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

Physical Sciences: 12-14 cr.
- CHEM 163 College Chemistry 5
  & 163L and Laboratory in College Chemistry 5
- or CHEM 177 General Chemistry I and Laboratory in General Chemistry I 4
  & 177L

One of the following:
- AGRON 259 Organic Compounds in Plants and Soils 3
- BBMB 221 Structure and Reactions in Biochemical Processes 3
- CHEM 231 Elementary Organic Chemistry and Laboratory in Elementary Organic Chemistry 4
  & 231L

One of the following:
- CHEM 178 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 3
- Statistics course 3
- Demonstration of computer proficiency in Excel or course in Computer Science 0-3

Agricultural Sciences: 21 cr.
- AGRON 181 Introduction to Crop Science 3
- or HORT 221 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 Preservation of Grain Quality and Preservation of Grain Quality Laboratory 3
  & 322L or TSM 433 Precision Agriculture 3

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
- or 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).