IGP Supporters and Partners

Supporters

Partners
# Table of Contents

**Director’s Message** ........................................... 2

**Remembering Mark Fowler** .................................. 3

**IGP Institute Participant Map** ............................. 4–5

## 2023 Features

**Working with Wheat** ........................................... 6–7

**More Than Fish Food** ......................................... 8–9

**Educating FAS Officials** ...................................... 10–11

**Building International Partnerships** ...................... 12–13

**Focused on Feed** .............................................. 14–15

**Enhanced Education** .......................................... 16–17

**2023 IGP Institute Year in Photos** ......................... 18–21

**2023 by the Numbers** ......................................... 22–25

**Our Facilities** .................................................. 26–27

**Faculty and Staff Directory** ................................. 27–28
2023 was another successful year for the IGP Institute. Attendance and interest in our programs have continued to grow, and we have added additional staff and new course offerings in our curriculum areas.

April Darnell was hired as the new Education Manager and started in January. April transitioned to IGP from K-State’s English Language Program, where she was a faculty instructor and advising coordinator. As the Education Manager for the IGP Institute, April leads the design and management of the professional development distance education programs and coordinates with IGP staff, Department of Grain Science and Industry faculty, and industry professionals to support the delivery of quality on-site and virtual workshops, programs, and courses.

Kate Williamson was hired in November as the new Event Coordinator and Communications Specialist. She previously worked for the College of Arts and Sciences as their Event and Social Media Coordinator and will have similar responsibilities at IGP. She is currently a graduate student at Kansas State University studying mass communications.

2023 saw the return of our educational partnership with the Grain Elevator and Processing Society (GEAPS). We are again offering the joint grain elevator managers course with topics including personnel management; grain quality management; grain handling equipment; grain drying; grain operations costs; grain inventory management; grain receiving and shipping; grain condition monitoring; grain aeration strategies; and fumigation. The GEAPS/K-State Hands-On Training for the Operation and Maintenance of Conveying Equipment course has also returned and was held in December. Participants learned how to safely operate, maintain, and repair conveying equipment commonly used in grain facilities through instructor demonstrations and hands-on practice.

IGP has expanded our curriculum areas and now offers additional courses focused on baking with a basic course covering breads, cakes, and cookies, and an advanced breads course. The first offering of another new course in 2023 covered the science and practical application of flour and dough testing.

In 2024 we will offer a new brewing and fermentation science course held in partnership with the Manhattan Brewing Company, industry professionals, and faculty from Kansas State University. It covers all facets of the brewing process including raw ingredients, brewing technology and techniques, fermentation, safety, packaging, and tasting of the finished products.

We look forward to expanding our curriculum in 2023 to offer more educational opportunities for professionals throughout the grain industry and hope you can join us for the best training available.

Sincerely,

Hulya Dogan
IGP Institute Interim Director
Professor and Interim Head, Department of Grain Science and Industry
Remembering Mark Fowler

The IGP Institute and K-State Department of Grain Science and Industry are sad to share that our friend and former associate director and flour milling curriculum manager for 12 years passed away unexpectedly February 20, 2023, at his home in Manhattan. After departing IGP he served briefly as the President and CEO of Farmer Direct Foods, Inc., in New Cambria, Kansas, and was the Vice President of Global Technical Services for U.S. Wheat Associates based in Arlington, Virginia, at the time of his passing.

Mark was well known throughout the world in the wheat and milling industries and traveled widely, sharing his knowledge and making friends in many locations. His technical milling background and practical experience growing up on a Kansas farm made him a respected source of information and proponent of U.S. wheat, and he worked with many organizations to educate foreign grain buyers and millers about the quality and advantages of grain commodities from the United States.

Mark is truly missed by all of us at Kansas State University as well as countless friends and grain industry colleagues around the world.

