effect would be for students applying for the Fall 2029 semester (Academic Year 2030).**

Rationale
K-State has provided the following rationale to support the proposed changes.

- both yield and retention rates are lower for students admitted by test score alone over the last five years;
- maintains competitive admission criteria with other Midwest universities with high or very high research activity;
- expands the GPA- based admission pathway to students with cumulative high school GPA of 3.0 - 3.24 providing increased access as the state's signature land grant university;
- students who do not meet qualified admission requirements will still go through a holistic committee review for consideration.

Recommendation
Board staff recommends approval of K-State's proposed changes to Qualified Admission requirements. If approved, the regulatory change process will begin.