

**AGRICULTURAL SCIENCES, CONCENTRATION—FOOD BIOSCIENCE AND TECHNOLOGY ACADEMIC MAP:  
 DEGREE BS (120 CREDIT HOURS)**

This degree map is a semester-by-semester sample course schedule for students majoring in **Agricultural Sciences with a concentration in Food Bioscience and Technology**. The milestones listed to the right of each semester are designed to keep a student on track to graduate in four years. The schedule serves as a general guideline to help build a full schedule each semester. Milestones are courses and special requirements necessary for timely progress to complete a major. When one or more milestones are missed, students should consult with an academic advisor to determine if another degree path would be more suitable.

This concentration stresses learning scientific concepts with the application of technology. It provides the opportunity to expand beyond the background provided by the core courses. This emphasis is for students interested in pursuing a master's and/or a doctoral program in a science or technology field in the future. In addition, this concentration provides additional background for research and development jobs in industry and the public sector and it will prepare one to become a food chemist, food microbiologist, or a food-processing technologist. As a student in the Department of Agricultural and Environmental Sciences, students must gain upper division status before enrolling in any upper division courses (3000 & 4000 levels). Students may be admitted to the upper division after completing at least 60 degree-level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0. It is the responsibility of the student to submit a formal petition to the department. Such petition will be reviewed by a departmental committee to ensure that all criteria have been met. Major Core: A minimum of 17 semester hours including, AGSC 1200, 1410, 2010 or 2020, 2040, 4500, 4710, and UNIV 100 are required. For General Education: 41 semester hours are required.

Tennessee State University recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). Various means of earning PLA credit at TSU are the following: Advanced Placement Program, American Council of Education (ACE) Military Credit, College Level Exam Program (CLEP), DSST Credit by Examination Program (includes DANTES Examination), Institutional Course Challenge Exams (Departmental Exams), International Baccalaureate Credit, Other Military Service, Portfolio Assessment. To learn more about PLA contact your academic advisor or the Office of Student Support Services for Adult and Distance Learners at (615) 963-7001 or [adultstudentsupport@tnstate.edu](mailto:adultstudentsupport@tnstate.edu).

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**Department Web Address: [http://www.tnstate.edu/agriculturalprograms/degrees/food\\_technology.aspx](http://www.tnstate.edu/agriculturalprograms/degrees/food_technology.aspx)**

Fall Schedule		Milestones
<b>Semester 1</b>	<b>Hrs.</b>	<b>Semester 1</b>
UNIV 1000*	1	
ENGL 1010	3	Pre-Requisite Course: Must be taken before HIST 2010, HIST 2020, HIST 2030, HIST 2060, HIST 2070, or HIST 2700; Minimum grade "C" Required
COMM 2200	3	
HUMANITIES**	3	
AGSC 1410	3	Minimum Grade of "C" Required
BIOL 1110/1111	4	Pre-Requisite Course: Must be taken before BIOL 2400/2401
<b>Total Hours</b>	<b>17</b>	

\*An Orientation course taken at another University does **NOT** meet this requirement. Students with less than 6 credit hours must take UNIV 100 at TSU.

\*\*Students must take credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART, 1010, HIST 1000, THTR 1020, MUSC 1010, PHIL 1030, or RELS 2010.

Spring Schedule		Milestones
<b>Semester 2</b>	<b>Hrs.</b>	<b>Semester 2</b>
ENGL 1020	3	Pre-Requisite Course: Must be taken before HIST 2010, HIST 2020, HIST 2030, HIST 2060, HIST 2070, or HIST 2700; Minimum grade "C" Required
MATH 1110	3	Pre-Requisite Course: Must be taken before AGSC 3690
AGSC 1200	3	Minimum Grade of "C" Required
AGSC 2200	4	Minimum Grade of "C" Required
AGSC 2010	3	Pre-Requisite Course: Must be taken before AGSC 4030; Minimum Grade of "C" Required
<b>Total Hours</b>	<b>16</b>	

Fall Schedule		Milestones
<b>Semester 3</b>	<b>Hrs.</b>	<b>Semester 3</b>
ENGL LIT*	3	
CHEM 1110/ 1111	4	Pre-Requisite Course: Must be taken before CHEM 1120/1121, CHEM 2120/2121, AGSC 3690, AGSC 3510, and AGSC 4460
AGSC 2040	3	Minimum Grade of "C" Required
HUMANITIES**	3	
HIST 2010***	3	ENGL 1010/1020 Required
<b>Total Hours</b>	<b>16</b>	

\*Courses within the range of ENGL 201 - ENGL 2322 will meet this requirement.

\*\*Students must take credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART, 1010, HIST 1000, THTR 1020, MUSC 1010, PHIL 1030, or RELS 2010. Students must remember **NOT** to duplicate course option from a previous semester.

\*\*\*The Department recommends HIST 2010; however, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 satisfy this requirement.

