Agricultural Sciences and Natural Resources

**Bachelor of Science in Agribusiness**

**FIRST YEAR**

**Fall**

- Lab Science
  - Lab Science* 4
  - ENGL 1301, Essentials of Coll. Rhetoric 3
  - MATH 1330, Intro. Math. Analysis I 3
  - POLS 1301, American Govt., Org. 3
  - AAEC 2300, Computers in Ag. II 3
  - TOTAL 13

**Spring**

- ENGL 1302, Advanced College Rhetoric 3
- MATH 1331, Intro. Math. Analysis II 3
- AAEC 2401, Agricultural Statistics 3
- TOTAL 16

**SECOND YEAR**

**Fall**

- ECO 2302, Principles of Economics II 3
- HIST 2300, History of U.S. to 1877 3
- ACCT 2300, Financial Accounting 3
- Sophomore English 3
- POLS 2302, American Public Policy 3
  - TOTAL 16

**Spring**

- AAEC 2301, Agricultural Statistics 3
- HIST 2301, History of U.S. Since 1877 3
- AAEC 2301, Managerial Accounting 3
- Creative Arts/Multicultural 3
- TOTAL 16

**THIRD YEAR**

**Fall**

- AAEC 3315, Agr. Price Theory 3
- or ECO 3312, Intermediate Econ. Theory 3
- or FIN 3320, Financial Management 3
- MGT 3373, Managerial Communications 3
- MKT 3330, Intro. to Marketing 3
- BLAW 3391, Business Law I 3
  - TOTAL 15

**Spring**

- ENGL 1301, Essentials of Coll. Rhetoric 3
- MATH 1330, Intro. Math. Analysis I 3
- AGBS Group 2
- MGT 4380, Strategic Management 3
- or AAEC 4315, Agribusiness Mgmt. 3
  - TOTAL 15

**TOTAL HOURS: 120**

* At least 8 of the 8 hours must be selected from ANSC 1401, PSS 2401 and 1402.
† Select AAEC elective from AAEC 3301, 3302, 3304, or 3305.
‡ Choose one course from ENGL 2305, 2306, 2307, 2308, or 2351.
§ Choose one course that satisfies both the university core curriculum Creative Arts requirement and the multicultural requirement.
# AGBS Curriculum Groups: Select 1 course from Group 1—AGBS 4305, 4306, or 4313; select 1 course from Group 2—AAEC 4301, 4309, or 4316.
** BA Curriculum Group: Choose 12 hours from at least two of the areas ACCT, BEOG, ECO, FIN, ISQS, MGT, MKT (not used to fulfill other requirements). At least 6 hours must be senior-level courses. Be aware that some senior-level courses will most likely have prerequisites. Refer to the course descriptions.

Department CORE Policy: Includes AAEC 3300, 3315, and 2401. All students expecting to graduate on schedule are strongly advised to complete the CORE before beginning their senior year. Students failing to do so may delay their graduation date.

All MATH, ENGL, and BA courses, AAEC 2305, and AGSC 2301 must be completed with a grade of C or better.

To advance to the upper division of the business administration program, satisfactory completion of the first and second year courses and a 2.75 GPA at Texas Tech are required.

2.75 GPA required for ACCT 2300 and 2301.

**FOURTH YEAR**

**Fall**

- AAEC 4317, Commodity Futures Trading 3
- AGBS Group 2
- MGT 4380, Statistical Methods 3
- or AAEC 4312, Appl. Optimiz. Methods 3
- Free Elective 3
  - TOTAL 15

**Spring**

- COMS 2358, Business & Prof. Comm. 3
- or BA Group 2
- AAEC 4302, Statistical Methods 3
- Electives 6
  - TOTAL 15

**TOTAL HOURS: 120**

* 8 hours must be from PSS 1322, 1361, ENGL 1301, 1302, 1307, or 1317.
† Language, Philosophy, and Culture; 3
‡ Multicultural; or Creative Arts Elective 3

**Bachelor of Science in Agricultural and Applied Economics**

**FIRST YEAR**

**Fall**

- Lab Science*
- ENGL 1300, Advanced College Rhetoric 3
- MATH 1330, Intro. Math. Analysis I 3
- POLS 1301, American Govt., Org. 3
- TOTAL 16

