Plant Sciences/Horticulture

Department Information

- **Department Head:**
  Richard Horsley, Ph.D.
- **Graduate Coordinator:**
  Edward Deckard, Ph.D.
- **Department Location:**
  166 Loftsgard Hall
- **Department Phone:**
  (701) 231-7971
- **Department Web Site:**
  www.ag.ndsu.edu/plantsciences/ (http://www.ag.ndsu.edu/plantsciences/)
- **Application Deadline:**
  International applications are due May 1 for fall and October 1 for spring. Domestic applicants should apply at least one month prior to the start of classes.
- **Credential Offered:**
  Ph.D. (Plant Sciences only), M.S.
- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6; Duolingo 100

For each M.S. or Ph.D. student, a plan of study that meets disciplinary requirements and the needs of the student will be developed in the first year. The faculty adviser and other members of the student's supervisory and examining committee assist in developing of the plan of study as well as the student's research plan.

Master's Program

The M.S. Plan A Thesis Option program requires completion of at least 30 credits, including 10 credits PLSC 798 Master's Thesis. The M.S. Plan B Comprehensive Study Option program requires completion of at least 30 credits, including 3 credits of a PLSC 797 Master's Paper. Both Plan A and Plan B further require an oral examination of academics related to the discipline and the research-based thesis as well as a public Exit Seminar discussing their thesis work. M.S. students generally satisfy all requirements within two years.

Code	Title	Credits
M.S. Plan A - Thesis Option		**30**
Didactic credits including **		16
PLSC 724	Field Design I	
Students focusing on Plant Breeding and Genetics must take and earn a B or better in		
PLSC 631	Intermediate Genetics	
PLSC 718	Genetics & Plant Improvement	
Additional 600-700 level courses		3
PLSC 790	Graduate Seminar	1
PLSC 798	Master's Thesis	10

Code	Title	Credits
M.S. Plan B - Master's Paper Option		**30**
Didactic credits including **		21
PLSC 724	Field Design I (or equivalent)	
Additional 600-700 level courses		5
PLSC 790	Graduate Seminar	1
PLSC 797	Master's Paper	3

** Didactic credits are graduate courses numbered 601-689, 691; 700-789, 791; and 800-889, 891.

Doctoral Program

The Ph.D. program requires completion of at least 90 credits; this may include 30 credits from a previously earned M.S. degree (Thesis Option). A Plant Breeding and Genetics subplan is available for doctoral students wishing to complete specific coursework.

All Ph.D. students are required to participate in two instances of PLSC 892 Graduate Teaching Experience (one credit each), two instances of PLSC 790 Graduate Seminar (one credit each), and 20 research credits (PLSC 899 Doctoral Dissertation). A preliminary written and oral examination of academics related to the discipline must be passed to progress to Ph.D. candidacy. Further, a final oral examination of academics related to the discipline and the research-based dissertation, as well as a public Exit Seminar discussing their dissertation work, are required. Ph.D. candidates with a previously earned Master's degree generally require three additional years to satisfy Ph.D. requirements.

Code	Title	Credits
M.S. (thesis option) to Ph.D.		**60**
Didactic credits including **		**15**
PLSC 724	Field Design I (if not part of M.S. Must earn B or better)	
Students focusing on Plant Breeding and Genetics must take and earn a B or better in		
PLSC 611	Genomics	
PLSC 631	Intermediate Genetics	
PLSC 718	Genetics & Plant Improvement	
Additional 600-700 level courses		21
PLSC 790	Graduate Seminar	2
PLSC 892	Graduate Teaching Experience	2
PLSC 899	Doctoral Dissertation	20

Code	Title	Credits
M.S. (thesis option) to Ph.D. - Plant Breeding and Genetics Option		**60**
600 - 800 level graduate courses including:		36
PLSC 611	Genomics	
PLSC 631	Intermediate Genetics	
PLSC 718	Genetics & Plant Improvement	
PLSC 724	Field Design I (if not part of master's degree)	
PLSC 731	Plant Molecular Genetics	
PLSC 751	Advanced Plant Genetics	
PLSC 776	Advanced Plant Breeding	
PLSC 782	Population and Quantitative Genetics	
PLSC 790	Graduate Seminar	2
PLSC 892	Graduate Teaching Experience	2
PLSC 899	Doctoral Dissertation	20

** Didactic credits are graduate courses numbered 601-689, 691; 700-789, 791; and 800-889, 891.