

# Plant and Soil Science, Ph.D.

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## Degree Offered

- Doctor of Philosophy with a major in Plant and Soil Science

## Nature of the Program

The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

## Areas of Emphasis

The doctor of philosophy in plant and soil sciences degree is offered to students who wish to study crops agronomy, entomology, applied and environmental microbiology, horticulture, plant pathology, or soil sciences.

## Admissions

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0711

A candidate for the Ph.D. degree in Plant and Soil Science must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

## Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
	Seminar (AEM, AGRN, ENTO, GEN, HORT, PPTH) *	5
	Research (AEM, AGRN, ENTO, GEN, HORT, PPTH)	6
Candidacy Exam		
Dissertation		
Dissertation Defense		
Total Hours		11

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A student must be enrolled in Seminar all semesters in residence.

Doctoral students must satisfactorily complete a set of core courses before they will be admitted to candidacy for the Ph.D. degree. All core courses will be at the 600 or 700 level, except where indicated below. Certain course requirements may be waived if the student has received equivalent training in prior coursework. Additional coursework pertaining to the student's area of specialization will be determined by the student's major professor and graduate committee.

## **Major Learning Outcomes**

### **PLANT AND SOIL SCIENCE**

1. Students will acquire fundamental knowledge of their area of emphasis and associated fields in plant and soil science.
2. Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.
3. Students will acquire technical skills in the field or laboratory.
4. Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
5. Students will develop the ability to design, conduct, and interpret the results of experiments.