

End of Year Assessment Report for Programs

Program: Agribusiness

Semester/year: S21

Contact Person: Mark Jenner

Submission date: June 1, 2021

Program Mission Statement

Beginning 2021

GU agribusiness program prepares graduates to be the best qualified, most talented candidates for any agriculture-related position. Graduates will combine business acumen, scope of agricultural applications, analytical and communication skills, wrapped up in confident strength of faith.

Prior to 2021

The mission of a BS degree in agribusiness management is to prepare graduates to be the best qualified, most talented candidates for any position in an agriculture-related industry. The agribusiness management program is highly experiential and relies on financial and operational analytical tools to arm Briner agribusiness majors with the ability to provide compelling solutions in evolving real-time challenges. Built on a foundation of faith in Jesus Christ, students will also understand the meaning of being a "Roaring Lamb," as described by the Briner School of Business namesake, Bob Briner. Agribusiness management graduates will have the professional acumen to respectfully impress industry colleagues and the confidence to suggest innovative ideas to their employers.

Program Objectives

The agribusiness program is state of continuous improvement. One of the evolving changes are the program objectives

Agribusiness Program Objectives 2018-2019 school year. At the close of their degree students should be able to:

1. Effectively manage colleagues, employees, and clients in ever-changing domestic and international business environments.
2. Synthesize goals, team work, and leadership activities built upon a meaningful business vision and strategy.
3. Analyze agricultural trends and integrate them into effective, profitable management decisions
4. Evaluate organizational strengths and weaknesses using proven financial and operational analytical tools.
5. Efficiently communicate plans, issues, and progress to any stakeholder with a broad array of technology using written, spoken, and digital techniques.

Agribusiness Program Objectives 2019-2020 school year. The program objectives were revised early in the year, then as the Business School went through the IACBE accreditation process, a fifth objective was added. This fifth objective go lost in the institutional transitions of reduced faculty and additional responsibilities for delivering fall and spring classes of 2020-2021 both face to face and online.

Agribusiness Program Objectives 2020-2021:

1. Speak the industry language of agriculture as it relates to food, feed, fiber, food production; recreation; and remediation; as it relates to local and global economies.
2. Analyze agricultural trends and integrate them into effective, profitable management decisions
3. Efficiently communicate plans, issues, and progress to any stakeholder through a broad array of written, spoken, and digital technologies.
4. Connect economic rural wealth creation (profit) to loving our neighbor.
5. Operate in a constructive and positive team climate by engaging all members respectfully in a diverse setting.

The fifth object emerged out of the IACBE business school accreditation process.

Assessment Methods and Benchmarks

Program Objective	Introducing	Developing	Mastering
PO1. Speak agriculture (understand)	AGRI101 CO4 Market Price Analysis – Mod 2	AGRI201 CO3 Final Exam	Agri301 CO1. Position Paper, “What is a Farm?”
	Benchmark: >=70%	Benchmark: >=70%	Benchmark: >=70%
	Evidence: 90% completion	Evidence: 100% completion	Evidence: NA
PO2. Analyze industry trends	AGRI101 CO2 Break-Even Analysis	AGRI201 C01 Ch 1-3 Hmwk	Agri401 CO4 Final feasibility
	Benchmark: >=70%	Benchmark: >=70%	Benchmark: >=70%
	Evidence: 100% completion	Evidence: 100% completion	Evidence: NA
PO3. Efficiently communicate	AGRI101 CO3 Final Exam	AGRI 201 CO2 Ch4 Industry Project	Agri301 CO1 Final Exam
	Benchmark: >=70%	Benchmark: >=70%	Benchmark: >=70%
	Evidence: 90% completion	Evidence: 100% completion	Evidence: NA
PO4. Create wealth and love your neighbor	AGRI101 CO1 Midterm Exam	Agr201 Midterm Exam	Agri301 CO1. Position Paper, “Can we Feed the World?”
	Benchmark: >=70%	Benchmark: >=70%	Benchmark: >=70%
	Evidence: 100% completion	Evidence: 100% completion	Evidence: NA
PO 5. Be a team	ECON202 Rural Wealth Creation Project	Agri401 CO4 Final feasibility	ENTR410 Entrepreneurship Capstone
	Benchmark: >=70%	Benchmark: >=70%	Benchmark: >=70%
	Evidence: 100% completion	Evidence: NA	Evidence: 100%

AGRI101 is taught every fall, AGRI201 is taught spring of Odd years, AGRI301 fall of Odd years, AGRI401, spring of even years.

As we move into an era of online delivery, and COVID-driven changes, some of the artifacts have changed. In AGRI101, the market analysis of Fall 2019, changed to a market price exercise with Excel. The Break-Even Analysis exercise now represents Course Objective 2 (CO2) in AGRI101.

Analysis of Assessment Findings

The GU agribusiness program is growing up. It is important to reflect each year that five years ago (Fall 2016) this program was launched as a list of four classes with a sentence or two of what the classes were to be about. As the 2020-2021 school year closes (year five), the agribusiness program has grown to 6, AGRI-prefix courses, and is moving online.

Year 5, 2020-2021, a big year for GU agribusiness. As with most enrollment this year, agribusiness enrollment was down.

- Four students graduated in May (Tori Dall, December; Bryson Johnson, Tucker Rappe', and Kenneth Young).
- AGRI101 online was written Summer 2020. This shaped the structure of AGRI101
 - The online courses are 8 weeks instead of 15, so it makes more sense to have 2 exams instead of 3.
 - Homework assignments moved from 'per chapter' to 'per module.'
 - The business plan project for AGRI101, became an introductory exercise for the AGRI401 mastery level, feasibility study. Both now have instructions and rubrics.
 - While some of the assignments differ between online and face to face, the organizational structure of the AGRI101 online D2L page was used as a general template for the face-to-face D2L page.
- COVID forced fall and spring classes to be taught simultaneously online and face-to-face. This removed the ability to use black/white boards. More reliance was on videos and websites. In hindsight, those excursions away from the PPT/videos were often undocumented or archived for later viewing. Something to work on for next year.
- In August 2020, GU launched an online agribusiness degree. This is something the 4-class program was not ready for. Simply translating the curricula from the face-to-face class online, did not achieve the same impact. There were many nuances that were brought to the classroom that did not make it to the formal curriculum.
 - A comparison of other agribusiness programs from local and university agribusiness schools was done.
 - Upon which two additional agribusiness programs were designed and added through the professional studies curriculum committee.

