

## Dairy Science Certificate

The certificate program requires the completion of a minimum of 20 credits, focusing primarily on dairy cattle management. Students may choose to complete the Certification Program concurrent with the pursuit of a degree in any of the eight colleges at Kansas State.

### Core Courses (14-17 Credit hours)

- AGEC 308- Farm and Ranch Management **Credit: 3**
- or ACCTG 231- Accounting for Business Operations **Credits: 3**
- ASI 396- Dairy Cattle Judging **Credits: 2**
- ASI 400- Farm Animal Reproduction **Credits: 3**
- ASI 621- Dairy Cattle Management **Credits: 3**
- ASI 680- Ruminant Nutrition **Credits: 1**
- ASI 681- Dairy Cattle Nutrition **Credits: 1**
- ASI 685- Stored Forage Systems **Credits: 1**
- Credit for at least one of the following experiential learning courses (maximum of 3 credits; dairy-related)
  - ASI 561- Undergraduate Research in Animal Sciences and Industry **Credits: 0-3**
  - ASI 599- Animal Science Internship **Credits: 1-3**
  - ASI 661- Animal Sciences and Industry Problems (example: Dairy Challenge) **Credits: 0-3**

### Electives (3-6 credits to reach 20 credits total)

- AGEC 420- Commodity Futures **Credits: 3**
- AGRON 550- Forage Management and Utilization **Credits: 3**
- AGRON 551- Forage Management and Utilization Laboratory **Credits: 1**
- ASI 106- Dairy/Poultry Lab **Credits: 1**
- ASI 405- Fundamentals of Milk Processing **Credits: 3**
- ASI 420- Advanced Dairy Cattle Judging **Credits: 1**
- ASI 510- Animal Breeding Principles **Credits: 3**
- ASI 512- Bovine Reproductive Technologies **Credits: 2**
- ASI 540- Principles of Animal Disease Control **Credits: 3**
- ASI 601- Endocrinology and Lactation **Credits: 3**
- ASI 608- Dairy Foods Processing and Technology **Credits: 3**
- ASI 655- Behavior of Domestic Animals **Credits: 3**
- ASI 662- Special Topics in Animal Science (must be dairy-related) **Credits: 0-6**
- ASI 682- Formulation of Livestock and Poultry Diets **Credits: 1**

### Required Prerequisite Courses

Students are expected to meet all prerequisites for the courses listed or have consent of the instructor to waive a requirement. Prerequisite courses do not count toward the total hours for the certificate program.

- AGEC 120- Agricultural Economics and Agribusiness **Credits: 3**
- ASI 102- Principles of Animal Science **Credits: 3**
- ASI 318- Fundamental of Nutrition **Credits: 3**
- ASI 320- Principles of Feeding **Credits: 3**
- BIOL 198- Principles of Biology **Credits: 4**
- CHM 110- General Chemistry **Credits 3**

To receive the certificate students must have a cumulative GPA of 2.0 in the 20 required credit hours. Course(s) from junior college and/or technical school programs will not be applied toward the certificate unless the course(s) are equivalent to a K-State course(s).