

Program of Study for Ph.D. in Agricultural Sciences, Tennessee State University

<i>Courses</i>	<i>Credit hours</i>
<i>Core Required Courses</i>	<i>13 credit hours</i>
AGSC 5110 – Research Methods	3 crs
AGSC 6350 – Topics in Agricultural Sciences	3 crs
AGSC 6620 – Research Ethics in Agricultural Sciences	1 crs
AGSC 7200 – Experiential AgriScience Teaching in Higher Education	1 crs
AGSC 7590 – Applied Multivariate Analysis	3 crs
AGSC 7610, 7620 – Doctoral Seminar in Agricultural Sciences I, II	2 crs
<i>Dissertation Research</i>	<i>24 credit hours</i>
AGSC 8120 – Doctoral Dissertation Research	24 crs
<i>Electives</i>	<i>11 credit hours</i>
AGSC 5015 Principles of Organic Agriculture	3 crs
AGSC 5050 Methods of Teaching Agricultural and Environmental STEM	3 crs
AGSC 5060 Statistics for Research	3 crs
AGSC 5170/6170 Advanced Poultry Production and Management	3 crs
AGSC 5180 Soil Classification	3 crs
AGSC 5190 Plant Breeding	3 crs
BIOL 5190 Ecology	3 crs
AGSC 5220 Plant Growth Substances	3 crs
AGSC 5230 Advanced Propagation of Horticultural Plants	3 crs
AGSC 5260 Environmental Analysis	3 crs
AGSC 4270/5270 Biosecurity and Bioforensics	3 crs
AGSC5280 Advanced Poultry Nutrition and Biotechnology	3 crs
AGSC 5290 Omics	3 crs
AGSC 5320 Wetlands Ecology & Management	3 crs
AGSC 5340 Cell and Tissue Culture	4 crs
AGSC 5350 Independent Study of Contemporary Issues and Problems	3 crs
AGSC 5470 Immunochemistry in Biotechnology	3 crs
AGSC 5500/7500 Environmental Issues and Sustainability	3 crs
AGSC 5510/7510 Ecosystem Science and Management	3 crs
AGSC 5520 Advanced Food Processing and Engineering	3 crs
AGSC 5530 Advanced Technologies in Detection and Food Analysis	3 crs
AGSC 5560 Food Product Development and Sensory Science	3 crs
AGSC 5570 Climate Change	3 crs
AGSC 5590 Forest Ecology and Management	3 crs
AGSC 5900/7900 Applied Entomology	3 crs
AGSC 6010 Gene Structure & Function	3 crs
AGSC 6270 Advanced Agricultural Biosecurity	3 crs
AGSC 6510 Advanced Geospatial Information Systems	3 crs
AGSC 6520 Advanced Spatial Analysis	3 crs
AGSC 6525 Remote Sensing and Image Analysis	3 crs
AGSC 6530 Advanced Geospatial Metadata	3 crs
AGSC 6540 Advanced Spatial Database Design and Management	3 crs
AGSC 6550 Advanced Geospatial Information Systems Application and Design	3 crs
AGSC 6560 Advanced Global Positioning Systems	3 crs
AGSC 7010 Advancement in Agricultural Biotechnology	3 crs
AGSC 7040 Plant Tissue Culture Methods and Application	3 crs
AGSC 7050 Biotechnology in Animal Reproduction	3 crs
AGSC 7260 Advanced Environmental Analysis	3 crs
AGSC xxxx Climate Smart Agriculture	2 crs
Guided Elective	3 crs
Total	48 credit hours