- AGRI115, Farm Production Planning – Successful farmers and agribusinesses have a pervasive reliance on the conversion of words to quantities. Sizing components of production systems is part of providing solution to agribusiness companies. There is a need for agribusiness students to have a semester of agricultural math, which is really the assignment of physical quantities to biological processes and systems. Or, calculating and sizing the components of agricultural systems.
- AGRI310, Biosystems Modeling – Modeling is a tool that can change the world and is within reach of anyone. Very few take advantage of it well, because building models can be intimidating. This class is to provide GU agribusiness student with the keys to change the world. A chance to be lambs that roar. Modeling provides validation of choices and explores the viability of new ventures where there is uncertainty.

Regression and linear programming are the currency of building new visions and changing the world. Modeling historic and potential dynamic systems allows new scenarios to be explored without first investing in capital. In addition to applied regression and math programming, students need an understanding of life-cycle assessment and equilibrium-seeking models. AGRI115 looks at static relationship in a single time frame. AGRI310 adds time to the profitable business analysis.

- In April, a meeting of the online agribusiness program outlined a manageable annual cycle for taking the six online classes. The courses of the first 5 years of GU agribusiness are in bold. The new courses beginning in years 6, 2021-2022, are unbolded.

	Block A	Block B
Fall Semester	AGRI101	AGRI201, AGRI115
Spring Semester	AGRI301, AGRI310	AGRI401

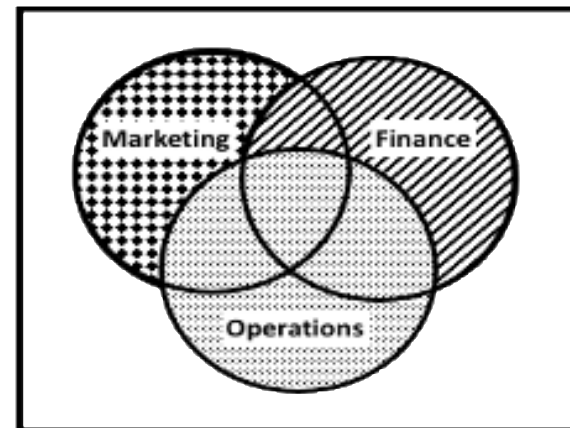
- CTL (Center for Teaching and Learning) and others are actively pursuing the hire of an adjunct faculty/online course writer to assist in meeting the goals. This is very helpful and encouraging.
- With 6, AGRI prefix courses, each cohort entering the GU agribusiness program will be invited to purchase the MS Excel text, Winston, Wayne L., Microsoft Excel 2019 Data Analysis and Business Modeling (6th Edition), Microsoft Publishing. ISBN: 9781509305889. This text will be used for exercises in all six courses, and perhaps some other non-AGRI courses if there is merit in doing so. The hope is that after 6 semesters of GU agribusiness courses, students will have a functional working knowledge in MS Excel.
- There are still some changes to evolve in GU agribusiness. The forthcoming year will be more about evaluating the switching of some classes in and out of the curriculum, but no additional AGRI courses are planned.
- Finally, the expansion of the agribusiness curriculum will build a robust online agribusiness program that would not deliver with only the original four courses. Success in the face-to-face agribusiness program was dependent on Mark Jenner. Moving to six agribusiness courses will remove the dependency on Mark Jenner for success.



Year 4, 2019-2020. Records reported in December 2019, there were 18 students declared in the agribusiness program.

- Five students graduated by May (Kaitlyn Smith, December; Austin Rexroad, Sam Hodges, Cordell Beckman, and Scott Woker)
- Program objectives were modified from 5 objectives to 4 objectives in October.
- GU agribusiness became IACBE-certified.
- Business writing and analytical skills were strengthened in the agribusiness curriculum this year (AGRI101, AGRI301, AGRI401). AGRI101 was taught before its 4-semester rotation to keep incoming students engaged (this class had 10 students).

Business Structure



Year 3, 2018-2019, shifted back to our initial plan of holding 1 agribusiness class each semester, or all 4 agribusiness classes every 2 years. We graduated our second agribusiness graduate in May 2019 (Derrick Dunn).

Year 2, 2017-2018, we realized we could have an agribusiness graduate in May 2018 if we offered 2, agribusiness classes each semester. This also allowed us to ground test the courses. Agri101 and Agri301 were offered F17, and Agri201 and Agri401 were offered S18. It was an illuminating year for our agribusiness courses AND we graduated our first agribusiness graduate in May (Samantha Cooley).

Year 1, 2016-2017, was the first year and we had 11 students in Agri101 F16. Most of them were not agribusiness students and filling another agribusiness class in the spring was not easy. The first class was the only agribusiness class that was offered in year 1.

AGRI101, Introduction to Agribusiness, has been taught each school year in the fall semester. This course has been evolving in positive ways each semester. This course in Fall of 2020 was taught from the completed online version of the class. For the most part it worked well. There were some innocent difficulties with the 8-week D2L page in the 15-week course. Wiley copied over the face-to-face course, so I just worked from the online course. I found the Wiley created D2L page is not easy to change. Innovations include:

- A move to 8 modules from 15 weeks or 20 chapters as a focus of topics. This worked pretty well.
- Weekly market analyses were adapted to orally presented news articles each week. This also was less overhead than individually submitted 100-word summaries of market analyses.
- Most modules had a 1) homework assignment from the text and 2) a ‘research’ assignment that was an application of the theory. These included:

Ag food pricing and indexing (spreadsheet).	Break-even analysis (discussion)
Ag food pricing and indexing (discussion)	Break-even analysis (worksheet)
Financial Ratios (worksheet)	Grazing dairy (worksheet)
- The business plan was divided into 4 sections: Business Structure, Marketing Plan, Operation Plan, Financial Plan. The four parts are divided across the semester (every 3-4 weeks in the classroom, every 2 weeks online). Fall 2020, these assignments were a little too

brief. Before it gets taught again in Fall 2020, they need to be expanded just a bit. The over-arching learning objective is to teach students planning components. Existing planning materials are too complicated to absorb easily. The focus with this exercise is to stick to the minimum but understand the parts.

- The business plan project has instructions and rubrics for each of the four segments.