IGP Institute Mission

To provide technical, research-based training benefiting industry professionals globally and enhancing the market preference for U.S. grains and oilseeds.
2023
932 Participants
40 Countries

Algeria
Bangladesh
Brazil
Cambodia
Cameroon
Canada
Colombia
Costa Rica
Cote d’Ivoire
Dominican Republic
Ecuador
England
Georgia
Ghana
Guatemala
Honduras
India
Iran
Ireland
Japan
Kazakhstan
Malaysia
Mexico
Mozambique
Nigeria
Pakistan
Peru
Philippines
Puerto Rico
Senegal
South Africa
South Korea
St. Vincent and the Grenadines
Switzerland
Trinidad and Tobago
Tunisia
Ukraine
United States
Uzbekistan
Venezuela
Total Participants

- 29 On-Site Courses (608 Participants)
- 16 Distance Courses (324 Participants)

Impact

- IGP Supported Courses
  - Soybean Excellence Centers (5,007 Students enrolled in KSU-supported trainings)
  - International Association of Operative Millers Correspondence Course (Facilitated 714 testing units)
- Additional IGP Institute Outreach
  - Workshops, Research, Presentations (3,578 Attendees)
Good relationships with U.S. Wheat Associates and the Kansas Wheat Commission continue to be a critical part of IGP. We partner with U.S. Wheat Associates to identify opportunities in specific targeted markets where specifically designed courses can be conducted on-location to promote the utilization and consumption of Kansas and U.S. wheat, and we continually work to build new courses and improve existing programs to support the IGP Institute mission. In 2023, IGP conducted two short courses focused on U.S. Wheat quality and milling with flour millers from Africa and Asia.

The U.S. Wheat Associates Flour Milling for Sub-Saharan Africa course was conducted from June 13–24 with 15 participants from South Africa, Nigeria, and Mozambique representing seven different companies. The goal of this course was to educate millers about the six classes of U.S. wheat, mill optimization for each class, and how their qualities affect end-use functionality. Topics included mill optimization for specific wheat classes, understanding U.S. grain grading practices, blending U.S. wheat, and proper storage and pest management practices.

Throughout the two-week course, the participants worked in the Hal Ross Flour Mill, visited Kansas farms, and elevators, and toured the Kansas Wheat Innovation Center. A highlight of the course was riding in combines during wheat harvest at the Kejr farm near Salina, Kansas.

The second training was held from July 30 through August 6 and included seven millers from six Korean milling companies. The U.S. Wheat Associates Advanced Milling for South Korea course was one week long and focused on advanced mill optimization techniques to maximize milling extraction and flour quality. During the course, the participants spent time in the Hal Ross Flour Mill for hands-on exercises and equipment demonstrations. The millers practiced different techniques for mill optimization of U.S. hard and soft wheat. Participants also visited a U.S. durum mill in Excelsior Springs, Missouri, and a Cargill grain elevator in Topeka, Kansas.

Both courses focused on training participants who are utilizing U.S. wheat in their respective countries. The courses expanded the participant’s knowledge of the U.S. wheat value chain. They were designed to provide technical knowledge while providing answers to any questions or issues the millers might have experienced within their mills. The IGP Institute and U.S. Wheat Associates will continue to offer advanced training opportunities to international milling industry professionals as well as create valuable content to advance the use of U.S. grains throughout the supply chain.
Shawn Thiele, Flour Milling and Grain Processing Curriculum Manager, tests flour samples in the Hal Ross Flour Mill during the U.S. Wheat Associates Flour Milling for Sub-Saharan Africa course.
IGP offers a variety of opportunities, from classroom instruction to facility visits, as well as online courses. Partnering with USSEC, IGP conducted a blended style training focusing on feed manufacturing and animal nutrition in aquaculture for the USSEC American region.

Participants first receive online learning topics on basic levels of feed manufacturing, aquaculture nutrition, and overall global agricultural production. After the lectures, they take a quiz and need to receive a specific grade to come to IGP for a higher level of lectures and hands-on demonstrations in extrusion, feed manufacturing, and quality control.

IGP then provides lectures on growing the fish and shrimp for certification and sustainability, focusing on the benefits of U.S. soybean meal as a key protein source for aquaculture feed. By utilizing U.S. soybeans, aquaculture producers can ensure that the feed being used is adequate for not only essential nutrients but also sustainable practices overall.

