

SEED SCIENCE

Secondary Major

Administered by the Departments of Agricultural and Biosystems Engineering, Agronomy, Horticulture, and Plant Pathology. Must be taken as a secondary major in conjunction with a primary major. The seed science program is designed for students with career interests in one or more aspects of the seed industry. Areas of study focus on seeds including production, conditioning, pathology, physiology, quality control, marketing, and seed plant designs.

Curriculum in Seed Science (Secondary Major)

Complete Communication and Library requirements of primary major and 3 cr. from the following:

ENGL 302	Business Communication	3
ENGL 309	Proposal and Report Writing	3
ENGL 314	Technical Communication	3
SP CM 312	Business and Professional Speaking	3

Biological Sciences: 10 cr.

BIOL 211 & 211L	Principles of Biology I and Principles of Biology Laboratory I	4
or BIOL 212 & 212L	Principles of Biology II and Principles of Biology Laboratory II	
AGRON 316 or HORT 321	Crop Structure-Function Relationships Horticulture Physiology	3
BIOL 313 or GEN 320	Principles of Genetics Genetics, Agriculture and Biotechnology	3

Physical Sciences: 12-14 cr.

CHEM 163 & 163L	College Chemistry and Laboratory in College Chemistry	5
or CHEM 177 & 177L	General Chemistry I and Laboratory in General Chemistry I	

One of the following:

AGRON 259	Organic Compounds in Plants and Soils	3
BBMB 221	Structure and Reactions in Biochemical Processes	3
CHEM 231 & 231L	Elementary Organic Chemistry and Laboratory in Elementary Organic Chemistry	4

One of the following:

CHEM 178 & 178L	General Chemistry II and Laboratory in College Chemistry II	4
PHYS 111	General Physics	5
PHYS 115	Physics for the Life Sciences	4

Mathematical Sciences 6-9 cr.

MATH 140	College Algebra	3
or MATH 150	Discrete Mathematics for Business and Social Sciences	

Statistics course		3
Demonstration of computer proficiency in Excel or course in Computer Science.		0-3

Agricultural Sciences: 21 cr.

AGRON 181 or HORT 221	Introduction to Crop Science Principles of Horticulture Science	3
AGRON 182	Introduction to Soil Science	3
AGRON 206	Introduction to Weather and Climate	3
AGRON 354	Soils and Plant Growth	3
TSM 322 & 322L	Preservation of Grain Quality and Preservation of Grain Quality Laboratory	3
or TSM 433	Precision Agriculture	
6 credits from AGRON, HORT, or TSM (3 credits at 300-400 level)		6

Economics and Business: 9 cr.

ECON 101	Principles of Microeconomics	3
ECON 235	Introduction to Agricultural Markets	3
One course from the following:		3
ACCT 284	Financial Accounting	
ECON 102	Principles of Macroeconomics	
ECON 230	Farm Business Management	
ECON 336	Agricultural Selling	
MGMT 370	Management of Organizations	
MKT 340	Principles of Marketing	

Seed Science: 16 cr.

AGRON 338	Seed Science and Technology	3
AGRON 421	Introduction to Plant Breeding	3
AGRON 311	Professional Internship in Agronomy (seed related)	1
AGRON 317	Principles of Weed Science	3
ENT 376	Fundamentals of Entomology and Pest Management	3
PL P 408	Principles of Plant Pathology	3

Humanities, Ethics & Social Sciences (met with primary major); remaining credits (student choice)

Because seed science is a secondary major, the courses taken by the student during the first year will vary, depending on the primary major (see typical program for the primary major).