AGRI201, Agricultural Markets, went well in the Spring of 2021. This class was also taught from the Wiley online template that was created prior to the semester. The Wiley class was not completed before the semester began, but it was far enough along to try out the exercises from the online delivery in the classroom (face to face). Changes to the AGRI201 deliverables included:

- Chapter lectures with frequent internet excursions and occasional videos. In the spring semester, I taught 2 economics classes and 1 international business class. All four classes relied more heavily on current events. In AGRI201, current events came from Mark Jenner's LinkedIn newsfeed and U of IL, farmdocs.com site. One of the downsides was there was often some challenge in getting URLs and Links into the presentations to be preserved in the historical record of the class.
- This semester weekly market analyses were not required. Creating an opportunity to read and process market analyses was intended to be a chance to help build a professional discipline. It didn't really work that way in practice. In past classes this seemed to be more a burden than a benefit for the material and the students.
- We played the Commodity Challenge, commoditychallenge.com, game for 10 weeks of the semester. Use of this tool in our classroom is evolving. In farm extension (working with farmers) and with FFA students, it seems there is a joy in playing the markets. But students do not come into GU's AGRI201 class with this passion. This year we used commoditychallenge.com for instructional purposes only. It worked very well for that. We used it about a month before we got to the theoretical part of the text that covered futures contracts.
- We went to 2, exams (instead of three). The online version of AGRI201 was being written during the semester. The face-to-face class was taught on the framework of the online version outline. That worked pretty well. The new exam format is about half multiple choice/half short answer. All exams were take-home. This works well in the questions can be more difficult and I like the students working together to solve the questions. It may work better to go to 4 take home exams? And forego homework?
- This semester we were able to attend the virtual USDA Outlook conference late in February. We also were able to build on some timely farmdoc.com papers on markets that occurred during our semester.
- Just as the semester was beginning, the author of our text, Joseph Parcell, released some textbook videos for use. I do not know if the students used them, but I think having another economist describe the textbook theory was likely helpful.

Sharing and Discussion of Assessment Findings

The 2020-2021 agribusiness year was defined by COVID and an institutional drive to open the online agribusiness option.

- The COVID influence resulted in only 1 new agribusiness student in 2020-2021. This is not much different than the general decrease in enrollment due to COVID restrictions.
- The online agribusiness initiative manifest itself in many short papers being written to clarify and understand the scope of what was set in place. This resulted in a greater understanding by nearly everyone.
 - The GU program is grounded intentionally in the liberal arts philosophy. And it is working pretty well for GU purposes.
 - A spot sampling of US agribusiness programs at other institutions were compared on course offerings. The GU agribusiness program is in the game but was deficient in agricultural and analytical classes. This is the basis for adding two more AGRI classes.

Refining Agribusiness – more than learning to farm (vocational ag).

For the last five years, GU agribusiness has been on a quest to identify definitions about what agribusiness means and doesn't mean. It is quite often confused with learning to farm or farming specifically. GU agribusiness activities are routinely compared with high school FFA programs and/or community college vocational agricultural programs. These are tremendous resources, but these focus on learning to farm, more than operation of profitable support industries for production agriculture. Farming is clearly part of agribusiness. But agribusiness is many times broader than production agriculture. For GU agribusiness purposes, the following definitions have been constructed.

Agriculture – The business of synchronizing human-controlled, biological rhythms with natural rhythms.

Agribusiness – Profitably cultivating rhythms between agriculture and the economy through dynamic value chains of food, fuel, fiber, recreational and remediation.

Agribusiness includes providing inputs into production agriculture, production agriculture, processing into food, fuel, fiber, recreation and remediation, distribution and retail (consumption) at every level.

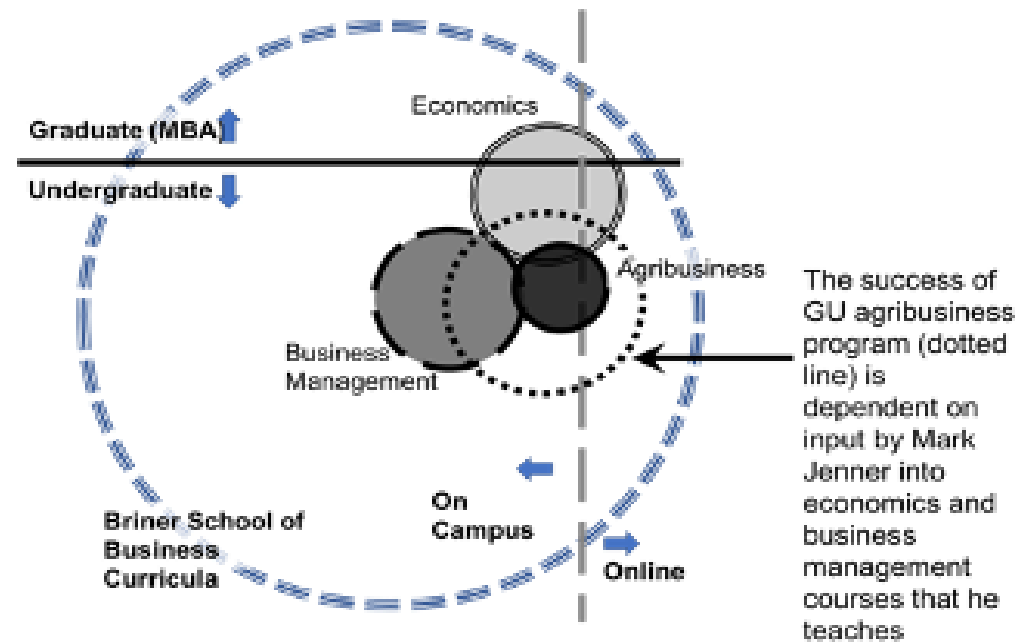
GU Agribusiness and Liberal Arts

A key to the success of the agribusiness program is the reliance on business management, marketing and accounting courses to supplement the agriculture-specific, GU AGRI courses. Mark Jenner's teaching load is about one third agribusiness, one third economics, and one third business management courses.

While the business management and economics courses are not agricultural in nature, the material covered supplements agribusiness students' agriculturally focused, agribusiness courses.

Jenner effectively covers the 'operations' portion of the four, business planning components mentioned above. He also covers international business which aligns global supply chains (in AGRI courses, International business, and economics) with local production and consumption (ECON202, rural wealth creation and Greenville SMART Center).

This works in agribusiness because it does not rely on vocational training in production agriculture like some of the other agricultural disciplines do.



