



AAS DEGREE - CODE #2917

Dr. Philip Schroeder, Department Chair and Program Coordinator
Email Address: schroepd@alfredstate.edu

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 automation and robotics curriculum has been designed to prepare students to enter the workforce as an agricultural automation technician or continue their education in one of Alfred State's baccalaureate programs.

ADVANTAGES

- Opportunities for hands-on experience with automated milking equipment.
- Hands-on experience and class work in both agriculture and engineering.
- The only program of its kind in the US.

DIRECT ENTRY INTO BACCALAUREATE DEGREE PROGRAMS

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

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 Robotics 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

- Installation and maintenance of agricultural automation equipment
- Agricultural automation equipment operations
- Agricultural automation equipment research and development
- Salespeople and consultants for agricultural equipment distributors

EMPLOYMENT STATISTICS

Employment and continuing education rate of 100% - 50% are employed; 50% continued their education.

RELATED PROGRAMS

- [Agricultural Technology](#)
- [Agricultural Business](#)
- [Electrical Engineering Technology](#)
- [Mechanical Engineering Technology](#)
- [Mechatronics Technology](#)

ENTRANCE REQUIREMENTS/RECOMMENDATIONS

Required: Algebra, Geometry, Algebra 2

Recommended: Physics

REQUIRED COURSE PREREQUISITES

If students do not place into MATH 1033 College Algebra, MATH 1084 Calculus I, MATH 1323 Quantitative Reasoning, 1034 College Algebra of Functions, 1054 Precalculus, or 2124 Statistical Methods & Analysis, then MATH 1014 Algebra Concepts is a required prerequisite for completion of the major.

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.

A typical day consists of two, one-hour lectures and a two-hour studio in the freshman and sophomore years. At the junior and senior levels, three-hour studios are required.

TYPICAL FOUR-SEMESTER PROGRAM

First			
ANSC	1204	Introduction to Animal Science	4
AGRI	1001	Farm Practicum I	1
MATH	1323 OR HIGHER		
COMP	1503	Writing Studies	3
MECH	1003	Intro to Mechanical Eng Tech	3
ELET	1202	Intro to Electrical Eng Tech	2
			16
Second			
AGPS	1104	Soils	4
AGRI	2102	Ag Equip Maint and Rep	2
MECH	1203	Materials Science	3
ELET	1142	Electronic Fabrication	2
AGEC	2101	Farm Records	1
GLST	2113 OR GE Equivalent	Global Perspectives: Special Topics OR GE Equivalent	3
			15
Third			
AGRI	4012	Internship	12
Fourth			
AGRI	4103	Constructn Technqs for Agrict	3
AGRI	4900	Directed Study	1
MCET OR ELET	2423 1133	Circuit Fundamentals OR Digital Logic	3
MCET OR ELET	2461 1111	Circuit Fundamentals Lab OR Digital Logic Lab	1
XXXX	XXX3	Gen Ed & LAS Elective	3
CISY OR CISY	4423 1113	Intro t Mobil Robotics & Animation OR Computer Programming I	3
SPCH OR GE Equivalent	1083	Effective Speaking OR GE Equivalent	3
			17

Suggested Technical or Transfer-related Electives:

- MCET 2423 Circuits Fundamentals
- MCET 2461 Circuits Fundamentals Lab
- MECH 1663 Manufacturing Processes
- MECH 4003 Solid Modeling
- MECH 3334 Statics
- MECH 3223 Mechanical Design Principles
- MECH 4024 Dynamics
- MATH 1063 Tech Calc I

- ELET 2103 Electronics Theory I
- ELET 2151 Electronics Theory I
- ELET 4224 Alternative Energy Generation
- CHEM 1114 General Chemistry
- PHYS 1024 General Physics I
- AGPS 3004 Soil Fertility
- ANSC 3202 Dairy Management Analysis
- ANSC 3003 Feeds and Nutrition
- ANSC 3223 Dairy Calf Management
- ANSC 3103 Livestock Management & Production
- ANSC 3204 Dairy Cattle Production III
- AGPS 5103 Sustainable Vegetable Production Tech
- AGPS 5003 Integrated Pest Management
- AGRI 2013 Organic & Sustainable Ag Tech
- AGRI 6103 Precision Agriculture
- BIOL 2803 Environmental Sciences
- BIOL 2801 Environmental Sciences Lab
- BIOL 4254 General Microbiology
- BIOL 6534 Genetics

Graduation Requirements

Students must:

- Successfully complete the prescribed sequence of courses.
- Achieve a minimum index of 2.0 in their core courses.
- Achieve a minimum index of 2.0 overall.
- Be recommended by the department faculty.