The course equips participants with the knowledge and skills to effectively incorporate U.S. soybeans into their aquaculture operations. Through the hands-on demonstrations and informative lectures, participants learned about the proper formulation of aquaculture feed, and taking into account the specific nutritional requirements of different species. They also explored the various processing techniques used to maximize the nutritional value of U.S. soybeans in feed production.

During the course, participants learned about extrusion, enzymatic treatment, and the bioavailability of nutrients present in soybeans. The goals of this course extended beyond the immediate training period. IGP and USSEC aim to foster long-term partnerships and collaboration between aquaculture professionals and the U.S. soybean industry. By establishing these connections, IGP hopes to facilitate ongoing training and opportunities ensuring that aquaculture producers continue to have access to high-quality U.S. soybean products.

The goal of this course is to increase aquaculture production, specifically in Latin America, using soybean meal as one of the main protein sources. By promoting the utilization of U.S. soybeans as a key protein source, this course enhances feed quality, improves aquaculture productivity, and encourages participants to apply the knowledge to everyday operations.

By educating participants about the nutritional value and sustainability of U.S. soybeans, this course helps aquaculture producers make informed decisions regarding their feed formulation choices. In the future this course will continue to be offered with the goal of educating additional professionals from various industry backgrounds.
Carlos Campabadal, IGP Institute Feed Manufacturing and Grain Management Curriculum Manager, leads aquaculture course participants on a tour of the O.H. Kruse Feed Technology Innovation Center.
Educating FAS Officials

IGP joins industry experts to train USDA Foreign Ag Service employees.

IGP and the USDA collaborated to create the USDA Foreign Ag Service (FAS) Training Grain and Oilseed Marketing System Seminar. To understand global grain and oilseed markets and how they operate, this training seminar was created to assist FAS staff in increasing their understanding of global grain and oilseeds trade. In support of the USDA/FAS mission, IGP delivered a three-day training program on U.S. grain and oilseed marketing systems that included various topics. Grain and oilseed production systems, grain and oilseed marketing systems and supply chains, U.S. grain quality standards and grading systems, commodity pricing, commercial practice, price forecasting methods, defining supply and demand, and current issues were a few areas that were covered in the course.

Attendees were mostly foreign ag service workers, with a few senior analysts from Ag Marketing Service, and World Ag Outlook Board. Several speakers and industry partners were brought in to serve as specialists for the curriculum areas of this course.

Touching on the importance of bringing in a variety of speakers, IGP’s senior ag economist, Guy Allen, who served as a host and speaker says, “All of those organizations have technical people in country, so your foreign service guys or USDA ag attaches need to engage locals to figure out what is happening. Crop updates and animal health problems are examples of issues that need to be addressed domestically. These discussions are a good way to initiate the networking of individuals in the country.”

The USDA FAS Training provided a unique platform for the professionals in the field to come together, exchange information, and enhance their overall understanding of global grain and oilseed markets. The comprehensive curriculum, coupled with the knowledge shared by industry experts, ensured that participants in the course were equipped with the necessary insight into the industry.

This course provided an understanding of how to navigate the complexities of the market by presenting a comprehensive overview of U.S. grain and oilseed marketing systems. On a larger scale, the impact of the course extended to the global grain and oilseed industry. The participants, equipped with newfound knowledge, become ambassadors for what are the best industry standards. This ensures the efficient and sustainable management of grain and oilseed markets and creates a positive impact on the overall productivity, profitability, and stability of the industry.
The IGP Institute assisted in the FAS employee training by sending senior ag economist, Guy H. Allen, and feed manufacturing and grain quality specialist, Carlos Campabadal, as content experts to provide presentations and answer questions.
Building International Partnerships

USDA Cochran program educates Malaysian officials on U.S. trade regulations.

Inspectors play a vital role in determining whether import or export procedures are safe and regulated. Becoming familiar with U.S. procedures and processes allows international officials to learn the significant impact and quality of U.S. products. By gaining a deeper understanding of U.S. food safety regulations, participants can ensure that products meet the necessary standards and requirements for international trade.