GU Agribusiness Curricular Cross-Check

The Briner School of Business evolved from a business program grounded in the social sciences and is becoming more with the expansion into quantitative business analytics. As the business faculty have added math-based business skills, the institution has relaxed quantitative reasoning requirements.

A curricular cross-check was conducted with SIU-Carbondale, State University of New York (SUNY)-Cobleskills, University of Missouri and Purdue University. The Cobleskills NY program is grounded in rural wealth creation similar to Greenville SMART Center.

GU is certainly a player in the agribusiness curriculum delivery. There are things at which Greenville excels, but there are others in which it needs some work. GU is weak in agricultural courses. While not explicitly identified in the table to the right, most of the other agribusiness courses are agriculturally oriented versions of the business courses. GU is also below the larger universities in math, computer skills and communication.

	GU	SIU-C	Cobleskills- NY	Missouri U	Purdue- U
Agribusiness (additional technical req.)	63	58	47 12	76	51
Total Major Credit	63	58	59	76	59
Computer course	0	0	0	3	3
General Education	45	38	59	34	51
Math/statistics	3	6	6	7	9
Biology/Chemistry/Physics	3 to 9	7	6	9	14
Communication	5 to 8	15	6	6	12 to 13
Uncommitted courses	12	24	2	10	10
Total Credits for Degree	120	120	120	120	120

This is the basis for adding the two new AGRI courses. They both add agriculture, math and spreadsheet skills, as well as business communication skills.

GU Agribusiness Assessment in Introductory, Developmental, and Mastery Skills

The assessable artifact for agribusiness in the IACBE accreditation is the AGRI401 feasibility study. This project uses skills in agricultural literacy, broad analytics, and agribusiness communication.

Feasibility studies, in this context, are an examination of the purchase of a multiyear investment technology that requires evaluation of productivity at a current level (the baseline), as well as comparison of benefits and cost of investing the next level of operation (the new investment).

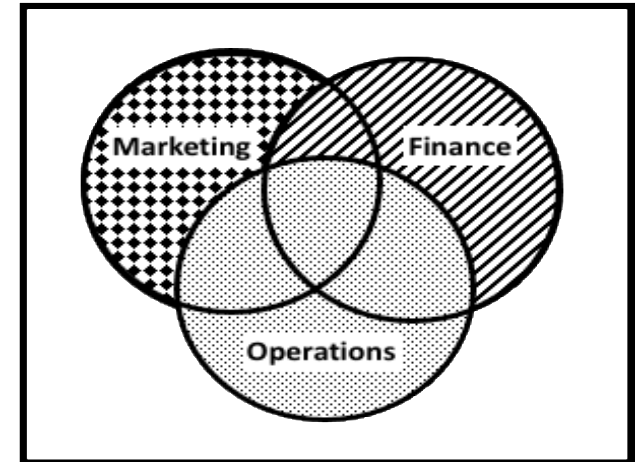
The *introductory level* of this same exercise is the business plan in AGRI101. AGRI101 is an introductory course. The largest objective of pursuing the development of a business plan is to introduce students to the four primary components of the business plan: business structure, marketing, operations and finance. The four assignments are intentionally brief, but all four build toward a system evaluation on a potential business.

The *developmental level* builds on skills for each of the four components:

1. business structure: AGRI101, BUSN101, ENTR130
2. marketing: AGRI201, AGRI301, MRKT201
3. operations: BUSN335 [New class, AGRI115 would fit here]
4. finance: ACCT 101, FINA341

Mastery level: Currently the mastery course is AGRI401 and the feasibility study. The second proposed AGRI310 course fits in as a pre-mastery level. The Biosystems Modeling looks at estimating sub-systems within the feasibility study. The models used in the Biosystem Modeling class aren't necessarily multiyear asset investments. They do look at interactions between components of production systems. After completing the modeling course, students will have the skill set to excel in the delivery of the end-of-program assessment artifact, the feasibility study.

Business Structure



Use of Assessment Findings for Program Improvement (Action Plan)

New Agribusiness Adjunct Faculty/Course Designer

As 2020-2021 school year came to a close, Megan Beeler, an academically and professionally qualified agribusiness teacher and course designer was hired. This is a great boost to the GU agribusiness program. Until this was discussed and executed, construction and teaching of both face-to-face and online instruction was on Mark Jenner's shoulders.

This year's assessment included reviewing multiple years and both program and course objectives to get every component within a single framework. As planning begins for the 2021-2022 school year, GU agribusiness is in a better position to teach from the assessment framework.

In 2021-2022, three of the original AGRI courses will be taught, and the online cycle of one year will include the teaching of all six AGRI courses in the next school year. This will mark a significant maturing of the GU agribusiness program with a more robust curriculum that is validated/authenticated by robust assessment.

Full Year Reflection – FALL/INTERTERM/SPRING TERMS

The 2020-2021 school year was a pivotal year for GU agribusiness. Against counsel from the director of agribusiness, GU initiated an online agribusiness degree. It was not possible to move from the four AGRI classes in the face-to-face program to an online version of the same content. An initiative to add 2 more AGRI courses to broaden the content sufficiently to benefit both the face-to-face and online programs was executed. In addition, additional curricular support and teaching were added. The next school year will complete all six AGRI program in both delivery methods.

The additional 2 AGRI programs provide the GU agribusiness program with conversational skills in the language of agriculture, critical thinking and spreadsheet skills, communication skills, and does so in the context of a liberal arts education.

- Has had 11 GU agribusiness graduates
- Has launched the online agribusiness degree after 5 years of discussion planning
- Is connected to the commercial agribusiness community through membership in the St. Louis Agribusiness Club
- Is connected through the IL agricultural education network, <https://www.ilaged.org/>. This includes an associate membership in the IL Association of Community College Agricultural Instructors (IACCAI).
- Is growing connections through the county, state, and national Farm Bureau network, including USDA's Ag in the Classroom program.
- Has articulation agreements with several community colleges that integrate their 2-year degrees into progress through the GU 4-year degree.
- Offers new opportunities to connect agribusiness industries to Greenville SMART. One such opportunity was the planning of a significant agricultural education/rural community event set for Earth Day 2020 (April 22). As planning was being completed, COVID-19 happened and has limited such community events. But it holds a restaurant (retail food), a demonstration kitchen, and already at least one agricultural input supply firm.

The GU agribusiness lost its secret weapon, Andy Rinker, to a better career opportunity in Mississippi. But as 2020-2021 ends, the new GU agribusiness secret weapon is Megan Beeler. Andy brought an advantage to agribusiness in recruiting. Megan will bring curricular excellence to the program.

