SOUTH DAKOTA STATE UNIVERSITY

Bachelor of Science in Agriculture, Food and Environmental Sciences
Major: Precision Agriculture
2018-2019 Sample 4-Year Plan

Total Degree Requirements: 120 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** 2.5 in Major required classes **Minor/Career Interest(s)** _____

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

First Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AST 119 or PS 119*	First Year Seminar		1-2	F	
BIOL 151-151L	General Biology I and Lab		4	F	
MATH 102	College Algebra (SGR #5)	p. Placement	3	F	
PS 103-103L*	Crop Production and Lab		3		
SPCM 101	Fundamentals of Speech (SGR #2)	p. Placement	3		
		Total Credit Hours	14-15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BOT 201-201L	General Botany and Lab (SGR #6)	p. BIOL 101 or BIOL 151	3		
ECON 201	Principles of Microeconomics (SGR #3)		3		
ENGL 101	Composition (SGR #1)		3		
ET 210-210L	Introduction to Electronic Systems	p. MATH 102	4		
SGR #4	Arts and Humanities/Diversity (SGR #4)		3		
		Total Credit Hours	16		

Second Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 106-106L	Chemistry Survey and Lab (SGR #6)	p. MATH 101 or higher	4		
ENGL 277	Technical Writing in Engineering (SGR #1)	p. GE 101, AST 119, PHYS 119, or PS 119, and ENGL 101	3		
PRAG 203-203L*	Intro to Precision Agriculture and Lab		2		
PS 223-223L*	Principals of Plant Pathology and Lab	P. BIOL 103/L, 153/L or BOT 201/L	3	F	
SGR #4	Arts and Humanities/Diversity (SGR #4)		3		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ABS 203	Global Food Systems (SGR #3)		3		
ACCT 210 or AGEC 271 or AGEC 354*	Principles of Accounting I Farm and Ranch Management Agricultural Marketing and Prices	 p. ECON 201 or ECON 202	3		
AST 273-273L*	Microcomputer Applications in Agriculture and Lab		3		
CHEM 120-120L	Elementary Organic Chemistry and Lab	p. CHEM 106/L or CHEM 112/L	4		
PS 213-213L*	Soils and Lab	p. CHEM 106/L or CHEM 112/L	3		
		Total Credit Hours	16		

*Students must earn at least a C grade in each major required class and must earn at least a 2.5 cumulative GPA in the major required classes.

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer

Third Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
PHYS 101-101L	Survey of Physics and Lab		4		
PRAG 340*	Climate Risk Management with Precision Agriculture		3		
PRAG 427*	Precision Ag Data Mapping	p. Jr. Standing	2		
PS 405-405L or PS 407-407L*	Entomology and Lab or Insect Pest Management and Lab	p. MATH 102 or higher; PS 405/L Cross-Listed with NRM 405/L	3	F S	
STAT 281	Introduction to Statistics	p. MATH 102 or 103 or 115 or 120 or 121 or 123 or 125	3		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AST 313-313L*	Farm Machinery Systems Management and Lab	p. PHYS 101 or PHYS 111	3	S	
PRAG 304-304L*	Electrical Diagnostics for Farm Machinery and Lab	p. AST 342/L or ET 210	3	S	
PRAG 345-345L*	Principles and Implications of Chemical Application Systems and Labs		3		
PRAG 423*	Soil Fertility and Plant Nutrient Management	p. PS 213/L	3	S	
		Total Credit Hours	12		

Summer

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AST 494 or PS 494	Internship or Internship	p. Written consent	2		
		Total Credit Hours	2		

Fourth Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ABS 475-475L*	Integrated Natural Resource Management and Lab		3		
AST 412-412L*	Fluid Power Technology and Lab		3	F	
AST 426-426L or PRAG 428*	Emerging Technologies in Agriculture and Lab or Use of Soil and Plant Sensors in Crop Production	p. PRAG 427	3	F	
PRAG 426*	Corn Production	p. Jr. or Sr. Standing	2	F	
PS 445-445L*	Weed Science and Lab	p. PS 103/L or HO 111/L; or CHEM 108/L or 1220/L or 326/L	3	S	
STAT 383*	Geospatial Data Analysis	p. STAT 281 or 381 or 382	3		
		Total Credit Hours	17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AST 333-331L*	Soil and Water Mechanics and Lab		3		
AST 390 or PS 490 *	Seminar or Seminar	p. PS 494	1		
PRAG 410-410L or PRAG 462-462L*	Soil Geography and Land Use Interpretation and Lab or Environmental Soil Management and Lab	p. GEOG 132/L or PS 213/L; PRAG 410/L Cross-Listed with GEOG 410/L p. PS 213/L	3		
PRAG 424 and/or PRAG 425*	Wheat Production and/or Soybean Production	p. Jr. or Sr. Standing; Wheat – Odd Springs; Soybean – Even Springs	2	S	
PRAG 440-440L*	Crop Management with Precision Farming and Lab	p. PS 427	3		
Electives	Electives as needed to reach 120 total credits		0-1		
		Total Credit Hours	12-13		

Comments/Notes

*Students must earn at least a C grade in each major required class and must earn at least a 2.5 cumulative GPA in the major required classes.

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer