PLANT BREEDING AND PLANT GENETICS, MS

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (https://guide.wisc.edu/graduate/#requirementstext) and policies (https://guide.wisc.edu/graduate/#policiestext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	Students must earn a B or above in all core curriculum coursework.
Assessments and Examinations	A formal MS thesis is required.
Language Requirements	No language requirements.

REQUIRED COURSES

The specific program of study for a master's degree is developed by the student and their major professor. Considerable flexibility in the selection of courses is permitted to meet the needs and interests of the candidate.

Code	Title	Credits
Coursework		
Chosen in consultation with advisor, students must complete at least 12 credits of coursework, including 9 credits of core curriculum coursework. Research (990) credits cannot be applied toward this requirement. This coursework must be graded (no pass-fail or satisfactory-unsatisfactory).		12
Core Curriculum		
Students must complete at least 9 credits from the core curriculum, including 2 credits in Section A and 2 credits in either Section B or Section C. Students may fulfill the remaining 5 credits with courses in any of the sections (A, B, C or D).		
Section A. Plant Breeding (minimum 2 credits)		
PLANTSCI 501	Principles of Plant Breeding	
PLANTSCI 502	Techniques of Plant Breeding [1]	
PLANTSCI 812	Selection Theory for Quantitative Traits in Plants	
Section B. Genetics (minimum 2 credits from section B or C)		
PL PATH 517	Plant Disease Resistance	
PLANTSCI 550	Molecular Approaches for Crop Improvement	
PLANTSCI/ GENETICS 615	Genetic Mapping	
GENETICS/ BIOCHEM 631	Plant Genetics and Development	
GENETICS/ BIOCHEM/ BOTANY 840	Regulatory Mechanisms in Plant Development	
Section C. Quantitative Genetics and Biometry (minimum 2 credits from section B or C)		
F&W ECOL/ STAT 572	Statistical Methods for Bioscience II	
PLANTSCI 811	Biometrical Procedures in Plant Breeding	
PLANTSCI 771 & PLANTSCI 772	Experimental Design and Analysis and Applications in ANOVA and Mixed Models	
AN SCI 865	Design and Analysis of Biological Studies	
Section D. Additional Courses		

	PL PATH/ BOTANY/ ENTOM 505	Plant-Microbe Interactions: Molecular and Ecological Aspects
	BIOCHEM/ BOTANY 621	Plant Biochemistry
	GENETICS 633	Population Genetics
	BOTANY 500	Plant Physiology
Seminar [2]		
Students must complete 2 credits of seminar by taking the following course twice.		2
	PLANTSCI 957	Seminar in Plant Breeding and Plant Genetics
Additional Coursework		
Students must complete 16 credits of additional coursework to satisfy the 30-credit minimum requirement. Courses are chosen in consultation with advisor and may be a combination of research and/or courses related to a student's needs and interests.		16
Research		
Research (990) credits may be applied towards degree requirements. Students will register for research credits in the home department of their faculty advisor.		
Total Credits		**30**

1 Students who complete this course must complete a second course in Section A to satisfy the 2-credit requirement.

2 With committee approval, students may substitute 1-credit of seminar with a different graduate-level seminar class.