



Master of Science in Agriscience Technology

Presentation to Academic & Student Affairs Committee
Board of Trustees

March 6, 2025





Overview and Features of Program

The Agriscience Technology degree will train highly skilled workers in the agricultural field that will be integral to the states' transition from conventional agricultural systems to new smart systems that are being implemented globally. The Agriscience Technology degree will focus on developing graduates who are flexible, innovative, and able to solve real world problems using the latest technological advances. This will be achieved through a multi-disciplinary effort utilizing faculty with expertise in animal science, horticulture, soil science, geospatial technology, engineering, and agribusiness.





Overview and Features of Program

Currently, THEC reports there are ten agriculture-related master level degree programs in Tennessee. The proposed Agriscience Technology degree will be unique in that it will integrate scientific and technological disciplines with a focus on applying smart system technology to agriculture.

Degree Requirements:

- Thesis option – 24 credit hours of coursework and 6 credit hours of thesis research.
- Non-Thesis option – 33 credit hours of coursework
- Coursework may be a combination of online and onground, depending on the nature of the course content.

Agriculture-Related Master's Programs in Tennessee

UNIVERSITY	PROGRAM
TSU	Agriculture Science
MTSU	Horse Science
UTM	Agriculture & Natural Resource Systems Management
UTK	Agricultural Economics
UTK	Agricultural Leadership Education & Communications
UTK	Entomology & Plant Pathology
UTK	Environmental Soil Science
UTK	Animal Science
UTK	Food Science & Technology
UTK	Plant Sciences





Need for Program

Feasibility Study showed...

- Agriculture companies & organizations often require a graduate degree in agriculture for career opportunities
- Professionals with a Bachelor's degree often seek an advanced degree in agriculture
- Many of our own undergraduate students have expressed their desires to pursue a graduate degree in agriculture at Tennessee Tech to be more competitive in the job market

Letters of Support from...

- “TTU would be helping to fill an important and emerging need in the industry. ... The new degree program would be helping to meet the workforce needs of our agency and others”
(Deputy Commissioner, TN Dep Ag)
- “It is the belief of the Co-ops that this new degree program will be able to help us meet the current need to reach our vision” *(TN Farmers Cooperative)*
- “This well-designed degree program will serve to train students in a very exciting area of technology and sustainability that our industry and others are increasingly seeking”
(Executive Director, TN Poultry Association)





Enrollment Projections

	Year 1	Year 2	Year 3	Year 4	Year 5
Enrollment (total # students, full-time and part-time)	7	12	16	19	19
Student Attrition	2	3	4	5	5
# of Graduates	0	3	4	7	7

Instructional Cost & Revenue Projections

- No additional full-time faculty lines will be required
- 9 graduate level courses will be developed for this program
- Expenses listed below represent additional costs to the academic unit beyond their reallocations of current resources

	Year 1	Year 2	Year 3	Year 4	Year 5
Expenses	\$9,000	\$8,250	\$8,250	\$8,250	\$8,250
Tuition/fees*	\$32,964	\$98,892	\$131,856	\$156,579	\$156,579



