

Horticulture, M.S.

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Degree Offered

- Master of Science
- For Ph.D. option, see Horticulture area of emphasis under Ph.D. in Plant and Soil Sciences

Nature of the Program

Master of Science in Horticulture provides students the opportunity to take courses and conduct original, master's-level research in their areas of specialization. The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter doctoral programs or 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.

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 requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

Major Code: 0739

A candidate for the M.S. degree in Horticulture must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

Program Requirements

All M.S. 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
Thesis Option:		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Select one of the following:		3
STAT 511	Statistical Methods 1	
BIOS 501	Applied Biostatistics 1	
Select one of the following:		3
STAT 512	Statistical Methods 2	
BIOS 503	Applied Biostatistics 2	
Seminar		3
HORT 796	Graduate Seminar	
Research		6
HORT 797	Research	
Discipline-Oriented Coursework *		15
(HORT, PLSC, GEN, BIOL, AGRN, AGBI, ENTO, PPTH, AEM, RESM, AGEE, GEOG, HN&F)		

Plan of Study

Thesis	
Total Hours	30

Code	Title	Hours
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Non-Thesis Option:

A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.

Select one of the following:	3
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STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
BIOS 501	Applied Biostatistics 1	
BIOS 503	Applied Biostatistics 2	

Graduate Chemistry/Biochemistry Course	3
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AGBI 610	General Biochemistry	
AGBI 612	General Biochemistry	
ESWS 516	Soil Chemistry	

Seminar	3
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HORT 796	Graduate Seminar	
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Teaching Practicum	2
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HORT 790	Teaching Practicum	
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Discipline-Oriented Coursework	15
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(HORT, PLSC, GEN, BIOL, AGRN, AGBI, ENTO, PPTH, AEM, RESM, AGEE, GEOG, HN&F)

Independent Study	3
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HORT 795	Independent Study	
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Electives	7
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Plan of Study	
Total Hours	36

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Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours.

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Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

Major Learning Outcomes

HORTICULTURE

- Students will acquire fundamental knowledge of horticulture and associated fields of plant and soil science.
- 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.
- Students will acquire technical skills in the field, greenhouse, or laboratory.
- Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
- Students will develop the ability to design, conduct, and interpret the results of experiments.