

**RESOLUTION ON ESTABLISHING A B.S. DEGREE IN AGRIBUSINESS
AND RENAMING THE B.S. DEGREE IN AGRICULTURAL AND APPLIED
ECONOMICS**

WHEREAS, with the increasing complexity of economic challenges, employers in agribusiness and in non-agricultural sectors are seeking graduates with understanding of the economic problems facing agribusiness and skills in applied economic management; and

WHEREAS, education is vital in preparing students for leadership roles in agribusiness and in applied economic management in non-agricultural sectors; and

WHEREAS, educational preparation of students for a career in agribusiness differs from preparation for a career in applied economic management in non-agricultural sectors; and

WHEREAS, substantial interest has been expressed by students and program advisors for separate degrees in Agribusiness and Applied Economic Management; and

WHEREAS, numerous employment and graduate opportunities will be available for students with degrees in Agribusiness and Applied Economics Management;

NOW, THEREFORE, BE IT RESOLVED, that a spin-off Bachelor of Science degree in Agribusiness be created, and that the name of the existing Bachelor of Science degree in Agricultural and Applied Economics be changed to Applied Economic Management, effective fall 2010.

RECOMMENDATION:

That the above resolution creating an Agribusiness bachelor of science degree and renaming the existing Agricultural and Applied Economics bachelor of science degree to Applied Economic Management be approved and forwarded to the State Council of Higher Education for Virginia for further review and approval.

June 7, 2010

PROPOSAL SUMMARY
Bachelor of Science in Applied Economic Management
Bachelor of Science in Agribusiness

Overview

Transfer of faculty members with expertise in financial planning to the Department of Agricultural and Applied Economics (AAEC) has fueled the growth of undergraduate majors in the department from 84 in 2000 to 146 in 2009. Half of the majors are now in the financial planning track. The current degree designation, Agricultural and Applied Economics, hampers their ability to seek jobs in non-agricultural sectors.

This is a proposal to split the existing degree into two separate degrees. The existing Agricultural and Applied Economics bachelor's degree would be renamed as Applied Economic Management, removing the reference to agriculture in the title. The second degree is a B.S. in Agribusiness to serve the students who continue to seek preparation for agriculture-related careers.

Degree Requirements

Required courses and electives in the Applied Economic Management and Agribusiness degrees provide breadth and depth of learning. University, college, and department core courses provide basic knowledge in humanities, natural sciences, and social sciences. Disciplinary core courses and restrictive electives teach fundamentals of the discipline as they relate to each of the degree options. Analytical methods give students additional quantitative skills necessary for their degree options. The areas of specialization allow students to gain expertise in a specific area that fits their primary career interests. Free electives provide educational flexibility.

Applied Economic Management

Community Economic Development; Environmental Economics, Management, and Policy; Financial Planning; and International Trade and Development are the defined options available to students.

University, college, and department core	45-50 hours
Disciplinary core courses specific to degree option	23-47 hours
Restrictive elective	9-12 hours
Analytical methods	8-9 hours ¹
Area of specialization	18 hours
Free electives	<u>10-16 hours</u>
Total credits	120 hours

¹ Analytical methods courses for Financial Planning are included with the disciplinary core courses requirement.

Agribusiness

Options for this degree are Agribusiness and Veterinary Business Management.

University, college, and department core	48 hours
Agribusiness core courses	25 hours
Restrictive electives	12 hours
Analytical methods	9 hours
Area of specialization	18 hours
Free electives	<u>8 hours</u>
Total credits	120 hours

Relationship to Other Management and Business-Related Degree Programs

Virginia Tech has undergraduate B.S. degree programs in Marketing; Management; Finance, Insurance, and Business Law; and Economics. These programs are located in the Pamplin College of Business. Economics is also offered through the College of Science. The proposed B.S. degrees fill unique niches in applied economics and management without duplicating existing management programs at the university.

What gives the proposed degrees additional strength and uniqueness is their home in AAEC within the College of Agriculture and Life Sciences. The courses offered in these degrees include fundamentals of applied economics and business management while also giving students hands-on experiential learning so that they are ready to enter the professional ranks upon graduation.

AAEC also has outstanding master's and doctoral programs, with the doctoral degree being offered jointly with the Economics Department. AAEC extension and outreach programs are focused on farm and small business management, agricultural and seafood marketing, policy, tax and legal issues, and youth economic education. AAEC faculty have prolific research programs in agricultural competitiveness, rural and community development, natural resource and environmental economics, nutrition and health, and economic and financial well-being. Faculty have a strong record in obtaining competitive research grants in these areas. These activities provide experiential learning and undergraduate research opportunities for students that complement their academic course work.

