

Illinois State University
Department of Agriculture

Proposed Changes to Master of Science in Agribusiness Degree Program

The proposal changes the Master of Science in Agribusiness program to a Master of Science in Agribusiness with two sequence options. These options include a sequence in Agribusiness and a sequence in Agriscience. The proposed changes include identifying a new “common core” for the two sequences. The core consists of nine hours (25% of the program requirements) comprised of three agribusiness courses. The Agriscience sequence is described below. The proposal also includes a reduction in required hours from 39 for the current Agribusiness major to 36 for the proposed Agribusiness sequence of the Agribusiness major. This reduction makes the Agribusiness and Agriscience sequences symmetric in terms of credit hour requirements. The 36-hour requirement still equals or exceeds the credit requirements of all masters programs in the College of Applied Science and Technology that require a thesis or a comprehensive examination. The agribusiness sequence retains the same course requirements from the College of Business that were present in the previous agribusiness program. However, the maximum limit of 12 hours of 400-level courses from the College of Business is explicitly included in the catalog copy.

Proposed Sequence in Agribusiness within the Agribusiness Degree

In this sequence, students choosing the thesis option or non-thesis option must complete required core courses (nine hours) consisting of AGR 497, 422, and 424 and additional required courses consisting of MKT 430, and MQM 421; six hours of business courses selected from MQM 420, FIL 411, 440, MKT 431, or ACC 450; and three hours of advance agribusiness courses selected from AGR 418, 420, or 445. Students who completed a limited number of business courses as undergraduates may be required to take some or all of the following foundation courses; ACC 401, FIL 404, MQM 402, MQM 406, MKT 403. Foundation courses cannot be presented for use in the Agribusiness degree program.

Option I: Option I is a 36-hour program that requires a thesis. Students selecting this option will complete the core requirements of nine hours, twelve hours of business courses, three hours of advanced agribusiness courses, six hours of Master’s Thesis (AGR 499) and six hours of electives selected from the list below.

Option II: Option II is a 36-hour program that requires a synthesizing experience consisting of three hours of Independent Study (AGR 400) under the direction of a major adviser and with the approval of an advisory committee. Students selecting this option will also complete the core requirement of nine hours, twelve hours of business courses, three hours of advanced agribusiness courses, and nine hours of electives selected from the list below. Students selecting this option must pass a comprehensive written/oral examination.

Elective courses: The following courses are acceptable to satisfy the elective courses requirement of the Agriscience Sequence: AGR 310, 312, 313, 314, 315, 316, 317, 318, 319, 320, 340, 352, 353, 355, 356, 357, 358, 363, 372, 375, 383, 418, 420, 445.

Proposed Sequence in Agriscience within the Agribusiness Degree

In this sequence, students choosing the thesis option or non-thesis option must complete required core courses (nine hours) consisting of AGR 497, 422, and 424 and additional required courses (eleven hours) consisting of AGR 445; BSC 490; and CHE 342, 343.

Option I: Option I is a 36-hour program that requires a thesis. Students selecting this option will complete the core requirements of nine hours, eleven hours of additional required courses, six hours of Master’s Thesis (AGR 499) and ten hours of electives selected from the list below.

Option II: Option II is a 36-hour program that requires a synthesizing experience consisting of three hours of

Independent Study (AGR 400) under the direction of a major adviser and with the approval of an advisory committee. Students selecting this option will also complete the core requirement of nine hours, eleven hours of additional required courses, and thirteen semester hours of electives selected from the list below. Students selecting this option must pass a comprehensive written/oral examination.

Elective courses: The following courses are acceptable to satisfy the elective courses requirement of the Agriscience Sequence: AGR 317, 352, 353, 355, 356, 357, 358, 363, 372, 375, 489; BSC 301, 321, 335, 336, 416; CHE 344, 444; GEO 303, 304, 305, 360, 380.

Concentrations: Students selecting the Agriscience Sequence may elect an Animal Science, Agronomy, or Horticulture Concentration. Students may choose courses from the following lists for each concentration.

- **Animal Science:** AGR 317, 363, 372, 375, 489; BSC 321, 416; CHE 344, 444; FCS 332.

- **Agronomy:** AGR 355, 356, 357, 358, 363, 489, BSC 301, 335, 336, GEO 303, 304, 305, 360, 380.

- **Horticulture:** AGR 352, 353, 355, 356, 357, 358, 363, 489; BSC 301, 335, 336.

Part A: Program Description and Explanations

Institution:	Illinois State University
Department:	Agriculture
Proposed program title:	M. S. in Agribusiness Sequence in Agribusiness Sequence in Agriscience
Previous program title:	M. S. in Agribusiness
CIPS Classification:	02.0101 (Agricultural Sciences-General) 01.0101 (Agricultural Business-General)
Date of Implementation:	August 2003

Description of proposed change:

The current proposal consists of changing the Master of Science in Agribusiness to a Master of Science in Agribusiness with two sequence options. These options include a sequence in Agribusiness and a sequence in Agriscience. The proposed changes include identifying a new “common core” for the two sequences. The core consists of nine hours (25% of the program requirements) comprised of three agribusiness courses. The sequence in Agriscience offers concentration options in Animal Science, Agronomy, or Horticulture. These curricular options are outlined in the attached catalog copy. The proposal also includes a reduction in required hours from 39 for the current Agribusiness major to 36 for the proposed Agribusiness sequence of the Agribusiness major. This reduction makes the Agribusiness and Agriscience sequences symmetric in terms of credit hour requirements. The 36-hour requirement still equals or exceeds the credit requirements of all masters programs in the College of Applied Science and Technology that require a thesis or a comprehensive examination. The agribusiness sequence retains the same course requirements from the College of Business that were present in the previous agribusiness program. However, the maximum limit of 12 hours of 400-level courses from the College of Business is explicitly included in the catalog copy.

Rationale for proposal:

The Department of Agriculture at Illinois State University is a multidisciplinary agriculture program that encompasses education, plants, animals, and the economics associated with these areas. The faculty members in the department regularly collaborate in research endeavors by writing research proposals and carrying out projects as co-investigators. In accordance with the Educating Illinois agenda of building a distinctive research agenda and strengthening graduate education, this proposal seeks to modify an existing graduate program and is directly in line with Action Item # 26. The current Master of Science in Agribusiness is a successful program with approximately 30 students and boasts a strong cultural diversity. It seems natural that if the faculty work in a multidisciplinary vein, then the graduate program should function in a similar manner by supporting Agriscience as well as Agribusiness research agendas. Current M.S. Agribusiness students are well suited for research in their specific area of agribusiness, but when a project requires both Agriscience and Agribusiness, there is a gap in that graduate students are not qualified to carry out laboratory and production type research plans. Undergraduate research support has been used extensively

in our department, but undergraduate students have heavy course loads and often cannot be shouldered with the time commitment required to carry out research. Graduate students, on the other hand, have a research requirement within the proposed program.

Recruitment of quality students into a new Master of Science program is one of the most important aspects to consider. For the Agriscience sequence, the first and obvious source of students is from within our own institution including those elite undergraduates in agriculture and the life sciences. Many of these students may already be part of a specific research program as undergraduates, allowing them a smooth transition to the graduate program. A second source of students that would bring diverse views and new ideas from outside the ISU community would be to recruit from elite, domestic and international, undergraduate programs. The Agriculture Faculty at ISU consistently interact with other research institutions, often in a collaborative effort to enhance various aspects of their research agendas. These relationships are a natural source for recruiting students into a graduate program.

With regard to the Agriscience sequence there are currently seven Agriscience related faculty positions within the ISU Department of Agriculture. The number of students enrolled in this program would obviously vary given the current research programs of specific faculty members. The current proposal has been written with Thesis and Non-Thesis options available. Based on the number of faculty members and two degree options, we would likely expect an average of two students per faculty member per year in the early stages of the program. Several faculty members have extensive research programs that would likely accommodate more students annually. These estimates would correlate to 14-20 students enrolled annually with 7-10 students graduating annually.

There is currently a strong research program established within the Department of Agriculture at Illinois State University. There are currently two research laboratories in Turner Hall that support animal science, soil science, plant science, and horticulture research. There is an additional laboratory in the Ropp Agriculture Building that supports animal science research. In addition to these chemical and tissue labs, the new University Farm at Lexington is already serving as a research unit supporting swine, beef cattle, soil science, and agronomic research projects. The farm will continue to develop as a major site for conducting scientific research.

Over the past five years, six faculty in Agriscience at ISU have accounted for \$2,301,063 in research funding. This funding has resulted in 66 research abstracts, 23 refereed journal articles and 3 book chapters. Other numerous field day presentations, popular press articles and research meeting proceedings have been produced as well. Over that same period of time, 54 undergraduate students have been utilized in the research program. Additionally, 11 Master of Science students from Agribusiness have participated in certain aspects of this Agriscience research program. These numbers reflect a commitment to research within the Department of Agriculture at Illinois State University. The current research programs would certainly be enhanced with the addition of a graduate component to the Agriscience related disciplines.

Expected impact on existing programs:

The current curricula in science and agriculture at ISU are structured such that it would accommodate this graduate program. The ability of our students to take courses in other disciplines on campus would serve to solidify the current concept of "learning communities" at ISU. Please refer to the attached letters of support from other ISU Departments with regard to available courses and classroom seats to accommodate new graduate students.

Library resources:

Please see attached letter of support from Milner Library.

Anticipated staffing arrangements:

No special staffing arrangements would be expected in that no new courses have been proposed. The agriculture faculty impacted by this proposal are all members of the graduate faculty, therefore other than scheduling within their own research programs, no new staffing requirements are needed.

Anticipated funding and sources:

Library funds request:

Soil and Sediment Contamination: an International Journal	\$ 450 annually
International Journal of Phytoremediation	\$ 295 annually
Pork Industry Handbook	\$ 100

Graduate Student Assistantships:

4 x 9months x \$900/month	\$ 32,400 annually
---------------------------	--------------------

The current minimum stipend for Agribusiness graduate assistants is \$ 825 per month. We propose to increase that figure to \$900 per month for the current University funded assistantships and to add 4 assistantships to the Department of Agriculture allotment as indicated above. We request that these funding needs be considered for allocation from Illinois State University enhancement funds or general revenue funds.