

Addendum Roanoke College

Pathway for Roanoke College students to the Roanoke College / Virginia Tech Collaborative UG/G for the online Masters of Agricultural and Applied Economics

Roanoke College students are eligible to apply in their Junior year and be accepted into the Roanoke College/Virginia Tech Collaborative UG/G Program for the online Masters of Agricultural and Applied Economics by completing the following courses by the second semester of their Junior year.

Table 1: Pathway courses (non-transferable). Our expectation is students would have an overall 3.0 grade average in the courses listed below with no grade lower than a B-.

Roanoke College Courses	Virginia Tech Equivalent
<p>MATH 121 - Calculus I:</p> <p>The analysis of limits, derivatives, integrals, and their applications for functions of one variable.</p>	<p>MATH 1225 - Calculus of a Single Variable (4 credits):</p> <p>Quantitative and computational thinking to address relevant intercultural and global issues. Unified calculus course covering techniques of differential and integral calculus for functions of one variable. Constitutes the standard first-year mathematics courses for science and engineering. Limits, continuity, differentiation, transcendental functions, applications of differentiation, introduction to integration.</p>
<p>STAT 210 - Statistical Methods I:</p> <p>Data collection and experimental design, graphical and numerical methods for describing data, correlation and linear regression, probability models, random variables, the central limit theorem, one and two-sample hypothesis tests and confidence intervals, Chi-Square test, and one-way ANOVA.</p>	<p>No Virginia Tech equivalent course offered</p>
<p>or STAT 220 - Statistical Methods II:</p> <p>Simple and multiple regression techniques, one and two-way ANOVA, nonparametric methods, logistic regression, big data, and bootstrap methods.</p>	<p>STAT 3006 - Statistical Methods (3 credits):</p> <p>Basic statistical methodology: exploratory data techniques, estimation, inference, and comparative analysis by parametric, nonparametric, and robust procedures. Analysis of variance (one-way), multiple comparisons, and categorical data. Includes real-world examples. Develops problem-solving skills and ethical reasoning</p>

	within the context of learning from data. 3006: Analysis of variance, simple and multiple, linear and nonlinear regression, analysis of covariance.
ECON 321 - Intermediate Microeconomics: In-depth coverage of contemporary economic discourse, with an emphasis on the pricing mechanism, competitive and imperfectly competitive markets, game theory, the distribution of income, and public economics.	AAEC 3004 - Agricultural Production and Consumption Economics (3 credits) The economic principles of production. Applications to decision-making and the allocation of resources for the agricultural firm. Consumer behavior and demand for agricultural products.
BUAD 342 - Corporate Finance: The principles of asset management, financial structure, and types of securities and their characteristics.	AAEC 3424 - Value-Based Management in Agribusiness (3 credits) Focus on finance concepts in the agricultural and environmental sectors. Apply the value-based management principles and financial analysis to industry-related cases. Estimate cost of capital, free cash flow, and net present value. Team-based approach on a real-world valuation case.

Roanoke College courses that are eligible for transfer into the online Masters of Agricultural and Applied Economics. To be admitted, students must have an overall GPA of or above 3.3. A grade of B or better must be earned in each course to be transferred.

Table 2: Transferable courses

Roanoke College Courses	Virginia Tech Equivalent
BUAD 442 - Finance Capstone	AAEC 4404 - Ag Management and Problem Solving
ECON 461 - Economics Seminar	AAEC 4414 - Applied Economic Problem Solving

As opportunities arise, other courses may be reviewed and added to the transfer list for the Masters of Agricultural and Applied Economics at Virginia Tech by mutual consent of both parties. Likewise, should the content in BUAD 442, ECON 461, or any other course offered at Roanoke College included in the above list change substantively, the responsible parties at Roanoke College are obligated to promptly notify their Virginia Tech counterparts that are parties to this agreement.