SIU Southern Illinois University
CARBONDALE

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Agronomy

The Agronomy major is administered through the School of Agricultural Sciences. The major has two specialized areas of study, with both specializations offering a general and science option. Students choosing the general option may select their upper division and elective credits from a wide choice of courses throughout the School of Agricultural Sciences and the University. If interests are more specialized, students may elect the science option and specialize in a specific discipline.

Crop Production and Management Specialization

This specialization provides the student with the background and preparation for careers in the biotechnology, seed, or plant industries incorporating both the traditional and molecular approaches to germplasm development, the agrichemical industry with expertise in crop management and protection employing a holistic approach to crop production by integrating the disciplines of plant pathology, entomology and weed science. This specialization will prepare students with careers with the Illinois/US EPA, US Forest Service, or the USDA (Agricultural Research, Forest, Animal and Plant Health Inspection Services).

Soil Science Specialization

Students selecting this specialization will receive training in soil quality management applying the principles of soil-water behavior, fertilizer use efficiency and soil ecology that influence the sustainability and quality of our soil and water resources. This specialization will prepare students with careers with the Illinois/US EPA and the USDA (National Resources Conservation Service) and the state Soil Water Conservation Service.

Opportunities for individual program development within the various specializations/options may be realized through work experience, internships, special studies, and seminars; however, no more than 30 hours of such unstructured coursework may be counted toward the degree. Students in all specializations/options are urged to make use of them to meet the goals and needs of their respective programs.

Students in all specializations must complete the Agronomy core. These courses are: CSEM 200, CSEM 240, one hour of CSEM 381, and CSEM 409.

There may be extra expenses for field trips, manuals, or supplies in some courses.

Bachelor of Science (B.S.) in Agronomy

B.S. Agronomy - Crop Production and Management (General) Specialization Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements	39

Degree Requirements	Credit Hours	
Foundation Skills: CMST 101, ENGL 101, ENGL 102, MATH 108, UNIV 101	13	
Disciplinary Studies: Fine Arts, Human Health, Humanities, CHEM 140A, PLB 200, ABE 204, Social Science	23	
Multicultural/Diversity	3	
Requirements for Major in Agronomy Core Requirements		41
CSEM 200, CSEM 240, CSEM 300, CSEM 305, CSEM 381, CSEM 401, CSEM 403A, CSEM 409, CSEM 420, CSEM 447, CSEM 448, CSEM 468	35	
CSEM 300- or 400-level	6	
Other required courses		8
CHEM 140A, CHEM 140B	5	
PLB 200	1	
ABE 333, ABE 360, AGRI 323 or AGSE 318	2	
Electives		32
Agricultural Sciences Electives 300- or 400- level	6	
Agricultural Sciences Electives	9	
Electives	17	
Total		120

B.S. Agronomy - Crop Production and Management (Science) Specialization Degree Requirements

Degree Requirements	Credit Hours	
University Core Curriculum Requirements		39
Foundation Skills: CMST 101, ENGL 101, ENGL 102, MATH 108, UNIV 101	13	
Disciplinary Studies: Fine Arts, Human Health, Humanities, CHEM 200, CHEM 201, PLB 200, ABE 204, Social Science	23	
Multicultural/Diversity	3	

Degree Requirements	Credit Hours	
Requirements for Major in Agronomy Core Requirements:		41
CSEM 200, CSEM 240, CSEM 300, CSEM 305, CSEM 381, CSEM 401, CSEM 403A, CSEM 409, CSEM 420, CSEM 447, CSEM 448, CSEM 468	35	
CSEM 300- or CSEM 400-level	6	
Other required courses:		37
CHEM 200, CHEM 201, CHEM 210, CHEM 211, CHEM 340, CHEM 341, CHEM 350	13	
PLB 200, PLB 320	5	
GEOG 434	3	
MATH 109, MATH 140	7	
PHYS 203A, PHYS 203B	6	
AGSE 472	3	
Electives		3
Agricultural Sciences Electives 300- or 400- level	3	
Total		120

B.S. Agronomy - Soil Science (General) Specialization Degree Requirements

Degree Requirements	Credit Hours	
University Core Curriculum Requirements		39
Foundation Skills: CMST 101, ENGL 101, ENGL 102, MATH 108, UNIV 101	13	
Disciplinary Studies: Fine Arts, Human Health, Humanities, CHEM 140A, PLB 200, ABE 204, Social Science	23	
Multicultural/Diversity	3	
Requirements for Major in Crop, Soil, and Environmental Management Core Requirements:		40
CSEM 200, CSEM 240, CSEM 360, CSEM 381, CSEM 404, CSEM 409, CSEM 446, CSEM 447, CSEM 448, CSEM 454, CSEM 479, CSEM 487, CSEM 489	34	

