

College of Agriculture, Nursing, Science and Engineering

Dr. James R. Clark, dean

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The College of Agriculture, Nursing, Science and Engineering is comprised of the Division of Agriculture, the Department of Life, Earth and Environmental Sciences, the Department of

Mathematics, Physical Sciences and Engineering, and the Division of Nursing. In addition to providing expertise to the University's general education curriculum via faculty participation in teaching courses in analytical reasoning, the college also offers, by its various components, a variety of undergraduate and graduate programs and majors. All are directed toward preparing individuals who will be competent and competitive in scientific, technical, educational and professional occupations.

Division of Agriculture

Dr. Donald R. Topliff, division head

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Faculty: Almas, Bachman, Baker, Brown, Clark, Colette, Greene, Kieth, Loneragan, Lust, Montgomery, Parker, Pendleton, Pipkin, C. Robinson, R. Robinson, Schuster, Stewart, Sweeten, Thomason, Topliff, Williams

The Division of Agriculture provides students the opportunity for personal development and preparation for careers in agriculture and related industries. One out of every five jobs in the United States is related to production, processing, distribution, or consumption of feed grains, food and fiber. Professions in the agricultural sector are available to trained personnel. Students may pursue a bachelor of science degree in agriculture or in agribusiness. The agriculture degree program includes majors in agricultural business and economics, teacher certification in agriculture, animal science, integrated pest management, and plant, soil and environmental science. The agribusiness degree program includes majors in agribusiness and equine industry and business. A preprofessional program leading to veterinary school admission also is available. Possibilities for post-baccalaureate study include a master of science in agriculture degree with thesis and non-thesis options and a Ph.D. degree in systems agriculture.

The excellent faculty in agriculture provides a rigorous and comprehensive approach to understanding agriculture and related businesses. The faculty's diversity of experience and training provides the student an educational opportunity rarely found at a regional university.

In addition to classrooms and laboratories, the Division of Agriculture utilizes the 2,500-acre Nance Ranch, Feedyard, Feedmill, Horse Center, federally inspected meat science

laboratory, and greenhouse complex to provide hands-on experience for students.

Discipline	Course Prefix
Agriculture Business and Economics	AGBE
Agriculture	AGRI
Animal Science	ANSC
Integrated Pest Management	IPM
Plant, Soil and Environmental Science	PSES

NOTE: See the "Academic Courses and Abbreviations" and "Course Descriptions" sections of this catalog for a complete list of courses offered by the University.

University Core Curriculum Requirements

Refer to the "University Core Curriculum" section of this catalog.

Bachelor of Science (B.S.) Degree

Majors in Agriculture

- Agricultural Business and Economics
- Agriculture—Teacher Certification/Non-Certification
- Animal Science
- Integrated Pest Management
- Plant, Soil and Environmental Science

Majors in agriculture include University core requirements, division core requirements, agricultural science core requirements, and major requirements specified under each degree option and total either 129 or 135 semester credit hours (see each degree for specific requirements). Students must maintain at least a 2.0 grade

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point average (GPA) for all courses at WTAMU counted toward the degree; at least a 2.0 GPA for all courses in the division and agricultural core, 2.0 GPA in major requirements and 2.0 GPA in the major subject. At least 36 semester hours of credit must be earned from upper-level (3000- and 4000-level) courses. In addition, students in the teacher certification option of the agriculture major must meet professional development standards set by the Division of Education. For specific requirements, see the "Division of Education" section of this catalog.

Majors in Agribusiness

- Agribusiness
- Equine Industry and Business

The bachelor of science degree in agribusiness is a cooperative program of the Division of Agriculture and the T. Boone Pickens College of Business. These two academic units coordinate the program through an agribusiness curriculum committee composed of faculty and administrators from the Division of Agriculture and the College of Business. The degree program is administered by the Division of Agriculture. A student must complete a minimum of 129 semester credit hours and maintain at least a 2.0 grade point average (GPA) for all courses at WTAMU counted toward the degree; at least a 2.0 GPA for all courses in the division and agribusiness core, 2.0 GPA in major requirements and 2.0 GPA in the major subject. At least 36 semester hours of credit must be earned from upper-level courses. Course requirements include core curriculum requirements, an agricultural component, a business component, physical education requirements and requirements specified under one of the degree options and totals 129 semester credit hours.