Academic Goals for Students

The goal for students is attainment of key skills and understanding of concepts necessary for a successful career in applied economic management or agribusiness. Key skills include oral and written communication, quantitative analysis, and use of relevant computer software. Basic economic concepts applicable to both degrees include principles of microeconomics and macroeconomics. Advanced concepts and issues for the Applied Economic Management degree include:

- economic development strategies
- natural resource and environmental policy
- valuation of resources and environmental amenities
- international trade and monetary flows
- principles and applications of personal financial planning
- retirement planning

Advanced concepts and issues for the Agribusiness degree include:

- small business management
- market analysis and forecasting
- risk analysis and management
- financial management principles and analytical tools
- labor management
- strategic planning and contingency planning

Three capstone courses—Agricultural Management and Problem Solving, Environmental Economic Analysis and Management, and Financial Planning Applications—focus on projects that require students to synthesize concepts and applications from previous coursework to solve real-world problems. Completion of capstone projects gives students further opportunity to refine their skills of written and oral communication and quantitative analysis. Classroom learning is reinforced by extra-curricular activities such as academic clubs and competitions. Students are encouraged to participate in internships with private or public organizations to gain further experience in applying academic knowledge to solving real-world problems. Extra-curricular and internship experiences give students additional opportunities to develop their social networking skills to enhance their careers and enrich their lives.

Types of Jobs for which Graduates will be Prepared

The program goal is to provide marketable skills and intellectual depth necessary for successful careers or graduate studies in applied economics or agribusiness. The range of possible jobs or graduate school opportunities will depend on the degree and degree option chosen by the student.

Agribusiness opportunities are numerous due to the size and diversity of the agricultural sector. The estimated gross value added of farm production was \$135.1 billion in 2009 while the average over 1999-2008 was \$129.1 billion (U.S. Department of Agriculture, 2009a). Yet the agricultural sector extends well beyond the farm gate. Only an estimated \$0.19 of every dollar spent on food goes to the farmer, with the remainder going to processing, transportation, and marketing activities (U.S. Department of Agriculture, 2009b).

Successful management of agribusiness and related firms is vital to U.S. economic prosperity. Key challenges facing U.S. agribusiness managers in the 21st century include globalization, adding value, achieving profitability, adapting to change, and

dealing with technological innovation (Boehlje, Akridge, and Kalaitzandonakes, 2002). To respond to these challenges, employers seek graduates who are trained in the use of analytical business and economic frameworks, the analysis of data, the integration of concepts with quantitative analysis, as well as team work and communication skills (Boehlje, Akridge, and Kalaitzandonakes, 2002).

Based on AAEC's previous student placements, agribusiness opportunities include farming/nursery management, commodity marketing, agricultural credit positions with banks and with the Farm Credit system, real estate appraisal and sales, and positions with agricultural processing and retail firms. Some students may choose to operate their own businesses. The Virginia Agribusiness Council and First Bank and Trust Company, important employers of our graduates, have provided letters of support after reviewing the proposal.

Opportunities in applied economic management may include careers with federal, state, and local governments, with non-governmental organizations, with private consulting firms, and with other types of businesses. Graduates may work on issues such as rural development to expand employment opportunities, natural resource management, provision of public services to rural areas, and international trade and development.

Opportunities in financial planning are growing rapidly as society ages and more people confront the need to plan for retirement. In 2006, *Money and Salary.com* ranked financial advisors as third on their list of the 50 best jobs in America based on salary, job prospects, and career characteristics. Financial planners strive to help individuals, families, and small businesses to achieve personal success through financial success.

Students may also go on to graduate or professional school. Graduates may pursue advanced degrees in economics, agricultural and applied economics, business administration, law, veterinary medicine, and other fields.

Program Resources

All necessary resources and courses are already in place and no new courses or teaching resources will be required. The proposed degree will not additionally burden the university's budget.

Benchmarks for Assessing the Program

The following benchmarks for success apply to the renamed degree in Applied Economic Management as well as the proposed spin-off degree, Agribusiness.

- Maintains 60 majors by the fifth year in which the new or renamed degree is offered;
- Most majors (80%+) graduate in 5 years or less;
- Most graduates (80%+) obtain employment in their chosen field (agribusiness or applied economic management) or pursue further graduate or professional study;

- Employers (75%+) remain satisfied with graduates' preparation for entry-level employment.

