



## College of Business, Industry, Life Science, and Agriculture

# Soil and Crop Science (Agronomy)

### What is Soil and Crop Science?

Soil and crop science, or agronomy, combines theories of plant and soil sciences into a field of study focused on the economically and environmentally sustainable production of crops for human consumption, animal feed, fiber, seed stock, or fuel. Agronomists must have a broad knowledge of factors affecting the management of soil resources and crops. Students majoring in soil and crop science can tailor their major to suit their interests and career objectives by choosing from the several emphasis areas and the wide range of classes offered within the program.

### Requirements

A Bachelor of Science degree in soil and crop science includes 36 credits of required courses plus 24 credits from one of the emphasis areas listed below, or by choosing a 24-credit university or second major. The required courses include soil science, soil fertility, pest identification and management, plant development and biotechnology, nutrient management, plant physiology, and soil and water conservation. Prerequisites include introductory courses in plant and soil science, introductory chemistry, botany, and School of Agriculture and UW-Platteville general education requirements.

### Emphasis Areas

The **Comprehensive** emphasis was created for students wanting both an in-depth knowledge of agronomy and a broad understanding of other areas within science and agriculture. Students in this emphasis complete 39 credits of required soil and crop science courses, choose two additional courses in the biological or physical sciences, and select 12 to 14 credits from any courses within the School of Agriculture.

The **Agribusiness** emphasis was created for students with interests in operating their own business or managing a business in the agronomy industry. Students in the emphasis complete 36 credits of required soil and crop science courses and 24 credits of agribusiness-related courses.

The **Plant Breeding and Genetics** emphasis was created for students with interests in working in the crop improvement/development field, or with interests in pursuing graduate education. Students in this emphasis complete 40 credits of required coursework in soil science, plant science, genetics, biotechnology, and chemistry, plus nine elective credits in soil and crop science and 11 to 12 credits of electives in the plant breeding and genetics area.

The **International** emphasis was created for students with interests in studying abroad or working in the field of international agriculture. Students selecting this emphasis are required to complete the core curriculum outlined in the soil and crop science requirements as well as 24 credits of approved courses that focus on International Studies.

Students are encouraged to participate in study abroad, one-on-one exchange, or instructor-led international experiences.

### Faculty and Facilities

All of the soil and crop science faculty hold doctorates. Faculty members also conduct individual research with students and through state and federally funded programs. They also advise student organizations, coach soils and crops teams for collegiate competitions, and advise students on classes. Campus facilities include newly-renovated soils, crops, biotechnology and horticulture laboratories and classrooms; and new greenhouse facilities. Students also have access to the 430-acre Pioneer Farm, a state-of-the-art educational and research facility.

### High School Preparation

Students should have a strong interest in science and agriculture. High school courses should include biology, chemistry, and algebra. High school agriculture courses are encouraged, but performance of students without agricultural backgrounds has been similar to those from rural areas.

### Outstanding Career Opportunities

Placement of soil and crop science graduates have been nearly 100 percent over the past 30 years. Graduates are employed in more than 40 types of agronomy-related careers with agencies, private industry, or through self-employment. Graduates work in areas that include farming, soil conservation, soil mapping, crop consultants, agricultural product sales, international agriculture, and corporate research. Graduates also enjoy a high admission rate into graduate school, and several have earned masters and doctoral degrees.

### Internship and Research Opportunities

All students are required to complete at least three credits of on-the-job training (internships) while attending UW-Platteville. Internships provide excellent opportunities to gain experience and interact with industry professionals, while earning credits and salary. Internships are available in agronomic product research and sales, crop and seed research and development, crop and environmental consulting, and with state and federal agencies that support agriculture and conservation. Students may also choose to become involved with research projects being conducted by faculty, or through independent study projects through university-sponsored undergraduate research grants.