Major in Agricultural Business and Economics (Major Code: 522)

Select BIOL 1413 or 1411, CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Agricultural Science Core (23 hours)

- AGBE 3301 or 3304, 3302.
- AGRI 3330, 4103.
- ANSC 1329, 3374.
- IPM 2313.
- PSES 3411.

Major Requirements (39 hours)

- ACCT 2301, 2302.
- AGBE 2375, 3301 or 3304, 3320, 4301 or 4311, 4310, 4312, 4313, 4316, 4328 or 4354, 4365.
- BUSI 3312.

Electives (5 hours)

Curriculum Guide (Suggested Course Sequence)			
Major in Agricultural Business and Economics			
First Year		Second Year	
Semester 1	Semester 2	Semester 1	Semester 2
ANSC 13193 hrs. ENGL 13013 hrs. SCOM 13153 hrs. POSC 23053 hrs. MATH 13143 hrs. IDS 10711 hr. 16 hrs.	PSES 13073 hrs. ENGL 13023 hrs. POSC 23063 hrs. ACCT 23013 hrs. AGBE 4328 or 43543 hrs. PHED 11111 hr. 16 hrs.	ANSC 13293 hrs. BIOL 14134 hrs. ECON 23013 hrs. AGBE 23753 hrs. ENGL 2332/ 23333 hrs. 16 hrs.	AGBE 23173 hrs. CHEM 14114 hrs. Visual/Performing arts core3 hrs. ACCT 23023 hrs. HIST 13013 hrs. PHED elective1 hr. 17 hrs.
Third Year		Fourth Year	
Semester 1	Semester 2	Semester 1	Semester 2
AGBE 33013 hrs. AGBE 33023 hrs. AGRI 33183 hrs. AGRI 33303 hrs. HIST 13023 hrs. BUSI 33123 hrs. 18 hrs.	AGBE 33043 hrs. AGBE 43283 hrs. AGRI or BIOL 33013 hrs. AGBE 33203 hrs. ENGL 2371/ HIST 2372/ PHIL 13013 hrs. Elective2 hrs. 17 hrs.	AGBE 4301 or 43113 hrs. AGBE 43133 hrs. AGBE 43163 hrs. AGRI 41031 hr. AGBE 43653 hrs. Elective3 hrs. 16 hrs.	AGBE 43103 hrs. AGBE 43123 hrs. PSES 34114 hrs. ANSC 33743 hrs. Elective3 hrs. 16 hrs.

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Major in Agriculture—Teacher Certification (Major Code: 497)

Select BIOL 1413 or 1411, CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements.

Education Component (24 hours)

- AGRI 2371, 4305.
- EDPD 3340, 4340.
- EDSE 4320, 4340, 4341.
- EDRD 4386.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Major Requirements (29 hours)

- AGRI 2372, 3303, 3304, 3306, 4103, 4302.
- AGBE 3301 or 3302 or 3304.
- ANSC 3374.
- PSES 1301, 3411.

Miscellaneous Requirements (9 hours)

- EPSY 3341, 3350.
- EDT 3343.

Agricultural Electives (9 hours)

- Six hours must be a 3000- or 4000-level course.

Free Electives (2 hours)

Major in Agriculture—Non-certification Option (Major Code: 501)

Select BIOL 1413 or 1411, CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements.

Education Component (9 hours)

- AGRI 2371, 3303.
- EDT 3343.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Major Requirements (35 hours)

- AGRI 2372, 3304, 3306, 4103, 4302.
- ANSC 3374, 2376.
- PSES 1301, 3411.
- AGBE 3301 or 3302 or 3304.
- Six hours internship.

Agricultural Electives (18 hours)

- At least nine semester credit hours from any 3000- or 4000-level course from AGRI, AGBE, ANSC, IPM or PSES.

