



AAS DEGREE - CODE #0510

Dr. Philip Schroeder, Department Chair and Program Coordinator
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Careers related to agriculture are diverse and constantly changing. Today's students need the flexibility to tailor a degree to suit their needs. That's why our agricultural technology curriculum has been designed to let you select the elective courses that fit your career goals. You can choose concentrations of courses in animal science, enhancing your knowledge of animal agriculture and/or dairy science, or enhance your knowledge of crops and plant sciences, including fruit and vegetable production.

ADVANTAGES

- Opportunities for hands-on experience with organic farming.
- Animal science concentration is a progressive practical program emphasizing dairy cattle management and provides both a science and a business background.
- Plant science concentration focuses on the management of soil to increase production of both human and animal food crops and the science and business behind it. It includes an emphasis on sustainability.

DIRECT ENTRY INTO BACCALAUREATE DEGREE PROGRAMS

Alfred State agricultural technology graduates may enter directly into either the agribusiness management BTech, interdisciplinary studies BTech, or the technology management BBA degree program.

ANIMAL/DAIRY SCIENCE CONCENTRATION

The animal science concentration is a progressive practical program emphasizing dairy cattle management. The program offers both managerial and hands-on experiences. This concentration's courses provide a science and business background. A strong emphasis is placed on application of these principles with a free-stall housed organic herd milked by a robot and our herds of Angus and Herford cattle, sheep, and meat goats. The farm also houses horses, pigs, and poultry that are used to extend learning opportunities for our students.

PLANT/CROPS/FRUIT/VEGETABLE CONCENTRATION

This curriculum emphasizes management of the soil to increase production of food crops for both human and livestock consumption. Students are usually interested in crop farming or market gardening careers. Students are taught conventional, natural, and organic food production systems. This concentration's courses provide a science and business background. A strong emphasis is placed on application of sustainability principles on our farm, research plots, gardens, hydroponic systems, greenhouses, and high tunnels.

SHOWMANSHIP DAY

All students enrolled in agriculture classes truly enjoy participating in the annual showmanship activities each spring. Students can select a species of animal (cattle, horses, swine, alpacas, or sheep) to train, groom, and show in this annual competition. Family, friends, and alumni are invited to enjoy the competition and the awards barbecue following the showmanship contest.

RELATED CLUBS AND ACTIVITIES

Students have the opportunity to participate in the Collegiate Agricultural Leaders (CAL) Club, Collegiate FFA, Equestrian Club, Dairy Judging

Team, Agricultural Skills Day, Spring Fling Consignment Sale, Community Supported Agriculture projects, local foods projects, showmanship contests, and Sustainability Club.

CONTINUING EDUCATION OPPORTUNITIES

Many schools, including Cornell University, grant full credit to students wishing to transfer to four-year programs. A formal articulation agreement exists between Alfred State and Cornell University for transfer options.

OCCUPATIONAL OPPORTUNITIES

- Owners, operators, managers, and herdsmen for dairy cattle and meat animal farms
- Fruit, vegetable, and field crop production
- Food industry
- Salespeople and consultants for feed, fertilizer, agricultural, and veterinary supply companies
- Agricultural banking and lending
- Inspectors of agricultural products
- Laboratory and field technicians for artificial insemination and veterinary supply companies
- Dairy farm inspectors

EMPLOYMENT STATISTICS

| % Employed | % Cont Ed | % Combined E&CE | % Knowledge Rate |
|------------|-----------|-----------------|------------------|
| 50% | 50% | 100% | 44% |

ENTRANCE REQUIREMENTS/RECOMMENDATIONS

Required: Algebra

Recommended: Geometry, Algebra 2, Biology, Chemistry

OFFICE OF ACCESSIBILITY SERVICES

Students who believe they need a reasonable accommodation to properly participate in this program may contact Melanie Ryan in the Office of Accessibility Services. This office may be contacted by email at oas@alfredstate.edu or by phone at 607-587-4506. Please keep in mind that some accommodations may take time to implement, so students seeking accommodations are encouraged to contact OAS as early as possible.

AGRICULTURE: ANIMAL AND PLANT SCIENCE - AAS DEGREE

ANIMAL SCIENCE CONCENTRATION TYPICAL FOUR-SEMESTER PROGRAM

| First | | | |
|--------------|------|--------------------------------|----|
| ANSC | 1204 | Introduction to Animal Science | 4 |
| AGRI | 1001 | Farm Practicum I | 1 |
| BIOL | 1304 | Botany | 4 |
| AGRI | 3351 | Live Animal Evaluation | 1 |
| COMP | 1503 | Writing Studies | 3 |
| GLST | 2113 | Global & Diverse Perspectives | 3 |
| | | | 16 |

| Second | | | |
|---------------|------|-----------------------------------|----|
| ANSC | 3203 | Dairy Cattle Production I | 3 |
| ANSC | 3103 | OR Livestock Mgmt & Production | 3 |
| AGPS | 1104 | Soils | 4 |
| ANSC | 2114 | Dom Animal Anat & Phys | 4 |
| AGRI | 2001 | Farm Practicum II | 1 |
| SPCH | 1083 | Public Speaking | 3 |
| XXXX | xxx3 | Agricultural Elective | 3 |
| | | | 18 |

| Third | | | |
|--------------|------|--------------------------------------|----|
| AGPS | 2113 | Field & Forage Crops | 3 |
| ANSC | 3013 | Animal Disease Control | 3 |
| AGEC | 3213 | Farm & Rural Business Mgmt I | 3 |
| AGRI | 3001 | Farm Practicum III | 1 |
| XXXX | xxx3 | Agriculture Elective | 3 |
| MATH | xxx3 | MATH 1033, or 1104, or 1113, or 1123 | 3 |
| | | | 16 |

| Fourth | | | |
|---------------|------|-------------------------------|-------|
| AGEC | 4303 | Farm & Rural Business Mgmt II | 3 |
| AGRI | 2101 | Sophomore Seminar | 1 |
| AGRI | 2013 | Organic & Sustainable Ag Tech | 3 |
| BIOL | 4254 | OR General Microbiology | 4 |
| AGRI | 4001 | Farm Practicum IV | 1 |
| XXXX | xxx3 | Ag or Transfer Elective | 3 |
| XXXX | xxx3 | General Education Elective | 3 |
| | | | 14-15 |

If full-time student, may cross register at AU for equestrian classes.

Suggested Agriculture or Transfer-Related Electives:

| | | | |
|------|------|-------------------------------|---|
| AGPS | 3004 | Soil Fertility | 4 |
| ANSC | 3003 | Feeds and Nutrition | 3 |
| ANSC | 3223 | Dairy Calf Management | 3 |
| ANSC | 3103 | Livestock Mgmt & Production | 3 |
| ANSC | 3204 | Dairy Cattle Production III | 4 |
| AGPS | 5003 | Integrated Pest Management | 3 |
| AGPS | 5103 | Sustainable Vegetb Prodn Tech | 3 |
| AGPS | 5113 | Sustainable Fruit Production | 3 |
| AGRI | 2013 | Organic & Sustainable Ag Tech | 3 |
| AGRI | 6103 | Precision Agriculture | 3 |
| BIOL | 2803 | Environmental Science | 3 |
| BIOL | 2801 | Environmental Sciences Lab | 1 |
| BIOL | 4254 | General Microbiology | 4 |
| BIOL | 6534 | Genetics | 4 |
| CHEM | 1114 | General Chemistry I | 4 |
| MATH | xxxx | | |

PLANT SCIENCE CONCENTRATION TYPICAL FOUR-SEMESTER PROGRAM

| First | | | |
|--------------|------|--------------------------------|----|
| ANSC | 1204 | Introduction to Animal Science | 4 |
| AGRI | 1001 | Farm Practicum I | 1 |
| BIOL | 1304 | Botany | 4 |
| COMP | 1503 | Writing Studies | 3 |
| GLST | 2113 | Global & Diverse Perspectives | 3 |
| | | | 15 |

| Second | | | |
|---------------|------|-------------------------------|----|
| AGPS | 1104 | Soils | 4 |
| AGRI | 2013 | Organic & Sustainable Ag Tech | 3 |
| AGRI | 2001 | Farm Practicum II | 1 |
| XXXX | xxx3 | Ag. Electives | 6 |
| SPCH | 1083 | Public Speaking | 3 |
| | | | 17 |

| Third | | | |
|--------------|------|--------------------------------------|----|
| AGPS | 2113 | Field & Forage Crops | 3 |
| AGEC | 3213 | Farm & Rural Business Mgmt I | 3 |
| AGPS | 5103 | Sustainable Vegetb Prodn Tech | 3 |
| AGRI | 3001 | Farm Practicum III | 1 |
| XXXX | xxx3 | Ag. Elective | 3 |
| MATH | xxx3 | MATH 1033, or 1104, or 1113, or 1123 | 3 |
| | | | 16 |

| Fourth | | | |
|---------------|------|-------------------------------|----|
| AGEC | 4303 | Farm & Rural Business Mgmt II | 3 |
| AGRI | 2101 | Sophomore Seminar | 1 |
| AGPS | 5003 | Integrated Pest Management | 3 |
| AGRI | 4001 | Farm Practicum IV | 1 |
| XXXX | xxx3 | Ag. Elective | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| | | | 14 |

If full-time student, may cross register at AU for equestrian classes.

Suggested Agriculture or Transfer-Related Electives:

| | | | |
|------|------|--------------------------------|---|
| AGPS | 5003 | Integrated Pest Management | 3 |
| AGPS | 5113 | Sustainable Fruit Production | 3 |
| AGRI | 6103 | Precision Agriculture | 3 |
| ANSC | 2102 | Dairy Cattle Reprod & A.I Tech | 2 |
| ANSC | 2114 | Dom Animal Anat & Phys | 4 |
| ANSC | 3003 | Feeds and Nutrition | 3 |
| ANSC | 3243 | Dairy Management Analysis | 3 |
| ANSC | 3204 | Dairy Cattle Production III | 4 |
| ANSC | 3223 | Dairy Calf Management | 3 |
| BIOL | 2803 | Environmental Science | 3 |
| BIOL | 2801 | Environmental Sciences Lab | 1 |
| BIOL | 4254 | General Microbiology | 4 |
| BIOL | 6534 | Genetics | 4 |
| CHEM | 1114 | General Chemistry I | 4 |
| MATH | xxxx | | |

GRADUATION REQUIREMENTS

Students must:

- successfully complete the prescribed sequence of courses
- achieve a minimum index of 2.0 in core courses
- achieve a minimum index of 2.0 overall
- be recommended by the department faculty