**Spring**

- AGSC 2401, Computers in Agriculture II 3
  - TOTAL 16

**SECOND YEAR**

**Fall**

- ECO 2302, Principles of Economics II 3
- POLS 2302, American Public Policy 3
- ECO 2311, Technical Writing 3
- or KOM 2302, Scientific Comm. 3
- Language, Philosophy, and Culture; 3
  - TOTAL 15

**Spring**

- ACCT 2301, Managerial Accounting 3
- AAEC 3304, Farm & Ranch Bus. Mgmt. 3
- Electives 6
  - TOTAL 15

**TOTAL HOURS: 120**

* 8 hours must be from PSS 1322, 1361, ENGL 1301, 1302, 1307, or 1317.
† Language, Philosophy, and Culture; 3
‡ Multicultural; or Creative Arts Elective 3

**THIRD YEAR**

**Fall**

- AAEC 3315, Agricultural Price Theory 3
- AAEC 2401, Agricultural Statistics 3
- ACCT 2300, Financial Accounting 3
- Electives 6
  - TOTAL 16

**Spring**

- AAEC 3301, Agribusiness Marketing 3
- AAEC 2401, Agricultural Statistics 3
- Electives 6
  - TOTAL 15

**FOURTH YEAR**

**Fall**

- AAEC Group 1
- AAEC 4317, Appl. Optimization Methods 3
- or AAEC 4302, Statistical Methods 3
- Electives 6
  - TOTAL 15

**Spring**

- AAEC Group 1
- Electives 6
  - TOTAL 12

**TOTAL HOURS: 120**

**Electives:** The degree program consists of 21 elective hours including 9 hours of required electives chosen from upper-level BA, ECO, PFP, or AAEC courses not required elsewhere (this may include AAEC 4301 for students wanting undergraduate research experience), and 12 hours of free electives chosen from any other courses not used elsewhere in the degree program. Suggested courses for students interested in specific areas are as follows:

- Agricultural Business Management: Choose electives from AAEC 3303, 4317, and appropriate upper level courses in BA or ECO, such as BA 3301, 3303, 3304, or 3305, ECO 3320. (To take BA courses, students may need to declare a business minor.)
- Agricultural Production: (Farm or Ranch) Management: Select electives from AAEC 4317 and appropriate courses in PSS, ANSC, NRM, and BLW.

2.75 GPA required for ACCT 2300 and 2301. Students may earn a minor by using electives carefully.

5302. Food and Agriculture Sector Public Policy (3). Prerequisite: AAEC 4305. Analysis of public policies affecting the food and fiber sector; commodity programs, environmental laws, and trade policy. F

5303. Advanced Production Economics (3). Prerequisite: AAEC 3315. Criteria for resource use optimality under price and yield certainty and uncertainty. F

5307. Applied Econometrics I (3). Prerequisite: AAEC 4302. Advanced statistical methods, including multiple regression analysis, for applied economic problems; constructing econometric models; multivariate techniques, autocorrelation, heteroscedasticity, and related problems. F

5308. Natural Resource Economics (3). Prerequisite: ECO 5312 or consent of instructor. Economic theory and empirical investigations of resource utilization with special emphasis on arid and semi-arid land areas and environmental issues. F

5309. International Economic Development in Food and Fiber Sectors (3). Prerequisite: AAEC 3315. World food and development issues; economic development of the food and fiber sector in industrialized and developing economies. F

5310. Advanced Market Analysis (3). Theoretical and empirical approaches to market structures and market price behavior. S

5312. Agribusiness Analysis (3). Prerequisite: AAEC 3315. Application of economic theory and methods to management problems of the business firms in the food and fiber sector. F

5313. Microcomputer Applications in Agribusiness and Research (3). Prerequisites: AGSC 2300 and permission of instructor. Use of microcomputers, software, and design of software for agricultural business and research purposes. Not open to majors. F, S.

5314. Environmental Economics and Policy Analysis (3). Familiarize students with economic techniques and their use in analyzing natural resources and environmental policy issues. For non-majors only.