Free Electives (5 hours)

Curriculum Guide (suggested course sequence)			
Major in Agriculture—Teacher Certification			
First Year		Second Year	
Semester 1 PSES 13073 hrs. IDS 10711 hr. ENGL 13013 hrs. Visual/Performing arts core3 hrs. MATH 13143 hrs. POSC 23053 hrs. 16 hrs.	Semester 2 ANSC 13193 hrs. SCOM 1315 or 13213 hrs. ENGL 13023 hrs. ECON 23013 hrs. PHED 11111 hr. POSC 23063 hrs. 16 hrs.	Semester 1 PSES 13013 hrs. HIST 13013 hrs. AGRI 23713 hrs. BIOL 1413 or 14114 hrs. 16 hrs.	Semester 2 AGBE 23173 hrs. ENGL 2332 or 23333 hrs. CHEM 1405 or 14114 hrs. HIST 13023 hrs. AGRI/BIOL 33013 hrs. PHED elective1 hr. 17 hrs.
Third Year		Fourth Year	
Semester 1 PSES 34114 hrs. AGRI 33033 hrs. AGRI 33043 hrs. EDPD 33403 hrs. ANSC 33743 hrs. 16 hrs.	Semester 2 AGRI 33183 hrs. AGRI 33063 hrs. EDSE 43203 hrs. ENGL 2371, HIST 2372 or PHIL 1301 ...3 hrs. EDRD 4386 ...3 hrs. 15 hrs.	Semester 1 AGBE 3301, 3302 or 3304 ...3 hrs. EPSY 33413 hrs. Adv. ag elective3 hrs. Ag elective3 hrs. Elective2 hrs. 14 hrs.	Semester 2 EPSY 33503 hrs. AGRI 43023 hrs. AGRI 43053 hrs. AGRI 41031 hr. Adv. ag elective3 hrs. 13 hrs.
Fifth Year			
Semester 1 EDPD 43403 hrs. EDT 33433 hrs. EDSE 43403 hrs. EDSE 43413 hrs. 12 hrs.			

Curriculum Guide (suggested course sequence)			
Major in Agriculture—Non-Certification			
First Year		Second Year	
Semester 1 PSES 13073 hrs. IDS 10711 hr. ENGL 13013 hrs. MATH 13143 hrs. Visual/Performing arts core3 hrs. POSC 23053 hrs. 16 hrs.	Semester 2 ANSC 13193 hrs. SCOM 1315 or 13213 hrs. ENGL 13023 hrs. ECON 23013 hrs. PHED 11111 hr. POSC 2306 ...3 hrs. 16 hrs.	Semester 1 PSES 13013 hrs. HIST 13013 hrs. AGRI 23713 hrs. AGRI 23723 hrs. BIOL 1411 or 14134 hrs. 16 hrs.	Semester 2 AGBE 23173 hrs. ENGL 2332 or 23333 hrs. CHEM 1405 or 14114 hrs. HIST 13023 hrs. ANSC 23763 hrs. PHED elective ...1 hr. 17 hrs.
Third Year		Fourth Year	
Semester 1 AGRI/BIOL 33013 hrs. PSES 34114 hrs. ANSC 33743 hrs. AGRI 33043 hrs. Ag elective3 hrs. 16 hrs.	Semester 2 AGRI 33183 hrs. AGRI 33063 hrs. ENGL 2371, HIST 2372 or PHIL 13013 hrs. EDT 33433 hrs. Ag elective3 hrs. Elective2 hrs. 17 hrs.	Semester 1 AGBE 3301, 3302 or 3304 ...3 hrs. Ag elective3 hrs. Ag elective3 hrs. Adv. ag elective3 hrs. 15 hrs.	Semester 2 AGRI 41031 hr. AGRI 43023 hrs. Adv. ag elective3 hrs. Elective3 hrs. Internship6 hrs. 16 hrs.

