The primary education and applied research partner to the global grain handling and commodity utilization industry.
Grain Operations Management Credentialing Program

• Organized approach to tracking personal achievement in grain operations management continuing education

• Establish industry-recognized career paths in grain operations and management
  • Attract new people from widely varying backgrounds and will enhance opportunities

• Group of more than 20 GEAPS members and Kansas State University faculty took the initiative in 2010
Standalone Minor in Grain Operations Management

• Available to any person who is working towards a four-year degree or has obtained a four-year degree

• Issued from Kansas State University, you can attend another institution and still obtain this minor

  • i.e. Iowa State, Kansas State, Nebraska and Missouri are members of the Ag*Idea consortium, and recognize each other’s credits in many agricultural science areas

• Minor will provide a specialized training that will bring value to employer and employee
• Originally at Purdue University, now at Kansas State University

• Offers relevant and applicable 10-unit training programs to professionals in the industry or expecting to come into the industry

• Accessible on a global scale through its online format and flexible schedule

• 12 courses this year, four new

• Over 1200 participants, 21 different countries

• Course materials originated from Kansas State, industry sources, and most recently Iowa State University
Courses ON-DEMAND for Companies

• Two weeks notice
• At least 10 employees
• Any start date
• Great way to provide consistent training to a large number of your workforce
• Convenient and flexible
International Center for Grain Industry Operations and Processing (ICGOP)
Developing Concept

- In-depth discussions with grain industry executives, grain handling professionals, and educators on how to solve current and emerging industry challenges
- Initially led by GEAPS and K-State, most recently joined by Iowa State University
- Collective knowledge resource for all segments of the grain production, distribution and processing industries to include grain handling professionals, grain millers, commodity processors, food and feed manufacturers, and other end users
- Comprehensive resource to the world’s grain and commodity supply chain and will offer enhanced training to support professional development
- Strong, active commitment to the vitality of grain industries as they meet the demographic, economic, consumer and environmental challenges of the future

The International Center for Grain Operations and Processing (ICGOP) will be the primary education and applied research partner to the global grain handling and commodity-utilization industry.
Charles R. Hurburgh, Professor, ABE Extension
Business is Changing Rapidly

• Retirement of baby boomers
• Increasingly diverse youth
• Globalization of companies
• Elevated attention on food
  – Food safety
  – Food choice
  – New farmers
  – New technologies
• Increase in value of natural resources – that’s us!
60% of the US Workforce will Retire in the Next Decade…

That means your employees!

Overall Vision

Loss of experienced employees and related problem-solving capacity will be solved by an integrated education and research center serving the global grain supply chain.

- **Three focus areas:**
  - Grain handling and distribution
  - Grain processing and product utilization
  - Environmental stewardship and food safety interactions across the supply chain.
The International Center for Grain Operations and Processing (ICGOP) will be the primary education and applied research partner to the global grain handling and commodity utilization industry.
Bigger Picture for Grain

Bag to Box

- Environmental stewardship and food safety interactions across the supply chain.
- Grain handling and distribution
- First and second processing steps

Commodity to product
Original Plan

- Developed by 3 GEAPS committees, ~25 members
  - Strategic Vision
  - Governance/Operations
  - Education/Credentialing
- Grew out of GEAPS Distance Ed courses
- Mostly education, some research

The initial partners:

GEAPS

Kansas State University
Programs

- Distance education for handling, processing and related industry employee training
- More intensive hands-on training deliverables at multiple locations
- Credentialing to mark successful completion and encourage ongoing education
- Augmentation for on-campus programs (4 year and 2 year)
- Applied research/problem solving for grain supply chain issues
Applied Problem Solving - Examples

• Management of large volume grain storage
• Monitoring and IT technologies
• Response to food safety concerns
• Standard operating practices, GMP’s etc.
• Trace compounds
• Product evaluations (dryers, process equipment)
• Climate change/quality in processing
Applied Problem Solving: Large Issues - Examples

• Regulatory policy impacts

• Whole supply chain challenges

• Environmental impact – carbon tracking

• Science-based input to policy making

Challenge: Translate large issues into practical actions?
Corn Yield Potential

Overall = 2.1 bu/ a/ yr; Last 10= 3.5 bu/ a/ yr; Seed industry = 4-6 bu/ a/ yr; +400-500 million bu/ year

Source: Monsanto, June 2010
ICGOP Value Proposition

- Recruitment and training is efficient and effective
- ICGOP basic training is broadly applicable across operations and industries
- Experience is collected for training current and future grain industry professionals
- New methods and procedures are independently evaluated for validity and cost
- New equipment, products, and services are accepted more rapidly
- Response to external challenges and development is science-based
Iowa State University as an ICGOP Partner

- A contributor to the education program
  - Add units to GEAPS program
  - Community College connection
  - Corn and soy process operations, food safety, environmental assessment
  - AgIDEA courses

- ISU emphasis on applied problem solving.
  - Share facilities with industry. Less staff, more program
Organization and Future

- Each partner responsible for fixed costs (facility, faculty)
- Consortium of industry foundations for operating funds
  - Management accountability
  - Donations, contracts, services, fees, and any other values
- Enhance the Value Proposition
- Update the operating plan
- Expand “ownership” and development participation
  - On campus and with a wider industry base
- Ready for launch in late 2011.
A Path into the Future
In a time of rapid change, it's time to focus on how to meet the demands of a global industry in need of education and training.

ADDRESSING A NEED
Baby boomers are beginning to retire and there is an increase in diverse youth. Companies continue to globalize and not surprisingly, there is an elevated attention on food. Although this increase is driving the industry forward, there is still an uncertain economic future. More from the industry.

"As long-term employees retire and leave the industry, all of that experience goes with them, so we have to replace"

THE VISION
Goal: Be the Gold Standard of operations and processing best practices...a credible and trusted source for professional development, continuing education, credentialing and applied research.

- Why Now?
- So What Do We Do?
- Center Timeline

YOUR SUPPORT
To ensure that the ICGOP is a relevant and valuable resource to the industry as a whole, we invite other industry leaders to engage in our joint efforts to shape this proposed international center. As a key industry stakeholder interest group, we hope you will join other industry leaders in creating a truly groundbreaking knowledge and continuing education resource, one that does not currently exist anywhere but is critically needed.
A New Organization?
Where to next?

- Value Proposition for Center completed (July). With high priority components and estimated economic impacts
- Formalize an operating plan to include two universities – high priority need. See above.
- Integrate the food safety effort which will:
  - **Expand ownership**: this is an activity that groups and people can take ownership in as long as it does not become driven by a single source, or a limited group of people.
    - On campus
    - Industry – NGFA, the rest of the stakeholder list; corn and soybean for ISU. KSU covers wheat, feed milling, grinding based industries.
- Retitle the Grain Quality Initiative. ???????

**Iowa Grain Operations and Processing Initiative**

A program of the International Grain Industry Operations and Processing Center.