Last year, the GU agribusiness program was firmly established and 'in the game' with other BS in agribusiness degrees housed in Colleges of Agriculture. With the expansion of two AGRI courses, GU agribusiness is in a leadership position to attract and shape agribusiness education in the US and beyond.

The most significant supporting document in the 2019-2020 school year is the IACBE Assessment protocols for agribusiness. These are attached. The first 2 pages refer to the entire Briner Business School. The balance of rest of the document are dedicated to the agribusiness-specific program assessment tools.

In the first five years of the GU agribusiness program, GU has succeeded in establishing an accredited agribusiness program.¹

***Agribusiness** – Profitably cultivating rhythms between agriculture² and the economy through dynamic value chains of food, fuel, fiber, recreational and remediation.*

In addition, GU agribusiness has cultivated functional relationships with IL state agriculture education network, St. Louis Agribusiness Club and the state and local farm network, Farm Bureau. In the first five years of a four-year program, end of the 2020-2021 school year, GU will have produced 10 agribusiness graduates.

While GU is credible, the initial curriculum plan is more status quo than a signature curriculum that will compete with the large agricultural colleges in producing the most sought-after graduates. GU can leverage its location, vision, and academic assets to enhance the quality of the GU agribusiness curriculum. More detailed justification follow this list.

Components of the Agribusiness Curriculum Upgrade include:

- 1. Remove the Online Agribusiness option from the GU website until after the curriculum has been successfully upgraded.** The goal of an online agribusiness program is driving this upgrade. It is the correct target. The entry-level curriculum must be expanded before the credible face-to-face curriculum can go online.
- 2. Specify specific courses for the General Education requirements for Social Sciences (ECON102) and Quantitative Reasoning (MATH 106, 111, or 113).** Identifying ECON102 as a gen ed, removes 3 credit hours from the agribusiness program requirements. Identifying a specific MATH course selection prepares agribusiness students for more analytical work in the program courses sooner. Statistics will remain the required program quantitative reasoning requirement.
- 3. Add two AGRI courses:** AGRI150, Farm Production Planning & AGRI350, Modeling Biosystems.
- 4. Revise selected business school courses.**
 - ECON102 – (primarily a name change) Mark Jenner
 - ECON202 – (primarily a name change) Mark Jenner
 - Combine BUSN380/BUSN409? – Keeli and Nathan?
 - Add Business Communication – Keeli and Jane?
 - Add Business Analytics – Nathan?
- 5. Develop specific elective tracks working with digital media and the sciences to provide a more robust secondary support area.**
- 6. in two years, reactivate agribusiness online degree option.**

Agribusiness Online

This is a great idea. But it is a deliverable for which GU is currently not prepared. A first step was to develop a face-to-face curriculum that fit GU's existing resources.

GU is in the ideal position to expand the agribusiness curriculum to be sufficiently robust to go online and pull students from around the world. It will take 2 years to get that together.

Until that time, GU should not sell online degrees in agribusiness. This means removing the online agribusiness degree option from the GU website.

¹ GU agribusiness is accredited with both the regional accrediting body, HLC, and business school accreditors, IACBE.

² Agriculture is the business of synchronizing human-controlled, biological rhythms with natural rhythms.

General Education Requirements

For the last several years the quantitative reasoning requirement for the business school programs has been statistics. This is an excellent choice. But business students are not sufficiently prepared for quantitative thinking in the business classes and would likely get more out of their statistics class if they had a stronger analytical background. Assigning a math class as a General Education requirement is simply an effort to strengthen agribusiness students analytic literacy.

The assignment of the ECON102 as the designated social science General Education requirement is intended to focus their study. It allows the ECON102 class to move from the agribusiness program requirements to the general education requirements.

Agribusiness (AGRI prefix) Course Revision

1. Current AGRI courses:

This is a solid program from which to begin. It is insufficient. Students need more applied analytics, more business writing, and more exposure to the industry jargon of agriculture.

- AGRI101: Intro to Agribusiness - Overview of agribusiness and how marketing, business management, operations, and finance fit into the agribusiness industry.
- AGRI201: Agricultural Markets - The infrastructure from commodity production to processing to retail sales is unique to agriculture due to seasonality of biological crop and livestock and the perishability of the products.
- AGRI301: Agricultural Economics - This provides the economic framework necessary for analytical analysis of agricultural products and coproducts into domestic and international markets.
- AGRI401: Leadership Professional Development - This is currently a senior seminar class that has 2 primary objectives: weekly presentations/tours with successful agribusiness practitioners, and development of a capital investment through creation of a feasibility study.

2. Proposed AGRI courses:

The current proposed upgrade keeps AGRI101 and AGRI401 the same (but renames the AGRI401 course title), but changes AGRI201 and AGRI301. It also adds AGRI150 and AGRI350.

- AGRI101: Intro to Agribusiness: Overview of what agribusiness is and how marketing, business management, operations, and finance fit into the agribusiness industry.
- **AGRI201: *Dynamic Agricultural Value Chains - (New Name) Revision keeps the infrastructure framework from current curriculum but combines the multiple emerging markets from the CURRENT AGRI301 Agricultural Economics course.***
- **AGRI150, *Farm Production Planning – One of the unique aspects of agriculture is the pervasive reliance of successful farmers and agribusinesses in conversion of words to quantities. There may be a tabled value available, but most businesses convert units and physical dimensions (linear to volume to value) constantly. There is a need for agribusiness students to have a semester of agricultural math, which is really the assignment of physical processes to biological systems, or calculating agricultural systems.***
- **AGRI301: *Agricultural Economics Policy - (New Name) Revised curriculum will become more of an ag policy version of the economics. In many ways, it will become an ag law class, but I am not an attorney and the economic side of ag policy is more relevant to what GU can equip students with than having it be taught by an attorney.***
- **AGRI350 *Modeling Biosystems – Regression and linear programming are the currency of building new visions and changing the world. Modeling historic and potential dynamic systems allows new scenarios to be explored without first investing in capital. In addition to applied regression and math programming, students need an understanding of life-cycle assessment and***

equilibrium-seeking models. AGRI150 looms at static relationship in a single time frame. AGRI350 adds time to the analysis.

- AGRI401: Leadership Professional Development: This is currently a senior seminar class that has 2 primary objectives: weekly presentations/tours with successful agribusiness practitioners, and development of a capital investment through creation of a feasibility study.