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Major in Animal Science (Major Code: 523)

Select BIOL 1413, CHEM 1411 or 1405, MATH 1314, ECON 2301 or PSYC 2301 to satisfy core curriculum requirements.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Agricultural Science Core (23 hours)

- AGBE 3301 or 3304, 3302.
- AGRI 3330, 4103.
- ANSC 1329, 3374.
- IPM 2313.
- PSES 3411.

Major Requirements (34–35 hours)

- CHEM 1412, 2533.
- BIOL 2420 or 2572 or CHEM 4323, 4223L.
- ANSC 2376, 3340, 3355, 3375.
- Three courses from ANSC 4317, 4320, 4322, 4324, 4328, 4370.

Electives (9–10 hours)

Curriculum Guide (suggested course sequence)			
Major in Animal Science			
First Year		Second Year	
Semester 1 IDS 10711 hr. BIOL 14134 hrs. ENGL 13013 hrs. MATH 13143 hrs. ANSC 13193 hrs. PHED 11111 hr. 15 hrs.	Semester 2 CHEM 1411/ 14054 hrs. SCOM 1315/ 13213 hrs. PSES 13073 hrs. HIST 13013 hrs. ENGL 13023 hrs. 16 hrs.	Semester 1 ANSC 23763 hrs. ECON 2301 or PSYC 23013 hrs. HIST 13023 hrs. Visual/performing arts core3 hrs. POSC 23053 hrs. PHED elective1 hr. 16 hrs.	Semester 2 BIOL 2420, 2572, CHEM 4323, 4223L ...4-5 hrs. ANSC 13293 hrs. CHEM 14124 hrs. AGBE 23173 hrs. IPM 23133 hrs. 17-18 hrs.
Third Year		Fourth Year	
Semester 1 AGRI 33013 hrs. ANSC or BIOL 33403 hrs. AGBE 33023 hrs. AGRI 33303 hrs. Elective3-4 hrs. 15-16 hrs.	Semester 2 ENGL 2332/ 23333 hrs. ANSC 33553 hrs. AGRI 33183 hrs. CHEM 25335 hrs. ANSC 33753 hrs. 17 hrs.	Semester 1 ANSC 4317, 4320, 4322, 4324, 4328 or 43706 hrs. AGBE 3301/ 33043 hrs. PSES 34114 hrs. AGRI 41031 hr. Elective(s)3 hrs. 17 hrs.	Semester 2 ANSC 4317, 4320, 4322, 4324, 4328 or 43703 hrs. ENGL 2371/ HIST 2372 or PHIL 13013 hrs. POSC 23063 hrs. Elective(s)6 hrs. 15 hrs.

Major in Integrated Pest Management (Major Code: 531)

Select BIOL 1413 or 1411, CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Agricultural Science Core (23 hours)

- AGBE 3301 or 3304, 3302.
- AGRI 3330, 4103.
- ANSC 1329, 3374.
- IPM 2313.
- PSES 3411.

Major Requirements (41–42 hours)

- BIOL 3510 or 4510.
- CHEM 1412, 2533.
- IPM 3343, 4343, 4351, 4361, 4371.
- PSES 3342, 4330, 4342.
- One course from PSES 2371, 4302, 4331, AGRI 4310, BIOL 3411 or IPM 4398.

Electives (2–3 hours)