Degree Requirements	Credit Hours
CSEM 300- or 400-level	6
Other required courses:	9
CHEM 140A, CHEM 140B	5
PLB 200	1
GEOL 220	3
Electives	32
Agricultural Sciences Electives at 300- or 400-level	9
Agricultural Sciences Electives	9
Electives	14
Total	120

B.S.Agronomy - Soil Science (Science) Specialization Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements	39
Foundation Skills: CMST 101, ENGL 101, ENGL 102, MATH 108, UNIV 101	13
Disciplinary Studies: Fine Arts, Human Health, Humanities, CHEM 200, CHEM 201, PLB 200, ABE 204, Social Science	23
Multicultural/Diversity	3
Requirements for Major in Agronomy Core Requirements:	38
CSEM 200, CSEM 240, CSEM 360, CSEM 381, CSEM 404, CSEM 409, CSEM 446, CSEM 447, CSEM 448, CSEM 454, CSEM 479, CSEM 487, CSEM 489	34
CSEM 300- or 400-level	4
Other required courses:	39
CHEM 200, CHEM 201, CHEM 202, CHEM 210, CHEM 211, CHEM 212, CHEM 340, CHEM 341, CHEM 350	15
PLB 200	1

Degree Requirements	Credit Hours
GEOL 220, GEOL 223	4
GEOG 434	3
MATH 109, MATH 140	7
PHYS 203A, PHYS 203B	6
AGSE 472	3
Electives	4
Total	120

Crop Breeding, Genetics, and Biotechnology Minor

A minor in Crop Breeding, Genetics, and Biotechnology is offered. A total of 15 hours is required with at least 12 hours taken at the University. One course must be either CSEM 200 or HORT 220 and a second course must be CSEM 305. Additional credit hours may be selected from: CSEM 401, CSEM 403A, CSEM 405, CSEM 419, CSEM 423, CSEM 433, CSEM 435, CSEM 438, and HORT 430. An advisor must be consulted before selecting this minor.

Agronomy Minor

A minor in Agronomy is offered. A total of 15 hours is required and at least 12 hours taken at the University. One course may be selected from: CSEM 200, or CSEM 240 and at least eight hours from 300- or 400-level structured courses. An advisor must be consulted before selecting this minor.

Capstone Option for Transfer Students

The SIU Carbondale Capstone Option may be available to eligible students who have earned an Associate in Applied Science (A.A.S.) degree or the equivalent. The Capstone Option reduces the University Core Curriculum requirements from 39 to 30 hours, therefore reducing the time to degree completion. See the Capstone Option section for more information on this option.

Technology Fee

The College of Agricultural, Life, and Physical Sciences assesses undergraduate majors a technology fee of $4.58 per credit hour up to 12 credit hours. The fee is charged Fall and Spring semesters.

Agronomy Courses

Agronomy Faculty

Bond, Jason, Professor, Ph.D., Louisiana State University, 1999.

Fakhoury, Ahmad, Associate Professor, Ph.D., Purdue University, 2001.

Gage, Karla, Associate Professor, Ph.D., Southern Illinois University, 2013.
Jones, K. L., Professor and Chair, Ph.D., Texas A&M University, 1999.
Kantartzi, Stella, Associate Professor, Ph.D., Aristotle University of Thessaloniki, 2006.
Lightfoot, David A., Professor, Ph.D., University of Leeds, 1984.
Meksem, Khalid, Professor, Ph.D., University of Cologne, 1995.

Emeriti Faculty

Chong, She Kong, Professor, Emeritus, Ph.D. University of Hawaii, 1979.
Klubek, Brian P., Professor, Emeritus, Ph.D., Utah State University, 1977.
McGuire, James M., Professor, Emeritus, Ph.D., North Carolina State University, 1961.
Olsen, Farrel J., Professor, Emeritus, Ph.D., Rutgers University, 1961.
Russin, John S., Professor, Emeritus, Ph.D., University of Kentucky, 1983.
Schmidt, Michael E., Associate Professor, Emeritus, Ph.D., Southern Illinois University, 1994.
Stucky, Donald J., Professor, Emeritus, Ph.D., Purdue University, 1963.
Tweedy, James A., Professor, Emeritus, Ph.D., Michigan State University, 1966.
Varsa, Edward C., Professor, Emeritus, Ph.D., Michigan State University, 1970.

Last updated: 05/06/2026