References

- Boehlje, Michael D., Jay T. Akridge, and Nicholas G. Kalaitzandonakes 2002. "Preparing for Success in the Agribusiness Market Place." *Journal of Agribusiness* (20:1): 31-39.
- U.S. Department of Agriculture, Economic Research Service. 2009a. "Value Added to the U.S. Economy by the Agricultural Sector?" Available at www.ers.usda.gov/publications/agoutlook/aotables/2009/09Sep/aotab29.xls. Accessed November 6, 2009.
- U.S. Department of Agriculture, Economic Research Service. 2009b. "Where Does Your Food Dollar Go?" Available at www.ers.usda.gov/Briefing/FoodMarketingSystem. Accessed November 6, 2009.



B.S. in Agribusiness and B.S. in Applied Economic Management

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Academic Affairs Committee
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Background

- **Within the College of Agriculture and Life Sciences (CALs) the Department of Agricultural and Applied Economics (AAEC) produces knowledge that assists society in making sound economic decisions about agricultural products, rural communities, and natural resources.**
- **Addition to AAEC of faculty who specialize in financial planning.**
- **Renaming the major captures shifts in department academic program.**
- **Fall of 2000: 84 majors; in the fall of 2009: 146 majors, half of whom are Financial Planning majors.**





Proposal

- **Proposed Degree Actions:** take one existing degree with multiple tracks and create two separate degrees; rename existing degree
 - Create a new *B.S. in Agribusiness* from an existing track (“spin-off degree”) and
 - Change the name of the existing B.S. in Agricultural and Applied Economics to *B.S. in Applied Economic Management*
- **Goal:** Prepare students for graduate study or successful careers in
 - Agribusiness
 - Community Economic Development
 - Environmental Economics, Management, and Policy
 - Financial Planning
 - International Trade and Development



Degree Requirements for Agribusiness and Applied Economic Management

120 Credit Hours

- University, college, and department core
- Disciplinary core courses
- Restrictive electives
- Analytical methods
- Area of specialization
- Free electives





Relationship to Management Programs at Virginia Tech

Proposed Agribusiness and Applied Economic Management degrees complement programs in Pamplin College of Business and the College of Science in:

- **Marketing**
- **Management**
- **Finance, Insurance, and Business Law**
- **Economics**



Unique Elements and Strengths Agribusiness and Applied Economic Management

- **Academic home in the College of Agriculture and Life Sciences**
- **AAEC M.S and Ph.D programs**
- **AAEC extension and outreach**
 - **Farm and small business management**
 - **Agricultural and seafood marketing**
 - **Policy, tax, and legal issues**
 - **Youth economic education**





Unique Elements and Strengths Agribusiness and Applied Economic Management

- **AAEC Research Programs**
 - **Agricultural competitiveness**
 - **Rural and community development**
 - **Natural resource and environmental economics**
 - **Nutrition and health**
 - **Economic and financial well-being**



Academic Goals for Students

- **Key Skills**
 - **Oral and written communication**
 - **Quantitative analysis**
 - **Computer software**
- **Basic Concepts**
 - **Principles of microeconomics**
 - **Principles of macroeconomics**





Advanced Concepts for Applied Economic Management

- **Varies with degree option**
- **Examples:**
 - **Economic development strategies**
 - **Natural resource and environmental policy**
 - **Valuation of resources and environmental amenities**
 - **International trade and monetary flows**
 - **Principles and applications of personal financial planning**
 - **Retirement planning**



Careers in Applied Economic Management

- **Federal, state and local government**
- **Non-governmental organizations**
- **Private consulting firms**
- **Other businesses**
- **Advanced graduate or professional studies**





Advanced Concepts for Agribusiness

- **Small business management**
- **Market analysis and forecasting**
- **Risk analysis and management**
- **Financial management principles and tools**
- **Labor management**
- **Strategic planning and contingency planning**



Career Opportunities in Agribusiness

- **Farm/nursery management**
- **Commodity marketing**
- **Agricultural credit**
- **Real estate appraisal and sales**
- **Agricultural processing and retail firms**
- **Owner/operator of business**
- **Further study in graduate or professional school**





Program Benchmarks

- **Maintain 60 majors by the fifth year in which the renamed or new degree is offered**
- **Majors graduate in five years or less (80%+)**
- **Graduates employed in their chosen field or pursue further study (80%+)**
- **Employers satisfied with graduates' preparation (75%+)**



Questions?

RECOMMENDATION:

That the renamed B.S. degree in Applied Economic Management and the spin-off B.S. degree in Agribusiness be approved and forwarded to the State Council of Higher Education for Virginia for further review and approval.

