PLANT AND ENVIRONMENTAL SCIENCE - DOCTOR OF PHILOSOPHY

This degree is designed to provide students with a comprehensive knowledge of agronomy, horticulture, environmental science, or soil science, and training in methods of research affiliated with these disciplines. Emphases in agronomy and horticulture include sustainable crop production, plant breeding and genetics (alfalfa, chile, cotton, onion, peanut), forestry, turf grass management, plant-pest/disease/weed interactions, soil-water-plant relations, plant growth/development/physiology. Emphasis in environmental and soil science include environmental quality and ecosystem services, bioremediation, recycling of organic wastes and wastewater, water-use efficiency, soil-plant relations, soil-geomorphology and desert ecology, and fertility, chemistry, physics, and microbiology of soils. Students will be well-prepared to succeed as lead scientists in commercial companies, educational institutions, governmental agencies, and private production enterprises. Candidates for this degree must successfully conduct original publishable research in one of the above areas. They must also complete a minimum of 30 graduate credits beyond the Master's Degree, or 60 credits beyond the Bachelor of Science degree, based on a program of study approved by the student's graduate committee.

Candidates for a Ph.D. degree in Plant and Environmental Sciences are expected to demonstrate (via course work and independent study) a thorough understanding and proficiency in their chosen major, and if applicable, a minor area. Courses numbered 450-499 are designed for senior undergraduates and graduate students; 500-599 are for graduate students working on a master's or doctoral degree; 6000-7000 are principally for students working on a doctoral degree. Qualifications for admission will be reviewed by the departmental graduate faculty.

Minimum Grade Point Average and Credit Hour Requirements: Your Doctorate degree requires a minimum of 30 completed degree hours beyond the Master's degree, or 60 degree hours beyond the Bachelor's degree, and a minimum GPA of 3.00 in all course work.

Degree residency requirement: 24 credits must be completed at NMSU.

Departmental Requirements: Selection of courses should be based on consultation with the student's graduate committee.

- Complete 2 credits of PLEN Seminar coursework: one credit each of AGRO 590 Graduate Seminar/HORT 590 Graduate Seminar/SOIL 590 Graduate Seminar and PLEN 6910 Doctoral Seminar.
- Complete 9 credits of course work numbered above 600: **exclusive** of PLEN 6991 Doctoral Research and PLEN 7000 Doctoral Dissertation credit.
- Complete at least 18 credits in PLEN 7000 Doctoral Dissertation after passing the comprehensive exam. A student may initially enroll in PLEN 7000 Doctoral Dissertation credits during the same semester that they take their comprehensive exam. However, this option is not recommended because if the student does not pass the exam, the 700-level credits will not count. Consequently, enrollment status, assistantship eligibility, and resident tuition rate eligibility could be jeopardized.

- Complete sufficient credits numbered 450 or above to bring total graduate credits to a minimum of 30 beyond the Master's degree, or a minimum of 60 credits beyond the Bachelor's degree.
- Complete a Qualifying Examination during the first (recommended) or second semester of study.
- Complete a written and oral Comprehensive Examination of the student's field of study.
- Complete a written Doctoral Dissertation.
- Complete a final oral defense of the Doctoral Dissertation.
- Complete one of the following requirements, as approved by the doctoral committee:
    - A thorough knowledge of a language other than English
    - A reading ability in two foreign languages
    - Reading ability in one foreign language and proficiency with a research tool
    - Reading ability in one foreign language and one semester of supervised teaching experience
    - Proficiency with a research tool and one semester of supervised teaching
    - Two semesters of supervised teaching