This year IGP hosted the USDA Cochran Fellowship: Regulatory Protocols on Import/Export Documentation and Sanitary/Logistical Practices – Malaysia. The main objective of this course was to boost the technical knowledge of participants regarding U.S. food safety regulations, specifically for importing grains. The course participants were federal Malaysian government inspectors who make the calls on procedures and processes in Malaysia. They gained valuable insight and technical knowledge about U.S. food safety regulations specifically related to importing grains. This knowledge was essential for them to make informed decisions regarding import and export procedures.

The course included meetings and tours of several USDA offices in Washington, D.C. The participants learned U.S. procedures and gained a deeper understanding of food safety regulations that ensure the products being imported meet the necessary standards and requirements.

Following the time in D.C., the group traveled to IGP for additional training on grain and oilseed exports along with tours of K-State meat and dairy facilities and the associated regulations and safety standards.

The final days of the course were spent meeting with the Oregon Department of Agriculture, the Oregon Wheat Commission, and the Wheat Marketing Center in Portland, Oregon.

The knowledge gained during the course helps officials make well-informed decisions regarding the safety and quality of imported grains which are essential during the purchasing process. The participants’ roles as key decision-makers for imports and exports into their country means that their understanding of the U.S. food safety regulations has a ripple effect on the entire industry. Seeing the U.S. supply chain in person builds trust in the quality of U.S. grains. The knowledge gained enables them to identify potential risks and allows them to implement preventative measures to mitigate issues that could potentially arise during the import and export process.

This course helped strengthen trade ties with Malaysia and enhanced both the U.S. and Malaysian economies. Participants recognized the economic implications of the work being done while learning the benefits of upholding strict regulations which make them reputable trade partners in the global market.
Malaysian government officials visited locations highlighting the U.S. grain supply chain including the Nunemaker-Ross farm (hosted by Pat and Mary Ross) during the two-week course focused on increasing technical knowledge of U.S. food safety regulations.
Focused on Feed

USDA Uzbekistan course focuses on protein nutrition for cattle and poultry.

A goal of the USDA is to increase trade with Uzbekistan by exporting U.S. commodities such as grains and oil seeds. USDA requested the help of IGP to conduct training that brings in industry professionals from Uzbekistan who work for and own feed companies. For two weeks, Uzbek professionals from feed and animal production companies came to Manhattan for a U.S. Study Tour for Uzbek Public and Private Sector Officials on Biotechnology and High-Quality Protein Feed for Cattle and Poultry. They toured Kansas State University’s facilities and learned from industry professionals in Kansas who share similar expertise in feed and animal production.

This partnership offers specialized courses focused on a wide variety of topics from storage and handling to processing and transportation. Participants gained a comprehensive understanding of the U.S. grain supply chain from farm to export.

The course also emphasized the importance of quality control and adherence to international export standards. Participants learned about the testing and inspecting procedures implemented throughout the U.S. grain supply chain. They also saw the family business side of the grain industry by visiting a Kansas cattle operation and talking with 4-H club members. These types of personal interactions between the producers and the buyers benefit both sides by building strong relationships and increasing understanding between international partners.

The course helped Uzbekistan professionals develop a stronger understanding of the U.S. supply chain and allowed them to make more informed decisions and have better insight into selecting and importing commodities. This ensures that the products they bring in meet the required quality standards that are essential in creating trade partnerships.

With programs of this kind, IGP can increase potential trade between the U.S. and Uzbekistan while providing participants with valuable knowledge and skills that directly impact their own feed manufacturing and animal production industries.

IGP’s Carlos Campabadal, who served as the course manager, and hosted the group during the course says, “The overall goal of the USDA and the regional FAS with this course is to improve and increase the trade of our ag products there in Uzbekistan. Our participants were chosen because they have the potential to increase and improve that business relationship.” In addition to increasing trade with Uzbekistan, participants learned that incorporating U.S. commodities into their operations can enhance the quality and efficiency of their products.
Mike Brouk, animal science professor and state dairy extension specialist, led participants from Uzbekistan on a tour of the K-State dairy farm and explained feed ingredients used in the diets of the dairy cattle.
The partnerships of IGP have always played an important role in the educational foundation that is needed for course participants to gain the most out of their experience. In 2023 the Grain Elevator and Processing Society (GEAPS) partnered with IGP to host two courses that provided hands-on training and instructor demonstrations.