### Extracurricular Activities

Students are encouraged to participate in the various clubs and organizations offered within the School of Agriculture

and the university. These activities provide interaction with other students, sharing of common interests, and build lifelong relationships. The Soil Agronomy-Conservation Club is a student chapter of two national organizations: the American Society of Agronomy and the Soil and Water Conservation Society. The club sponsors field trips, high school agronomy, land judging, and forage quality contests, and collegiate judging teams. The collegiate soils and crop judging teams are consistently among the top teams in regional and national competitions, and have won several national championships.

## Nontraditional and Transfer Students

Nontraditional and transfer students fit into the soil and crop science program with relative ease. Students are individually advised each semester with regard to courses and credits. Because of the broad nature of the program, flexible handling of credit transfer is a normal procedure.

## For More Information

Visit <http://www.uwplatt.edu/soa>.

For more information on the soil and crop science program, write to the School of Agriculture, University of Wisconsin-Platteville, 1 University Plaza, Platteville, Wisconsin 53818-3099, or call 608.342.1393.

For general information on the university and its programs, contact UWP Prospective Student Services, University of Wisconsin-Platteville, 1 University Plaza, Platteville, WI 53818-3099, or call toll-free 1.877.897.5288 or locally 608.342.1068.

## Suggested Course of Study

### First Year

#### First Semester

Engl 1130	Freshman Composition	3
Ag Sci 1240	The Plant-Soil Environment	3
Chem 1140	General Chemistry	4
	OR	
Chem 1050	General Chemistry	5
	Humanities, Fine Arts, or Historical	
	Perspective elective	3
	Social Sciences elective	3
	Foreign Language (if required)	(4)
		<b>16-17</b>

#### Second Semester

Engl 1230	Freshman Composition	3
Biol 1350	Botany	5
Math 1730	Math of Finance	3
	OR	
Math 1830	Statistics	3
Ag Ind 1500	Intro to Agribusiness	3
Ag Sci 3200	Pest ID and Management	3
	Foreign Language (if required)	(4)
		<b>17</b>

### Second Year

#### First Semester

Ag Sci 2230	Soils	4
Ag Sci 1000	Intro to Animal Science	3
Spch 1010	Public Speaking	2
	OR	
Spch 2250	Public Speaking	2
	Humanities, Fine Arts, or Historical	
	Perspective elective	3
	Social Sciences elective	3
PE 1000	Wellness	1
		<b>16</b>

#### Second Semester

Ag Sci 3220	Plant Dev. and Biotech.	4
Ag Ind 1750	Equip, Struct, Power Syst.	3
Ag Sci 3340	Nutrient Management	3
	Humanities, Fine Arts, or Historical	
	Perspective elective	3
	Social Sciences second course	3
		<b>16</b>

### Third Year

#### First Semester

Ag Sci 4350	Soil and Water Conservation	3
	Soil and Crop Science elective	3
	Ethnic and Gender Studies elective	3
	Physical Activity elective	1
	Minor or emphasis area courses (2)	6
		<b>16</b>

#### Second Semester

Ag Sci 3340	Nutrient Management	3
Ag Sci 4340	Plant Physiology	3
	Soil and Crop Science elective	3
	Minor or emphasis area courses (2)	6
		<b>15</b>

#### Summer

Ag Ind 4580	Agribusiness Intern	3
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### Fourth Year

#### First Semester

	Soil and Crop Science elective	3
	Humanities, Fine Arts, or Hist.	
	Perspective 2nd course	3
	International Education elective	3
	Minor or emphasis area courses (2)	6
		<b>15</b>

#### Second Semester

Ag Sci 4350	Soil Fertility and Fertilizers	3
Ag Sci 3310	Soils, Crops, and Orn. Hort Seminar	1
	Soil and Crop Science elective	3
	Minor or emphasis area courses	6
		<b>13</b>

The University of Wisconsin-Platteville does not discriminate on the basis of age, race, creed, color, handicap, sex, sexual orientation, developmental disability, national origin, ancestry, marital status, arrest record or conviction record.