Spring Schedule		Milestones
<b>Semester 4</b>	<b>Hrs.</b>	<b>Semester 4</b>
HIST 2020*	3	ENGL 1010/20120 Required
CHEM 1120/1121	4	Pre-Requisite Course: Must be taken before AGSC 3510 and AGSC 4460
SOCI 2010	3	
SOCIAL BEHAVIORAL ELECTIVES**	3	
BIOL 2400/2401	4	3430 Must be completed before taking 3000 level courses.
<b>Total Hours</b>	<b>17</b>	<b>Students must meet with an academic advisor to make a petition to the Upper Division Courses.</b>

\*The Department recommends HIST 2020; however, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 satisfy this requirement. Students must remember **NOT** to duplicate course option from a previous semester.

\*\*The following courses can meet the Social Behavioral Elective: AFAS 2010, ANTH 2300, ECON, 2010, GEOG 1010, HPSS 1510, POLI 1010 PSYC 2010, WMST 2000, and URBS 2010.

Fall Schedule		Milestones
<b>Semester 5</b>	<b>Hrs.</b>	<b>Semester 5</b>
CHEM 2010/2011	4	Pre-Requisite Course: Must be taken before CHEM 3000 level courses.
AGSC 3500	3	Pre-Requisite Course: Must be taken before AGSC 4280; Minimum Grade of "C" Required
AGSC 3530	3	Minimum Grade of "C" Required Prerequisite: BIOL 2400
AGSC 3690	3	Pre-Requisite Course: Must be taken before AGSC4280; Minimum Grade of "C" Required. Prerequisite: AGSC 3500, MATH 1110 & CHEM 1110
<b>Total Hours</b>	<b>13</b>	

Spring Schedule		Milestones
<b>Semester 6</b>	<b>Hrs.</b>	<b>Semester 6</b>
		<b>Students must meet with academic advisor to discuss research topics for the Senior Project.</b>
CHEM 2120/2121	4	Pre-Requisite Course: Must be taken before CHEM 3000 level courses.
AGSC 3510	3	Minimum Grade of "C" Required
AGSC Elective*	3	Minimum Grade of "C" Required
AGSC 3120	4	Minimum Grade of "C" Required
AGSC 3020	3	Minimum Grade of "C" Required Prerequisite: AGSC 2010 Required or instructor's approval
<b>Total Hours</b>	<b>17</b>	

AGSC Electives are as follows: 3450, AGSC 3480, or AGSC 3601.

Fall Schedule		Milestones
<b>Semester 7</b>	<b>Hrs.</b>	<b>Semester 7</b>
		<b>Review Senior Standing with Academic Advisor</b>
AGSC 4030	4	Minimum Grade of "C" Required Prerequisite: AGSC 2010 or instructor's approval
AGSC 4280	3	Minimum Grade of "C" Required
AGSC 4710	1	Minimum Grade of "C" Required
CHEM 3410/3411	4	
<b>Total Hours</b>	<b>12</b>	

Spring Schedule		Milestones
<b>Semester 8</b>	<b>Hrs.</b>	<b>Semester 8</b>
		Take Senior Exit Exam and Apply for Graduation
AGSC 4460	3	Minimum Grade of "C" Required
AGSC 4500	3	Minimum Grade of "C" Required
CHEM 3420	3	
AGSC 4450	3	Minimum Grade of "C" Required; perquisite AGSC 1410
<b>Total Hours</b>	<b>12</b>	

**Employment Information:**

There is unmet demand for skilled professionals within the food industry, the largest manufacturing industry in the United States. Completing a degree in Agricultural Sciences, Concentration—Food Bioscience and Technology opens doors to a world of employment in supervisory or managerial roles in various fields.

**Representative Job Titles Related to this Major:**

Food Technologist, Microbiologist, Production and Quality control Managers, Food Inspectors, Home-land Security Associates and Entrepreneurs

**Representative Employers:**

Major Food Companies i.e. PepsiCo Inc., Coca-Cola Co., Aquafine Corporation, Kraft Foods, Nestle, ConAgra Foods Inc., Tyson Foods and the Federal Government

**International study is available for all TSU students and may include opportunities for internships or taking course work towards various minors.** International study may have an impact on the academic map; therefore, it is important to consult with the academic advisor for this major before participating in an international Program opportunity. Students interested in study abroad opportunities should contact the Office of International Programs and consult with their academic advisor.

**Launch My Career Tennessee**

To better assist you in making decisions about the career for which you are preparing, a link to the website, Launch My Career Tennessee has been provided for you to explore. The tools on the site will give you a wealth of information concerning your degree choice and possible career pathways. For example, the site will allow you to determine the return on the investment you are making in your education by estimating expected earnings over the course of your career. Begin charting your course by clicking on the link below.

<http://launchmycareertn.org/>

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This map is not intended to be a contract, either expressed or implied, between the University and the students, but represents a flexible program of the current curriculum which may be altered from time to time to carry out the academic objectives of the University. TSU specifically reserves the right to change, delete or add to any MAP at any time within the student's period of study at the University.