Revise and Add Selected Business School Courses

1. Rename ECON classes

Recent confusion about the GU Economics curricula has illuminated the need to have better documentation of the vision and execution of the current programming. There is nothing random about the current face-to-face programming. The first undergraduate semester is a survey-class for all majors. The second semester is a more demanding micro/macro application of a 2-semester, undergraduate economics program. The second semester includes a semester project on rural wealth creation, inspired by the GreenvilleSMART initiative. This does not appear in the recently created GU ECON202 course.

It is unclear why GU would create two, distinctly different economics classes (face-to-face and online) and call them the same class? But as the only PhD economist in the GU system, I can take responsibility for adding clarity to the mission.

2. Add Business Communication – Keeli

There are complications in the existing business curriculum and what is required to sit for the CPA exams in the accounting programs. A business communication class is required. This is complicated by the reality that our business students are not receiving sufficient training and practice in business communications. The idea is to create/retool a business communications class.

3. Add Business Analytics – Nathan Data Analytics Course

The same situation exists with business analytics. One solution is to create a business analytics course. The exact curriculum is still being refined, but there degree programs in business analytics, so there is plenty of material from which to choose for a 3-credit hour class.

4. Combine BUSN380/BUSN409? – Keeli and Nathan

End of fall semester Briner discussion illuminated an opportunity to combine two important classes. There is some redundancy in the current curricula in Strategic Management (BUSN380) and Business Case Studies (BUSN409). A proposed solution would be to combine the best of both classes into a single class.

Develop More Functional Working Tracks for Agribusiness Electives

One of the existing elective courses is Ecology (BIOL370). This has prerequisites of BIOL110 and BIOL112. This is an excellent support knowledge for agribusiness. But if the path to BIOL370 is not spelled out, students will likely not understand the prerequisites until later in their studies.

Similarly, the Marketing program has excellent ties to digital media. With some additional thought and discussion, this could be another excellent support area for agribusiness.

There is value in pre-loading the elective choices for agribusiness students.

Reinstate Online Agribusiness Degree Option

With these changes, GU agribusiness will become the signature agribusiness degree program that was envisioned in 2016 to create lives of character and service. Employers will pursue GU agribusiness graduates for their critical and creative thinking skills in agribusiness innovation.

The last page is the proposed agribusiness curriculum upgrade with changes identified on a one-page, view-at-glance visual.

General Education			Credit Hours
1) Foundations of Liberal Arts (3)	UNIV101 (3)		3
2) Christian Thought and Life (3)	THEO110 (3)		3
3) Science and Christianity (3)	UNIV301 (3)		3
4) Senior Seminar (3)	UNIV401 (3)		3
5) Biblical Studies (3)	BIBL205 (3) or BIBL215 (3)		3
6) Written communication (3)	ENGL105 (3)		3
7) Physical Health and Wellness (3)	PHED103 (3)		3
8) Physical Activity (1)	ACTY (.5) + ACTY(.5)		1
9) Physical and Life Science/Lab	BIOL110 (4) or CHEM111 (4) or PHYS120 (4)		4
10) Social Science/Business Mgmt	ECON102 (3)		3
11) Humanities (3)	No specific course specified		3
12) Quantitative Reasoning (3)	MATH106 or MATH111 or MATH113		3
13) Creative and Performing Art (3)	No specific course specified		3
14) Global Foundations (3)	BUSN351 (3)		3
15) Writing Intensive (3)	BUSN409 (3)		3
			3
			41
Agribusiness			Credit Hours
BUSN101	BUSNFOUN		3
ENTR130	BUSNFOUN		3
ACCT101	BUSNFOUN	Principles of Accounting I	3
BUSN222	BUSNFOUN	Business Law	3
MRKT201	BUSNFOUN	Marketing	3
AGRI101	AGRI	Introduction to Agribusiness	3
AGRI150	AGRI	Farm Production Planning	3
AGRI201	AGRI	Agricultural Markets	3
AGRI301	AGRI	Agricultural Policy	3
AGRI350	AGRI	Modeling Biosystems	3
AGRI401	AGRI	Agribusiness Asset Management	3
AGRI405	AGRI	Practicum	3
BUSN3??	BUSN	Business Communication	3
BUSN335	BUSN	Operations Management	3
ACCT3??	ACCT	Data Analytics	3
BUSN380/409?		Strategic Mgmt/Case Studies	3
ECON202	Economics	Economics II	3
ENTR410			3
FINA341	Finance		3
BIOL302	Biology	Statistics	4
			61
Additional Electives			
Track 1 (12)	BIOL110 + BIOL112 + BIOL370. (Ecol)		(9-12)
Track 2 (9)	Three Math/DMDA - programming tr		
Track 3 (10)	one each of BUSN, Science, DMDA		
Track 4 (12)	BIOL + CHEM + PHYS		
			12
And some other classes...			6
Total Credit Hours for Agribusiness Degree			120

#1. Remove online degree option from GU website.

#2. Focus Gen Ed Social Science and Quantitative Reasoning

#3. Revise and add current AGRI courses from 4, 3-credit hour courses to 6, 3-credit hour

#4. Revise and add current ECON/BUSN

#5. Cultivate specific support areas for

#6. Reinstate online degree option on GU

Building Wealth Cultivating Life: GU Agribusiness

Mark Jenner, PhD and Roaring Lamb

October 16, 2020

- ✓ The world cannot grow enough agriculturally derived products and services
- ✓ Agricultural universities cannot meet current demand for agribusiness graduates
- ✓ Greenville University delivers an accredited agribusiness degree in a business school
- ✓ GU agribusiness is primed to compete with top agribusiness universities

Greenville University (GU) is actively providing agribusiness graduates to the global work force. Jobs are expanding in food and bioenergy industries. But current agricultural higher education cannot meet the demand for agribusiness graduates.³ GU agribusiness is anchored in the Briner School of Business and accredited by both HLC and IACBE.⁴ GU agribusiness is ready to integrate current local, experiential, and entrepreneurial strengths into a truly unique and robust, online agribusiness program. With increased quality, GU reach becomes boundless.