Curriculum Guide (suggested course sequence)			
Major in Integrated Pest Management			
First Year		Second Year	
Semester 1 PSES 13073 hrs. ENGL 13013 hrs. HIST 13013 hrs. MATH 1314, 13243 hrs. Visual/Performing arts core3 hrs. IDS 10711 hr. 16 hrs.	Semester 2 ANSC 13193 hrs. ENGL 13023 hrs. ANSC 13293 hrs. BIOL 1411 or 14134 hrs. POSC 23053 hrs. PHED 11111 hr. 17 hrs.	Semester 1 CHEM 1405 or 14114 hrs. AGBE 23173 hrs. ENGL 2332 or 23333 hrs. SCOM 1315 or 13213 hrs. HIST 13023 hrs. PHED elective3 hrs. 17 hrs.	Semester 2 CHEM 14124 hrs. AGRI/BIOL 33013 hrs. IPM 23133 hrs. ENGL 2371, HIST 2372 or PHIL 13013 hrs. ECON 23013 hrs. 16 hrs.
Third Year		Fourth Year	
Semester 1 AGRI 33303 hrs. IPM 33433 hrs. PSES 33423 hrs. BIOL 3510 or 45105 hrs. PSES 34114 hrs. 18 hrs.	Semester 2 PSES 43303 hrs. PSES 43613 hrs. CHEM 25335 hrs. AGBE 33023 hrs. PSOC 23063 hrs. 17 hrs.	Semester 1 IPM 43513 hrs. IPM 43433 hrs. IPM 43713 hrs. AGRI 33183 hrs. PSES 2371, 4302, 4331, AGRI 4310, BIOL 3411 or IPM 43983-4 hrs. 15-16 hrs.	Semester 2 AGRI 41031 hrs. AGBE 33043 hrs. PSES 43423 hrs. ANSC 33743 hrs. Electives2-3 hrs. 12-13 hrs.

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Major in Plant, Soil and Environmental Science (Major Code: 524)

Select BIOL 1411, CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Agricultural Science Core (23 hours)

- AGBE 3301 or 3304, 3302.
- AGRI 3330, 4103.
- ANSC 1329, 3374.
- IPM 2313.
- PSES 3411.

Major Requirements (37–38 hours)

- AGRI 4310.
- One course from BIOL 2420, 2572, 4510 or 4513.
- CHEM 1412, 2533.
- PSES 3342, 4330, 4331, 4342.
- Three courses from PSES 1301, 2371, 4302, 4311, 4398, IPM 3343, 4343, 4351, 4371.

Electives (8–10 hours)

Curriculum Guide (suggested course sequence)			
Major in Plant, Soil and Environmental Science			
First Year		Second Year	
Semester 1 PSES 13073 hrs. ENGL 13013 hrs. BIOL 14114 hrs. HIST 13013 hrs. MATH 1314, 13243 hrs. IDS 10711 hr. 17 hrs.	Semester 2 ANSC 13193 hrs. ENGL 13023 hrs. ANSC 13293 hrs. POSC 23053 hrs. Visual/Performing arts core3 hrs. PHED 11111 hr. 16 hrs.	Semester 1 CHEM 1411 or 14054 hrs. HIST 13023 hrs. AGBE 23173 hrs. ENGL 2332 or 23333 hrs. PHED elective ..1 hr. SCOM 1315 or 13213 hrs. 17 hrs.	Semester 2 CHEM 14124 hrs. PSES 34114 hrs. IPM 23133 hrs. AGRI 33013 hrs. POSC 23063 hrs. 17 hrs.
Third Year		Fourth Year	
Semester 1 CHEM 25335 hrs. AGRI 33303 hrs. PSES 1301, 2371, IPM 3343 or 4351 ...3 hrs. ENGL 2371, HIST 2372 or PHIL 13013 hrs. PSES 43423 hrs. 17 hrs.	Semester 2 ANSC 33743 hrs. AGRI 33183 hrs. AGBE 33023 hrs. BIOL 2420, 2572, 4510 or 45134-5 hrs. PSES 4311, 4398, IPM 4343 or 43713 hrs. 16-17 hrs.	Semester 1 PSES 33433 hrs. AGRI 43103 hrs. PSES 33423 hrs. PSES 1301, 2371, IPM 3343 or 4351 ...3 hrs. ECON 23013 hrs. Elective3 hrs. 18 hrs.	Semester 2 AGRI 41031 hr. AGBE 3301 or 33043 hrs. PSES 43313 hrs. PSES 43303 hrs. Electives ... 5-7 hrs. 15-17 hrs.

Major in Agribusiness (Major Code: 515)

Select BIOL 1413 or 1411, CHEM 1411 or 1405, MATH 1324, and ECON 2301 to satisfy core curriculum requirements.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Agribusiness Core (36 hours)

- ACCT 2301, 2302.
- BUSI 3312.
- AGBE 3302, 3304, 4316.
- AGRI 3330.
- FIN 3320.
- MGT 3330.
- MKT 3340.
- MATH 1325.
- One course from BUSI 3319, MKT 4304, ECON 4341, 4342, FIN 4323.