The GEAPS/K-State Hands-on Training for the Operation and Maintenance of Conveying Equipment course educated participants on the use and maintenance of conveying equipment commonly used in grain facilities with a focus on safety. In addition, this course provided practical information and guidelines on how to develop and implement a comprehensive preventative maintenance program.

The K-State – GEAPS Grain Elevator Managers course provides additional training for individuals who supervise grain elevator employees. The course focuses on the science behind the practices used in grain management. It provides new managers with the information they need to manage grain quality, and the insight required when evaluating the practices used by their predecessors.

Course topics include personnel management, grain quality management, grain handling equipment, grain drying, grain operations costs, grain inventory management, grain receiving and shipping, grain condition monitoring, grain aeration strategies, and fumigation.

The re-establishment of the partnership with GEAPS combines expertise and resources from the two organizations that will benefit the future of the grain industry. In addition, the renewed partnership is beneficial for Kansas State University Grain Science and Industry programs. GSI students will have the opportunity to increase their skills and careers with a wide range of opportunities for internships, networking, and job placements.

Collaboration between GEAPS and IGP allows for the sharing of resources and expertise in the grain industry. Both IGP and GEAPS have a shared commitment to enhance industry education and collaborations. Educating industry professionals and students strengthens the future development of the grain industry. IGP hopes to expand the courses and training offered, and potentially recruit intern managers.

With K-State’s state-of-the-art facilities, IGP can offer a truly unique experience for grain industry leaders. IGP’s Carlos Campabadal says, “This is one of the few courses out there in the entire grain industry where participants can go and learn about operations, maintenance, and safety, and run the equipment here in our facilities.”
Reggie White, one of several course instructors with industry experience and owner of RNC-CO, explains proper belt adjustments on a bucket elevator used for training during a session of the GEAPS/K-State Hands-On Training course.
2023 IGP Institute Year in Photos
2023 IGP Institute Year in Photos
## 2023 by the Numbers