***Agribusiness** – Profitably cultivating rhythms between agriculture⁵ and the economy through dynamic value chains of food, fuel, fiber, recreational and remediation.*

Fortune Magazine’s Fortune 500 is filled with agribusiness giants generating trillions of dollars in sales like retail food (grocers and restaurants), bioenergy providers, processors, distributors and input suppliers.⁶ These are household names like Walmart, Amazon, Whole Foods, Dollar General, PepsiCo, Tyson Foods, Starbucks, McDonalds, Marathon Petroleum, Valero, ADM, and Deere. Retailers like Casey General Stores sell retail biofuels (ethanol), groceries, **and** ready-to-eat pizzas.

COVID has shuffled the stability of our globally intertwined value chains. Meat processors faced production shortages, while bans on indoor dining have closed restaurants. New opportunities opened for restaurants like Panera Bread and now, Uber, to move into grocery delivery.

Demand for critical thinking and innovation in agribusiness has never been greater. GU agribusiness teaches a working knowledge of the language of agriculture, agribusiness analytics and communications skills. Since the traditional agricultural programs cannot keep up with the demand for agribusiness graduates, there was space for an agribusiness program ‘startup’. Expansion now requires cultivation of a unique brand leadership in agricultural education.

Greenville University Agribusiness Program Curriculum

Agribusiness (51 credits)	Credit	Ag Terms	Business Analytics	Business Comm.	Applied Theory
ACCT101	3		XXX		
AGRI101, AGRI201, AGR301, and AGRI401	12	XXX	XXX	XXX	XXX
AGRI405 Practicum	3	XXX		XXX	XXX
BUSN101, BUSN222, BUSN335, BUSN380, BUSN409	15		XXX	XXX	XXX
ECON102 and ECON202	6				XXX
ENTR130 and ENTR410	6		XXX		XXX
FINA341 and MRKT201	6				XXX
Statistics (3 credits)					
BIO302, PSYC202, or LEAD307	4/3	XXX	XXX		
Additional Electives (9 credits)					
ACCT317 or ACCT319	3				XXX
BIOL108, BIOL115, BIOL215, BIOL300, or BIOL370	4	XXX			
MRKT333 or MRKT334	3				XXX

³ Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources, and the Environment United States, 2015-2020. www.purdue.edu/usda/employment/

⁴ HLC, is GU’s regional accreditor, as well as IACBE, the international business school accreditor.

⁵ Agriculture – the business of synchronizing human-controlled, biological rhythms with natural rhythms.

⁶ Fortune 500 companies. fortune.com/fortune500/

Building an agribusiness program in an established business school was innovative, relevant and efficient. Agribusiness entrepreneurs are part of the larger, University network of partners and work with all GU students even without being part of the agribusiness program. The liberal arts education already integrates cross-disciplinary resources into all its major (see curriculum on flip side). The integration of business management, marketing, accounting, entrepreneurship biology, and economic courses, into an agribusiness major is natural for Greenville University.

GU founding agribusiness director, Mark Jenner, has 40 years of agribusiness experience across the frontier across agribusiness value chain. This unique background includes

- ***Owning and operating two different, successful agribusiness companies.***
- Working in ***production agriculture*** in the US, Europe, and Asia.
- Sharing ***experience in national ag and environmental lobbying*** with ag students.
- Developing seminal work in ***a) the economics of local rural wealth creation*** and ***b) the economics of coproducts*** (from a career in converting waste liabilities to assets).

Greenville University has succeeded in creating an accredited agribusiness program because:

1. GU provides all students with
 - A rich endowment of successful and engaged agricultural businesses, and
 - A focus on entrepreneurship and experiential education.
2. GU agribusiness has a director with
 - The depth to integrate the range of agribusiness professions into agribusiness
 - The scope to teach economics, business management, analytics and writing; weaving relevant agricultural applications into general business courses.
3. Active relationships with local and regional agricultural organizations
 - Illinois Department of Agricultural Education (supporting collegiate ag and FFA)
 - Illinois and Bond County Farm Bureaus
 - St. Louis Agribusiness Club

To move from entry level agribusiness to leadership in higher ed, GU agribusiness must:

1. ***Strengthen agricultural courses*** (two additional, 3-credit agricultural courses).
2. ***Strengthen business analytics*** (one additional, 3-credit general education math course).
3. ***Strengthen business writing*** (one additional, 3-credit general education writing class and one additional, 3-credit business writing class).
4. ***Expand GU articulation agreements*** with agricultural community college programs.
5. **Steps 1-4 are required to build an online compliment to current agribusiness degree.**
6. Explore offering degrees in *agricultural education* and *agricultural engineering* (optional).

The demand for business graduates that think critically and can innovate, is high. To set the GU program apart from other established programs, GU agribusiness must be more. Adding a few traditional ag, analytic, and business writing courses to the existing, unique GU endowments positions GU as a leader in agribusiness higher education. Minor adjustments will facilitate virtual access online to GU agribusiness. This market reach is without limits. **It is boundless.**

Rationale

Building an agribusiness program in a non-agricultural business school made:

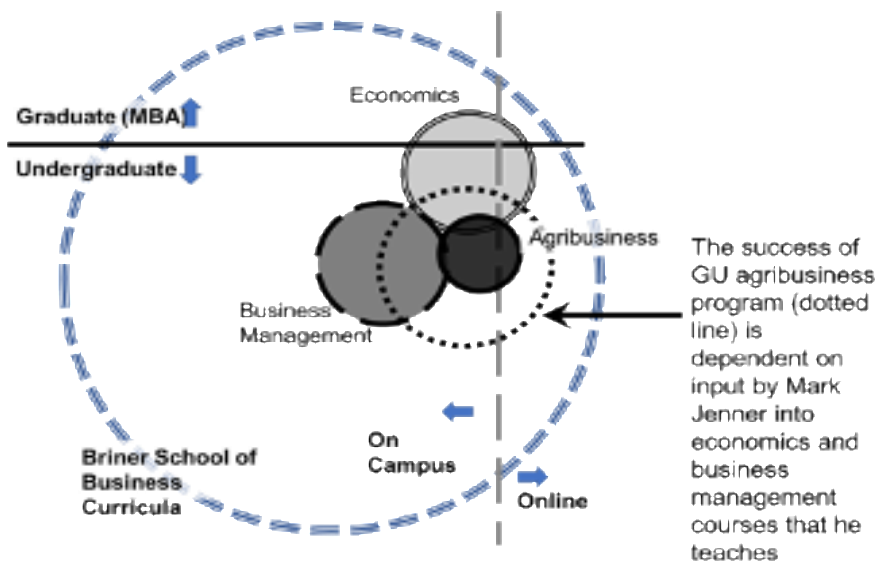
- Studies indicated that existing US agribusiness degree programs could not supply the demand for current and future agribusiness industry needs.
- Greenville University is a liberal arts college in the heart of Midwest agriculture.
 - The institution already integrates businesses with their academic programs, many of these are naturally agricultural. Outside of the agribusiness program, local and globally based agribusiness entrepreneurs already interact with GU students.
 - The liberal arts approach to education already integrates cross-disciplinary resources into all its major. Therefore, integrating strong economics, business management, marketing, accounting and biology into an agribusiness major is not new for a liberal arts institution like Greenville University.
- Mark Jenner is academically and professionally qualified to lead an agribusiness program.
 - He has four agricultural degrees: BS agronomy, MS ag systems, MS ag econ, PhD in ag econ.
 - Jenner worked in agriculture in both Europe and Asia early in his career.
 - Jenner had owned and operated two successful agribusiness companies of his own.
 - Dr. Jenner brought 40 years of relationships to the GU agribusiness program development.
- Unlike most technically and vocationally based agricultural programs, agribusiness does not require a university farm for teaching agribusiness skills.

