Prerequisite Courses for Successful Graduate Studies

I frequently get emails from potential graduate students all over the world wanting to get into graduate program in agricultural/applied economics. Unfortunately, most of the applicants do not realize the amount of mathematics, statistics & probability theory, and undergraduate economics courses preparation needed for performing well in the graduate studies.

If you plan to get a M.S. degree and then go on for Ph. D. in Economics or Agricultural Economics and pursue a career in academics (particularly doing teaching and research), you would be better off taking the following courses and knowing the materials before entering a graduate program.

**Math Courses**
- Pre-calculus Algebra and Analytic Geometry
- Analytic Trigonometry
- Analytical Geometry and Calculus I
- Analytical Geometry and Calculus II
- Analytical Geometry and Calculus III
- Introduction to Higher Mathematics
- Ordinary Differential Equations
- Linear Algebra

**Stat Courses**
- Statistical Methods
- Probability and Statistics
- Statistical Analysis
- Probability Theory
- Mathematical Statistics

These math and stat courses are not an exclusive set by any means. Taking additional math and probability theory courses would be very useful.

**Undergraduate Econ Courses**
- Principles of Macroeconomics
- Principles of Microeconomics
- Intermediate Macroeconomic Analysis
- **Intermediate Microeconomic Analysis**
- Money and Banking
- International Economics
- International Trade
- International Finance
Labor Economics
Monetary Economics
Natural Resource Economics
Environmental Economics
Development Economics
Industrial Organization
Econometrics
Game Theory