Minor in Plant Breeding
School of Integrative Plant Sciences
College of Agriculture and Life Sciences
Cornell University

Description of the Minor
The Minor Program of Study in Plant Breeding will provide a basic understanding of crop improvement, a historical perspective of the discipline, and a sense of how plant breeding contributes to modern society’s demands for food, fiber, fuel, and environmental sustainability. A minor in plant breeding can complement most any major in the life sciences.

To satisfy the requirements for the Minor in Plant Breeding, the minor candidate must successfully complete the three courses listed below (10 credits) below and a minimum of five additional credits of Plant Breeding or related courses at the 2000-level and higher, for a minimum requirement of 15 credits in plant breeding coursework. Special topic courses, independent study, seminar courses, and courses without regular instruction cannot be counted toward the credit requirement without prior written approval of the program advisor.

All courses must be taken for a letter grade, and a grade of “C” or better must be received to count toward the minor. Any undergraduate student, except those majoring in Plant Sciences, may enroll in the minor.

A. Plant Breeding Core
The following three courses are required:
1. PLBRG 2010 - Plants, Genes, and Global Food Production (Fall, 3 credits)
2. PLBRG 2250 - Plant Genetics (Spring, 4 credits) Prerequisite: one majors-level biology course or equivalent.
3. PLBRG 4030 - Genetic Improvement of Crop Plants (Fall, 3 credits) Prerequisite: BIOMG 2800, PLBRG 2250, or other standard genetics course and course in crops or horticulture.

Learning Outcomes: Students will be able to:
1. Describe the cellular and organismal processes of plants and relate those processes to evolution, diversity and ecology.
2. Convey to professional and lay audiences, orally and in writing, information about the breadth of issues in Plant Sciences.
3. Work with plants in field and laboratory, and follow and use experimental protocols.
4. Express scientific questions as testable hypotheses based on a synthesis of current understanding and resources.
5. Debate the biological and ethical consequences of future advances in Plant Science - especially in the areas of genetic engineering, biofuels, and climate change.
6. Describe the impact that Plant Sciences have on self, community, and global health and wellbeing.

Information for Transfer Students
Transfer students are encouraged to apply for a minor in plant breeding. An initial meeting with the minor advisor will help determine if a student is able to take the necessary credits or has equivalencies that can be applied to satisfy the program requirements.
How to receive credit for the Minor Program of Study in Plant Breeding:
1. Meet with a plant breeding and genetics faculty advisor (Mark Sorrells or Don Viands) to discuss your interests in plant breeding and choose the courses you will take to satisfy the minor.
2. Submit a copy of the enclosed form to Mark Sorrells or Don Viands. Retain a copy for your records and give your major advisor a copy for your file.
3. Complete the courses required for the plant breeding minor.
4. In the final semester prior to graduation, bring a copy of your transcript and your “Application to Graduate” to Mark Sorrells or Don Viands. Upon verification of the successful completion of all requirements, your minor advisor will sign the form required for the minor.

Contact Information:
Mark Sorrells                Don Viands
413 Bradfield Hall          174 Roberts Hall
mes12@cornell.edu           drv3@cornell.edu
607-255-1665                607-255-3081
Application for Admission to Minor Program of Study

Student’s name: ________________________________________________________

Major: _____________________________________ College: ___________________

Cell phone #: _________________________ E-mail: __________________________

Home Address: _________________________________________________________
______________________________________________________________________

Advisor’s name_________________________ Department: _________________

Advisor’s signature________________________ Date: _______________________

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TOTAL CREDITS: ________