Major Requirements (28 hours)

- AGBE 3320, 4312, 4313, AGBE 4365 or MGT 4315, AGRI 4103, MGT 3335, FIN 4328, ANSC 1329 or 3374.
- One course from AGBE 3301, 4301, 4310, 4311.
- One course from ANSC 4320, 4322, 4324, 4328, 4370, IPM 2313, PSES 3411, 4302.

Electives (2–3 hours)

Curriculum Guide (suggested course sequence)			
Major in Agribusiness			
First Year		Second Year	
Semester 1 ANSC 13193 hrs. ENGL 13013 hrs. SCOM 1315 or 13213 hrs. POSC 23053 hrs. MATH 13243 hrs. IDS 10711 hr. 16 hrs.	Semester 2 PSES 13073 hrs. ENGL 13023 hrs. POSC 23063 hrs. MATH 13253 hrs. AGBE 23173 hrs. PHED 11111 hr. 16 hrs.	Semester 1 ANSC 1329 or 33743 hrs. BIOL 1411 or 14134 hrs. ECON 23013 hrs. ACCT 23013 hrs. ENGL 2332 or 23333 hrs. 16 hrs.	Semester 2 AGBE 23173 hrs. CHEM 1405 or 14114 hrs. Visual/performing arts core3 hrs. ACCT 23023 hrs. HIST 13013 hrs. PHED elective1 hr. 17 hrs.
Third Year		Fourth Year	
Semester 1 AGBE 33023 hrs. AGRI 33303 hrs. HIST 13023 hrs. BUSI 33123 hrs. MKT 33403 hrs. 15 hrs.	Semester 2 AGBE 33043 hrs. AGRI/BIOL 33013 hrs. AGRI 33183 hrs. ENGL 2371, HIST 2372, or PHIL 13103 hrs. MGT 33303 hrs. Elective2-3 hrs. 17-18 hrs.	Semester 1 AGBE 3301, 4301, 4310 or 43113 hrs. AGBE 43133 hrs. AGBE 43163 hrs. AGRI 41031 hr. FIN 33203 hrs. MGT 33353 hrs. 16 hrs.	Semester 2 FIN 43283 hrs. ANSC 4320, 4328, 4370, IPM 2313, PSES 3411, 43023-4 hrs. AGBE 4365 or MGT 4315 ...3 hrs. MKT 43403 hrs. BUSI 3319, MKT 4340, ECON 4341, 4342 or FIN 43233 hrs. 15-16 hrs.

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Major in Equine Industry and Business (Major Code: 534)

Select BIOL 1413 and CHEM 1411 or 1405, MATH 1314 and ECON 2301 to satisfy core curriculum requirements. Select sports and exercise sciences requirements from ANSC 1178 and 1274 or 1275.

Division Core (16 hours)

- IDS 1071.
- AGBE 2317.
- AGRI or BIOL 3301.
- AGRI 3318.
- ANSC 1319.
- PSES 1307.

Business Component (24 hours with a minimum of two AGBE courses)

- ACCT 2301, 2302.
- BUSI 3312.
- One course from AGBE 3302 or MKT 3340.
- One course from AGBE 3301, 3304 or MGT 3330.
- One course from AGBE 4313 or FIN 3320.
- Two courses from AGBE 2375, 3301, 3302, 3304, 4301, 4311, 4312, 4313, 4316, 4328, 4354, or 4356; ECON 4312; FIN 3320 or 3350; BUSI 3319; MGT 3330, 3332, or 3333; MKT 3340, 3342, 4340, or 4342.

Agriculture Component (16 hours)

- AGRI 3330, 4103.
- ANSC 3355, 3374, 3375.
- ANSC or BIOL 3340.

Equine Component (18 hours)

- ANSC 1274 or 1275, 2374, 2375, 2377, 4370, 4473.

