

DAIRY CATTLE PRODUCTION MANAGEMENT CERTIFICATE (24 CREDITS)

Successful certificate completion requires a minimum of 18 credits at the 3000 (junior) or 4000 (senior) level. Additionally, the certificate must include at least 9 unique credits that are not used to meet any other department, college, or university requirement. Unique credits can be used as elective credits.

Foundation Course (3 credits)		Credits
AN S 2350	Dairy Cattle Science	3
Fundamental Disciplines (9 credits)		
AN S 3200	Animal Feeds and Feeding	3
AN S 3310	Domestic Animal Reproduction	3
AN S 3370	Lactation*	3
Expertise Expansion (3 Credits)		
AGRON 2800	Crop Development, Production, and Management	3
AGRON 3340	Forage Crop Management	3
AN S 3330	Embryo Transfer and Related Technologies	3
AN S 3350	Dairy Cattle Evaluation	3
AN S 3450	Growth and Development of Domestic Animals*	3
ANS 3520	Genetic Improvement of Domestic Animals	3
ANS 4190	Advanced Animal Nutrition	2
FS HN 4070	Microbiological Safety of Foods of Animal Origins	3
MICRO 3020	Biology of Microorganisms	3
TSM 3270	Animal Production Systems*	3
TSM 4550	Feed Processing and Technology*	3
TSM 4570	Feed Safety, Ingredient Quality, and Analytics*	3
Enterprise Management (3 credits)		
AGEDS 4510	Agricultural Law	3
ECON 2300	Farm Business Management	3
ECON 2350	Introduction to Agricultural Markets	3
ECON 3320	Cooperatives	3
ECON 3340	Entrepreneurship in Agriculture	3
ECON 3370	Agricultural Marketing	3
Dairy Cattle Production Emphasis (6 credits)		
AN S 4340 OR AN S 4350	Dairy Systems Management OR Applied Dairy Farm Evaluation	3
ANS 3990A	Dairy Internship Experience	3

Expertise Expansion (3) Courses marked with an "*" fulfill the Animal Science degree discipline expansion requirement unless designated as a unique course in the certificate.

Enterprise Management (3) (ECON 2300 is a prerequisite for AN S 4340)