Mid-State Technical College Agribusiness Science Technology (AAS) to South Dakota State University Precision Agriculture (BS)

SDSU General Education Requirements.   MSTC Required Coursework: 13 credits

SGR Goal	SDSU Course(s)	Cr	MSTC Course	Cr
SGR Goal #1 Written Communication	ENGL 277	3	*10-801-136 English Composition I*	*3*
	ENGL 101	3		
SGR Goal #2 Oral Communication	Select from SDSU Catalog	3	*10-801-198 Speech*	*3*
SGR Goal #3 Social Sciences	ECON 201	3		
	ABS 203	3		
SGR Goal #4 Arts and Humanities	Select from SDSU Catalog	6	*10-809-166 Intro to Ethics: Theory and Application*	*3*
SGR Goal #5 Mathematics	MATH 114 (3)	3		
SGR Goal #6 Natural Sciences	BIOL 101-101L	3	*10-806-114 General Biology*	*4*
	CHEM 106-106L	4		

C. General Education and Supporting Requirements to be completed at SDSU: 35 credits

1. SGR#1: ENGL 277 Technical Communications (3 cr)
2. SGR#3 ECON 201 (3 cr)
3. SGR#3 ABS 203 Global Food Systems (3 cr)
4. SGR#4: Select from SDSU Catalog (3 cr)
5. SGR#5: MATH 114 College Algebra (3 cr)
6. SGR#6: CHEM 106-106L Chemistry Survey and Lab (4 cr)
7. AST 342-342L – Applied Electricity and Lab (3 cr)
8. BOT 201-201L - General Botany and Lab (3 cr)
9. CHEM 120-120L - Elementary Organic Chemistry and Lab (3 cr)
10. PHYS 101-101L - Survey of Physics and Lab (4 cr)
11. STAT 281 - Introduction to Statistics (3 cr)

D. Major Requirements for the Precision Agriculture B.S. 53 credits

1. ABS 475-475L - Integrated Natural Resource Management and Lab (3 cr)
2. AST 313-313L - Farm Machinery Systems Mgmt. and Lab (3 cr)
3. AST 333-333L - Soil and Water Mechanics and Lab (3 cr)
4. AST 390 *or* PS 490 - Seminar (Internship) (1 cr)
5. AST 412-412L - Fluid Power Technology and Lab (3 cr)
6. AST 494 – Internship (1 cr) **or** PS 494 – Internship (1 cr)
7. AST 426-426L - Technology Applications in Precision Ag. and Lab (3 cr) ***or*** PRAG 428 - Use of Soil and Plant Sensors in Crop Production, 3 cr
8. PRAG 304-304L - Electrical Diagnostics in Farm Machinery & Lab (3 cr)
9. PRAG 340 - Climate Risk Management with Precision Ag (3 cr)

10. PRAG 345 - Principles and Implications of Chemical Application Systems (3 cr)
11. PRAG 410-410L - Soil Geography and Land Use Interpr & Studio (3 cr) *or* PS 462-462L
- Environmental Soil Mgmt. and Lab (3 cr)
12. PRAG 423 - Soil Fertility and Plant Nutrient Management (3 cr)
13. PRAG 427 - Precision Ag Data Mapping (2 cr)
14. PRAG 440-440L - Crop Management with Prec. Farming & Lab (3 cr)
15. PS 223-223L - Principles of Plant Pathology and Lab (3 cr)
16. PS 405-405L - Entomology and Lab (3 cr) *or* PS 407-407L - Insect Pest Management
and Lab (3 cr)
17. PS 445-445L - Weed Science and Lab (3 cr)
18. STAT 383 - Geospatial Dataset Analysis (3 cr)
19. Choose 4 credits – from the following three courses
   a. PRAG 424 - Wheat Production (2 cr)
   b. PRAG 425 - Soybean Production (2 cr)
   c. PRAG 426 - Corn Production (2 cr)

   E. Electives: as needed to reach 120 credits total

   TOTAL MSTC CREDITS: 34
      Agribusiness Science and Technology block credits: 21
      Transferable general education credits: 13

   TOTAL SDSU CREDITS: 88
      General education and supporting courses: 35
      Precision Agriculture Major: 53

   TOTAL CREDITS REQUIRED: 120

Additional Requirements:

1. Students transferring from MSTC must have a cumulative GPA of 2.5 or higher.
2. Precision Agriculture Core (Major Requirements #1 – 18) must be a C or better in each
   course, and the GPA for those courses must be ≥ 2.5.
3. Course grades of "C" and above meet the College of Agriculture, Food and
   Environmental Sciences requirements.
4. Credit for technical course transfer requires that the student has completed the Agribusiness
   Science and Technology degree.
5. Student must be admitted to South Dakota State University
6. Student must complete all pre-requisite requirements.