## **Program Learning Outcomes**

## Agribusiness and Economics Program Learning Outcomes:

Students completing the Agricultural Business and Economics programs will demonstrate:

- 1. Have a solid understanding of how markets operate and the effects of extensive government policies on those markets;
- 2. Obtain basic skills in mathematical and analytical reasoning and statistical techniques;
- 3. Be able to read and comprehend general articles in business and economics journals;
- 4. Understand firm and farm level decision rules for the efficient operation of enterprises and the institutional structure and use of agricultural marketing systems;
- 5. Be able to analyze changes in market and general economic conditions in a broad array of settings and be able to determine the impact on various groups affected by those changes;
- 6. Have knowledge in supporting areas such as accounting, plant science, and animal science in order to better develop technical knowledge specific to agriculture and agricultural business;
- 7. Be able to present ideas effectively in oral and written forms to those in the agricultural and related fields.

## Financial Engineering Program Learning Outcomes:

Students completing the Financial Engineering program will demonstrate:

- 1. an ability to apply knowledge of mathematics, science, economics, and financial engineering;
- 2. an ability to design financial instruments and risk management strategies, as well as to analyze and interpret data;
- 3. an ability to function on inter-professional teams;
- 4. an ability to identify, formulate, and solve financial engineering problems from a systems perspective;
- 5. an understanding of professional and ethical responsibility;
- 6. an ability to communicate effectively;
- 7. the broad education necessary to understand the impact of financial engineering and risk management solutions in a global, economic, environmental, and societal context;
- 8. a recognition of the need for, and an ability to engage in life-long learning;
- 9. an ability to use the data analysis and modeling tools necessary for financial engineering and risk management; and
- 10. an ability to design, develop, implement, and improve integrated systems.

## MS Applied Economics Learning Outcomes

Students completing the Applied Economics program will demonstrate:

- 1. an ability to conduct substantive independent research;
- 2. mastery of subject content knowledge and research/critical inquiry methodology;
- 3. effective written communication of substantive content;
- 4. effective oral communication of substantive content;
- 5. an ability to conduct scholarly or professional activities in an ethical manner.