Electives (9 hours)

Curriculum Guide (suggested course sequence)			
Major in Equine Industry and Business			
First Year		Second Year	
Semester 1	Semester 2	Semester 1	Semester 2
IDS 10711 hr. BIOL 14134 hrs. MATH 1314 or 13243 hrs. ENGL 13013 hrs. PHED 11111 hr. Visual/Performing arts core3 hrs. ANSC/PHED 11781 hr. 16 hrs.	CHEM 1411 or 14054 hrs. ENGL 13023 hrs. PSES 13073 hrs. HIST 13013 hrs. ANSC 1319 ... 3 hrs. 16 hrs.	SCOM 1315 or 13213 hrs. ACCT 23013 hrs. ECON 23013 hrs. ANSC 23743 hrs. ENGL 2332 or 23333 hrs. ANSC/PHED 1274 or 1275 ... 2 hrs. 17 hrs.	ANSC 23753 hrs. ACCT 23023 hrs. AGBE 23173 hrs. ANSC 23773 hrs. HIST 13023 hrs. ENGL 2371, HIST 2372 or PHIL 13013 hrs. 18 hrs.
Third Year		Fourth Year	
Semester 1	Semester 2	Semester 1	Semester 2
AGRI/BIOL 33013 hrs. ANSC 33743 hrs. ANSC or BIOL 33403 hrs. POSC 23053 hrs. BUSI 33123 hrs. Elective or ANSC 3240 ... 2 hrs. 17 hrs.	AGBE 3301, 3304 or MGT 33303 hrs. ANSC 33553 hrs. ANSC 33753 hrs. POSC 23063 hrs. AGBE 4313 or FIN 3320 ... 3 hrs. 15 hrs.	AGBE 3302 or MKT 33403 hrs. AGRI 33303 hrs. AGRI 33183 hrs. AGBE or BUSI elective3 hrs. Elective 3 hrs. 15 hrs.	ANSC 43703 hrs. ANSC 44734 hrs. AGRI 41031 hr. AGBE or BUSI elective3 hrs. Electives 4 hrs. 15 hrs.

Preprofessional Program Requirements

Pre-Veterinary Medicine

Students may complete a bachelor of science degree in animal science, which includes pre-veterinary medicine requirements. Students do not have to complete the bachelor of science degree to apply for admission to a veterinary college. Once students have completed the preprofessional requirements, they may apply. Completion of the preprofessional requirements can be done in as little as two years but usually takes three or four years of undergraduate study. Preprofessional requirements of the 27 schools and colleges of veterinary medicine in the United States vary. Students interested in applying to a school or college of veterinary medicine outside Texas should contact the school or college to obtain information on preprofessional requirements. To meet Texas A&M University College of Veterinary Medicine preprofessional requirements, suggested curriculum includes:

- AGRI 3301, 3318.
- ANSC 3310, or 3374.
- BIOL 1413, 2572.
- CHEM 1411, 1412, 2523, 2525, 4323.
- ENGL 1301; 2332 or 2333 or 2371 or 3304.
- PHYS 1401, 1402.
- SCOM 1321.

Prerequisite for the above courses include:

- ANSC 1319.
- ENGL 1302.
- MATH 1314.

In addition, to meet requirements for a bachelor of science degree in agriculture, animal science option, suggested curriculum also includes:

- ANSC 2376, 1329, 4317, 3355, 3375.
- Three courses from ANSC 4320, 4324, 4328, 4370.
- AGBE 2317, 3301, 3302.
- AGRI 3330, 4103.
- Demonstrated computer competency or CIS 1301.
- ECON 2301.
- HIST 1301, 1302.
- IDS 1071.
- PSES 1307, 3411.
- POSC 2305, 2306.
- Three hours from MUS 1306, THRE 1310, HUMA 1315, ARTS 1303 or 1304.
- PHED 1111, PHED activity course.

For information about the master of science (M.S.) degree or doctor of philosophy (Ph.D.) degree, refer to the "Graduate School" section of this catalog.