History

In November 2015, the Briner School of Business opened at Greenville University. Exploratory research was conducted on the marketability and delivery of an agribusiness program in the new Briner School of Business. A director of agribusiness was sought, recruited and hired. In Fall 2016, GU launched the agribusiness program with Mark Jenner as the charter director of agribusiness. Fall 2020 is the fifth school year of the program.

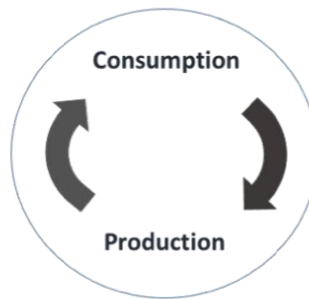
GU Agribusiness and Liberal Arts

- Jenner was brought to GU to build an agribusiness program. But because his academic pedigree is robust, he has taught thirteen different courses at GU with the following prefixes: AGRI (4), BUSN (4), ECON (3) and ENTR (2), plus the agribusiness practicum.
- Jenner’s academic load is 30 percent agribusiness, 50 percent economics, and 20 percent business management and entrepreneurship.
- The GU agribusiness program has relied on the biology program and non-business statistics to deliver the major courses.

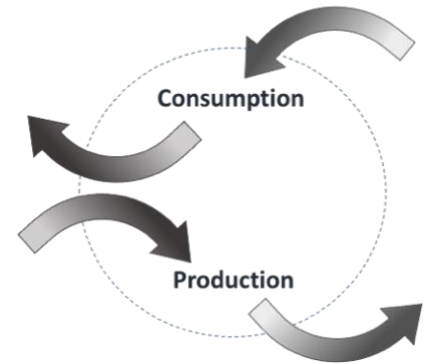


- Mark Jenner has built business spreadsheet analytics into his work with both Briner School of Business and the agribusiness analytical curricular needs. Students learn to replicate published charts from current data on the internet and transpose a column of multiple variables into columns with multiple categories (data management skills).
- Mark Jenner has built business technical writing skills into his upper-level agribusiness and Briner School of Business applied curricular writing needs.
- Mark Jenner has developed an ECON202 sub-theme on creating wealth in rural America. Effectively it is the economics of 'local', that drives the rationale for much of what GreenvilleSMART is delivering. Within this framework, real savings in capital costs, and imports, exports and deficits within the local area make sense.
- Jenner served for two years as part of the institutional assessment team and played a role in developing the justification for streamlining the institutional Student Learning Outcomes (SLOs).
- Jenner served for one year as Dean of the Business School and the Director of Graduate Studies, at a time when the business school had both face to face and online delivery of undergraduate and graduate business degrees.

Local – Produced and consumed in the same place



Global – Produced and consumed in different places



GU Agribusiness Curricular Cross-Check

GU agribusiness compares with other agribusiness programs. GU could compete with the largest universities. This requires existing GU agribusiness curriculum be strengthened.

	GU	SIU-C	Cobleskills- NY	Missouri U	Purdue- U
Agribusiness (additional technical req.)	63	58	47 12	76	51
Total Major Credit	63	58	59	76	59
Computer course	0	0	0	3	3
General Education	45	38	59	34	51
Math/statistics	3	6	6	7	9
Biology/Chemistry/Physics	3 to 9	7	6	9	14
Communication	5 to 8	15	6	6	12 to 13
Uncommitted courses	12	24	2	10	10
Total Credits for Degree	120	120	120	120	120

GU Agribusiness Successes in the First Four Years

- Accredited with both HLC and IACBE.
- Is an agricultural degree produced in a non-agricultural, academic unit.
- Has produced seven GU agribusiness graduates in 4 years (especially because it is a 4-year degree program).
- Currently has about 10 GU agribusiness students.
- Currently has 3 to 5 community college articulation agreements in place.
- Has one AGRI course available online.

GU Agribusiness Assessment in Introductory, Developmental, and Mastery Skills

The assessable artifact for agribusiness in the IACBE accreditation is the AGRI401 feasibility study. This project uses skills in agricultural literacy, broad analytics, and agribusiness communication.

Feasibility studies, in this context, are an examination of the purchase of a multiyear investment technology that requires evaluation of productivity at a current level (the baseline), as well as comparison of benefits and cost of investing the next level of operation (the new investment).

The ***introductory level*** of this same exercise is the business plan in AGRI101. AGRI101 is an introductory course. The largest objective of pursuing the development of a business plan is to introduce students to the four primary components of the business plan: business structure, marketing, operations and finance. The four assignments are intentionally brief, but all four build toward a system evaluation on a potential business.

The ***developmental level*** builds on skills for each of the four components:

1. business structure: AGRI101, BUSN101, ENTR130
2. marketing: AGRI201, AGRI301, MRKT201
3. operations: BUSN335 [New class, AGRI115 would fit here]
4. finance: ACCT 101, FINA341

Mastery level: Currently the mastery course is AGRI401 and the feasibility study. The second proposed AGRI350 course fits in as a pre-mastery level. The Biosystems Modeling looks at estimating sub-systems within the feasibility study. The models used in the Biosystem Modeling class aren't necessarily multiyear asset investments. They do look at interactions between components of production systems. After completing the modeling course, students will have the skill set to excel in the delivery of the end-of-program assessment artifact, the feasibility study.

**Business
Structure**

