

# Dairy Cattle Production & Management

**D**airy cattle production and management is the animal care, business, and associated services that are part of a dairy farm or a dairy agribusiness.

## **Pursuing Dairy Cattle Production and Management at Ohio State ATI**

Ohio State ATI recommends that students entering the study of dairy cattle production and management pursue a college preparatory curriculum and have previous experience or an aptitude for working with dairy animals. A vocational education background may be helpful if associated with any aspect of animal production or agriculture.

Students seeking an Associate of Applied Science in Dairy Cattle Production and Management at enter directly into the program upon the completion of their admission requirements. All applicants are strongly advised to arrange a pre-admission conference in order to acquaint themselves with the various aspects of this major.

The dairy cattle production and management program requires that 40 percent of each student's credit hours be earned in the general studies of science, math, communications, and social science. Courses such as developing written expression, technical reporting, oral communication, economics, technical math, chemistry, biology/animal anatomy and physiology, and social science electives are some of the courses offered in general studies.

Technical instruction includes genetics, milking, health, reproduction, and nutritional management of the dairy herd. Additional course work in computers, agronomy, buildings and equipment, personnel management, accounting, and farm/business management helps to prepare graduates to manage farm finances as well as the herd. Specific courses include milk production; feeding/nutrition; reproduction; genetics; health; judging, classifying, and presenting; forage crop production; soil management; tractors/farm machinery; building construction and design; and farm business/financial management.

To obtain an Associate of Applied Science in Dairy Cattle Production and Management from Ohio State ATI, students must complete a minimum of 104 quarter credit hours with a cumulative point-hour ratio of 2.0 or above. They must satisfactorily complete a prescribed curriculum, which includes at least 62 quarter credit hours in technical studies and 42 quarter credit hours in basic and general studies. A minimum of 45 quarter credit hours must be earned through regular course work at the institute, exclusive of an internship.

**For more information, check these web sites:**

**Dairy Cattle Production and Management:**  
[www.ati.osu.edu/programs](http://www.ati.osu.edu/programs)  
**Ohio State ATI:** [www.ati.osu.edu](http://www.ati.osu.edu)

Applied Dairy Herd Management is required of students in dairy cattle production and management. This is a supervised, practical work experience that provides students with the opportunity to apply skills learned in the classrooms at the Ohio State ATI dairy. Students are encouraged to think independently and to evaluate and solve farm problems under the guidance of the dairy manager. Students assist in the daily tasks of milking, feeding, record keeping, and health management of the herd.

Because of their diverse and related interests, many students choose to pursue a dual major during their academic studies at Ohio State ATI. This can serve to broaden professional opportunities and educational experience. Students who decide to follow this curriculum track are urged to work closely with their academic advisors.

## **Internships**

Students in this program complete an industry internship of 10 weeks of full-time employment. Ohio State ATI helps students find appropriate internship positions both in Ohio and in other states. Students are paid for their employment, graded on their job performance, and awarded academic credit.

Most students are employed on dairy farms assisting in all types of dairy production: herd and animal health, reproduction, feeding, milking, operating tractors, equipment, field work, forage production, record keeping, etc. The farms have ranged from 50 cows to more than 5,000. Most internships have been in Ohio but others have taken place throughout the U.S., as well as in Canada, Australia, Switzerland, and the United Kingdom.

The balance of interns are employed as field service representatives with dairy-related agribusinesses: assisting veterinarians, nutrition and seed sales; artificial insemination, semen sales, or other reproductive work; milk quality control work; and milking equipment sales and repair.

## **Career Prospects in Dairy Cattle Production and Management**

Dairy cattle production and management positions are available in production management, service, quality control, and sales. Graduates fill positions as dairy herd or farm managers and employees, dairy field representatives, or dairy technicians. This curriculum can also lead to careers as agribusiness representatives in the areas of artificial insemination; milk quality; feed sales; nutritional consulting; and health, finance, and business management.

**Ohio State:** [www.osu.edu](http://www.osu.edu)  
**Admissions:** [www.ATIadmissions.osu.edu](http://www.ATIadmissions.osu.edu)  
**Student Success Services:** [www.ati.osu.edu/support.html](http://www.ati.osu.edu/support.html)

## Curriculum Sample

First Year:

Autumn Quarter

Personal and Career Orientation	1
Technical Mathematics I	5
Dairy Cattle Milk Production	5
General Biology	4
Judging and Classifying Dairy Cattle	2

Winter Quarter

Dairy Cattle Reproduction	4
First-Year Written Composition	3
Introductory Chemistry I	4
Animal Anatomy and Physiology	4
Introduction to Microcomputer Applications	1

Spring Quarter

Dairy Cattle Health	4
General Economics	5
Essentials of Oral Communication	3
Social science or humanities electives	3
Introductory Chemistry II or Introduction to Soil and Soil Management or Math for Retail Technicians	4

Summer Quarter

Occupational Internship	6
<b>Total hours</b>	<b>58</b>

Second Year:

Autumn Quarter

Farm Financial Records or Financial Accounting	4/5
Technical Reporting or Business Communication	3
Social science or humanities elective	3
Principles of Animal Nutrition	4

Winter Quarter

Dairy Cattle Feeding Management	3
Social Science or humanities elective	3
Applied Dairy Herd Management or technical elective	5/7
Genetic Principles	4

Spring Quarter

Dairy Facilities and Equipment	3
Integrated Dairy Farm Business Management	5
Applied Dairy Herd Management or technical elective	5/7
<b>Total hours</b>	<b>44/49</b>

Note: Anml Tec 295.02 Technology and Development in Animal Industries (2) must be scheduled during this two-year curriculum.

Additional field experience will help to prepare students to become dairy farm and business owners.

Beginning salaries for careers associated with dairy production and management range from \$20,000 to \$35,000 plus benefits annually, depending on the specific skills, responsibilities, benefits, and other factors determined by various employers.

## Related Programs

Curricula for two Associate of Technical Studies options have been developed. The Associate of Technical Studies degree allows students to create a unique curriculum focused on special interests related to their career goals. Most students will actually begin their enrollment as Dairy Production and Management majors in the Associate of Applied Science degree area.

In the dairy equipment service technician curriculum, you will study milking equipment and dairy facility design as well as learn basic milking system installation and service skills. This option includes course work from the dairy production and management curriculum as well as the engineering technologies area.

The dairy farm supply specialist curriculum focuses on milking system design, system washing theory, cleaning and sanitizing products, mastitis and udder health, udder health products, and sales skills. This option includes course work from the dairy production and management curriculum as well business management area.

In both programs you will develop your awareness of dairy production management, including nutrition and feeding, breeding and reproduction, herd health management, milk marketing, dairy cow physiology, and the financial management of a dairy operation while you address the basics of accounting and the profitable management of a business.

Ohio State ATI also offers an Associate of Science degree in Dairy Science. This degree option allows students to begin their course work toward a Bachelor of Science degree. Students who pursue this degree at Ohio State ATI can meet a portion of the requirements for a bachelor's degree at The Ohio State University College of Food, Agricultural, and Environmental Sciences.

In addition, this degree contains the "transfer module," a common set of general education courses, which apply to bachelor's degrees at other colleges in Ohio. Consult the Dairy Science major series sheet for the curriculum details of this option.

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## Contact information:

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(330) 264-3911 ext. 1327 | Toll free in Ohio 1-800-OH-STATE