**29 On-site Courses • 608 Participants**

<table>
<thead>
<tr>
<th>On-site Courses</th>
<th>Month</th>
<th>Participants</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAOM–KSU Introduction to Flour Milling</td>
<td>January</td>
<td>17</td>
<td>Canada, St. Vincent and the Grenadines, United States</td>
</tr>
<tr>
<td>USDA Cochran Fellowship – Regulatory Protocols on Import/Export Documentation and Sanitary/Logistical Practices, Malaysia</td>
<td>February</td>
<td>7</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Buhler–KSU Expert Milling</td>
<td>Feb.–March</td>
<td>6</td>
<td>United States</td>
</tr>
<tr>
<td>USDA Cochran Fellowship- Malaysia</td>
<td>Feb.–March</td>
<td>14</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Buhler–KSU Executive Milling</td>
<td>March</td>
<td>9</td>
<td>United States</td>
</tr>
<tr>
<td>NGFA KSU Food Safety Modernization Act Feed Industry Training</td>
<td>April</td>
<td>38</td>
<td>Puerto Rico, United States</td>
</tr>
<tr>
<td>KSU–GEAPS Grain Elevator Managers</td>
<td>April</td>
<td>20</td>
<td>United States</td>
</tr>
<tr>
<td>IGP–KSU Baking Basics Training</td>
<td>May</td>
<td>9</td>
<td>United States</td>
</tr>
<tr>
<td>USSEC Aquaculture Nutrition Executive Program</td>
<td>May–June</td>
<td>32</td>
<td>Columbia, Costa Rica, Ecuador, Venezuela</td>
</tr>
<tr>
<td>IGP–KSU Grain Procurement and Purchasing</td>
<td>June</td>
<td>28</td>
<td>Bangladesh, Colombia, Costa Rica, Mexico, South Korea, St. Vincent and the Grenadines, United States</td>
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<tr>
<td>IGP–KSU Grain Export Supply Chain Expedition</td>
<td>June</td>
<td>10</td>
<td>South Korea</td>
</tr>
<tr>
<td>IGP–KSU Feed Manufacturing</td>
<td>June</td>
<td>37</td>
<td>Cambodia, Cote d'Ivoire, Ghana, Senegal, United States</td>
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<tr>
<td>IGP–USW Flour Milling for Sub-Saharan Africa</td>
<td>June</td>
<td>16</td>
<td>Mozambique, Nigeria, South Africa</td>
</tr>
<tr>
<td>WISHH Food Safety Webinar for Africa and Asia</td>
<td>July</td>
<td>20</td>
<td>Cambodia, Kazakhstan, Uzbekistan</td>
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<tr>
<td>USW Advanced Milling for South Korea</td>
<td>July–Aug.</td>
<td>8</td>
<td>South Korea</td>
</tr>
<tr>
<td>IAOM–KSU Introduction to Flour Milling</td>
<td>August</td>
<td>17</td>
<td>Canada, United States</td>
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<tr>
<td>IGP–KSU Pet Food Workshop</td>
<td>August</td>
<td>26</td>
<td>Ireland, Mexico, Philippines, United States</td>
</tr>
<tr>
<td>IGP–KSU Extrusion Processing</td>
<td>August</td>
<td>36</td>
<td>United States, Philippines, Mexico</td>
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<tr>
<td>FSMA–HAACP (Regulatory Protocol)</td>
<td>August</td>
<td>29</td>
<td>United States</td>
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<tr>
<td>IAOM–KSU Flour and Dough Analysis</td>
<td>August</td>
<td>22</td>
<td>Canada, Cameroon, St. Vincent and the Grenadines, Trinidad and Tobago, United States</td>
</tr>
<tr>
<td>On-site Courses</td>
<td>Month</td>
<td>Participants</td>
<td>Countries</td>
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<tr>
<td>IAOM–KSU Basic Milling Principles</td>
<td>September</td>
<td>17</td>
<td>Canada, England, United States</td>
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<tr>
<td>IAOM–KSU Advanced Milling</td>
<td>September</td>
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<td>England, United States</td>
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<td>USDA–FAS Cochran Grain Procurement and Storage</td>
<td>September</td>
<td>5</td>
<td>Algeria</td>
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<tr>
<td>Management for Algeria</td>
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<tr>
<td>USSEC Nutrition vs. Purchasing – Building to Align</td>
<td>September</td>
<td>32</td>
<td>Columbia, Costa Rica, Dominican Republic, Ecuador, Honduras, Mexico, Peru, Venezuela</td>
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<tr>
<td>USDA FAS Training</td>
<td>October</td>
<td>34</td>
<td>United States</td>
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<tr>
<td>IGP–KSU Advanced Milling Principles</td>
<td>October</td>
<td>8</td>
<td>Canada, United States</td>
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<tr>
<td>Buhler–KSU Executive Milling</td>
<td>November</td>
<td>12</td>
<td>Canada, Costa Rica, Dominican Republic, Guatemala, India, Nigeria, United States</td>
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<tr>
<td>Buhler–KSU Flowsheet Technology</td>
<td>November</td>
<td>7</td>
<td>Cameroon, Canada, Japan, United States</td>
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<tr>
<td>NGFA–KSU Food Safety Modernization Act Feed Industry Training</td>
<td>November</td>
<td>14</td>
<td>United States</td>
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<tr>
<td>IGP–KSU Practical Flour and Dough Testing</td>
<td>Nov.–Dec.</td>
<td>12</td>
<td>United States</td>
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<tr>
<td>GEAPS/K-State Hands-On Training for the Operation</td>
<td>December</td>
<td>32</td>
<td>United States</td>
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<tr>
<td>and Maintenance of Conveying Equipment</td>
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<tr>
<td>IGP–KSU Flour Milling for Wheat Commissioners and</td>
<td>December</td>
<td>18</td>
<td>United States</td>
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<tr>
<td>Staff</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>608</strong></td>
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</table>
## 2023 by the Numbers

**16 Distance Courses • 324 Participants**

<table>
<thead>
<tr>
<th>Distance Courses</th>
<th>Month</th>
<th>Participants</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFIA 500A: Overview of U.S. Feed Industry*</td>
<td>Jan. – Dec.</td>
<td>3</td>
<td>United States</td>
</tr>
<tr>
<td>AFIA 500B: Particle Size, Batching and Mixing*</td>
<td>Jan. – Dec.</td>
<td>24</td>
<td>United States</td>
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<tr>
<td>AFIA 500C: Pelleting Process*</td>
<td>Jan. – Dec.</td>
<td>16</td>
<td>United States</td>
</tr>
<tr>
<td>AFIA 500D: Finished Product Packaging and Bulk Loadout*</td>
<td>Jan. – Dec.</td>
<td>9</td>
<td>United States</td>
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<tr>
<td>AFIA 500F: Boilers and Boiler Efficiency*</td>
<td>Jan. – Dec.</td>
<td>5</td>
<td>Saint Vincent and the Grenadines, United States</td>
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<tr>
<td>AFIA 500G: Preventive Maintenance, Sanitation and Energy Conservation*</td>
<td>Jan. – Dec.</td>
<td>3</td>
<td>Canada</td>
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<tr>
<td>Pet Food Formulation for Commercial Production</td>
<td>January</td>
<td>34</td>
<td>Canada, India, Iran, Pakistan, Philippines, Tunisia, United States, Switzerland</td>
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<tr>
<td>AFIA 500- Fundamentals of Feed Manufacturing</td>
<td>February</td>
<td>34</td>
<td>Brazil, Canada, Malaysia, Ukraine, United States</td>
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<tr>
<td>USSEC Aquaculture Nutrition Executive Program</td>
<td>March</td>
<td>32</td>
<td>Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Mexico, Peru, Venezuela</td>
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<tr>
<td>AFIA 500- Fundamentals of Feed Manufacturing</td>
<td>April</td>
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<td>Brazil, Georgia, United States</td>
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<td>AFIA 500- Fundamentals of Feed Manufacturing</td>
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<td>AFIA 500- Fundamentals of Feed Manufacturing</td>
<td>August</td>
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<td>Brazil, Dominican Republic, Malaysia, Trinidad and Tobago, United States</td>
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<tr>
<td>JBS Fundamentals of Preventative Maintenance</td>
<td>September</td>
<td>6</td>
<td>United States</td>
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<tr>
<td>JBS Fundamentals of Feed Manufacturing</td>
<td>September</td>
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<td>United States</td>
</tr>
<tr>
<td>AFIA 500- Fundamentals of Feed Manufacturing</td>
<td>October</td>
<td>36</td>
<td>Canada, Dominican Republic, United States</td>
</tr>
</tbody>
</table>

*On-demand courses from Global Campus Catalog*

| Total | 324 |

## Other IGP-Supported Courses

<table>
<thead>
<tr>
<th>Other IGP-Supported Courses</th>
<th>Month</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Association of Operative Millers</td>
<td>Jan. – Dec.</td>
<td>714 testing units</td>
</tr>
</tbody>
</table>
Our Facilities

IGP Institute Conference Center – our primary building for hosting course participants featuring meeting spaces, technology-enhanced classrooms, and dining facilities

Hal Ross Flour Mill – state-of-the-art pilot scale flour mill used for teaching, research, and industry training on full-scale equipment and control systems found in commercial flour mills

Bioprocessing and Industrial Value Added Products (BIVAP) Innovation Center – research facility for bioprocessing and renewable energy, biomaterials, and extrusion laboratories

O.H. Kruse Feed Technology Innovation Center – a modern feed mill used for teaching feed production, pet food development, grain handling, and featuring an embedded BSL-2 research facility
Shellenberger Hall — home of offices and classrooms for the Department of Grain Science and Industry on the Kansas State University main campus

Shellenberger Milling Laboratory — table-top milling equipment provides a hands-on understanding of the basic grinding techniques used in the flour milling process

Shellenberger Baking Laboratory — IGP course participants bake cakes, bread, and cookies with different types of flour to see the effects on the finished products

Shellenberger Milling Laboratory — small-scale milling and sifting equipment is also available for teaching and research use
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College of Veterinary Medicine

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Agronomy

Brian Lindshield
Food, Nutrition, Dietetics and Health

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Jared Parsons
Animal Sciences and Industry

Tom Phillips
Entomology

Harold Trick
Plant Pathology

2023 IGP Institute Faculty and Staff