Twin Cities Campus

Plant Pathology Minor

Plant Pathology

College of Food, Agricultural and Natural Resource Sciences

Link to a list of faculty for this program.

Contact Information:

Department of Plant Pathology Graduate Program, 495 Borlaug Hall, 1991 Buford Circle, Saint Paul, MN 55108 (612-625-8200)

Email: plpath@umn.edu

Website: http://plpa.cfans.umn.edu

- Program Type: Graduate minor related to major
- Requirements for this program are current for Spring 2022
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

Plant pathology focuses on the biology of plant-microbe interactions, and incorporates research involving biochemical, molecular, genetic, physiological, whole organism, population, and community levels of biological organization. Plant pathology interfaces with all plant science disciplines, and with many other fields including food sciences, veterinary medicine, biobased products, and ecology. Areas of concentration include molecular plant pathology, plant disease management, biological control of plant disease, forest pathology and microbial degradation of wood, microbial ecology, population biology, plant-microbe interactions, disease resistance, host-parasite coevolution, plant microbe mutualisms, and virology.

Program Delivery

This program is available:

• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

Special Application Requirements:

Students interested in the minor are strongly encouraged to confer with their major field advisor and director of graduate studies, and the Plant Pathology director of graduate studies regarding feasibility and requirements.

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

Required Coursework (6 to 12 credits)

Masters students select 6 credits, and doctoral students select 12 credits from the following in consultation with the Plant Pathology director of graduate studies:

PLPA 5103 - Plant-Microbe Interactions (3.0 cr)

PLPA 5300 - Current Topics in Molecular Plant Pathology (1.0 cr)

PLPA 5301 - Large Scale Omic Data in Plant Biology (3.0 cr)

PLPA 5444 - Ecology, Epidemiology, and Evolutionary Biology of Plant-Microbe Interactions (3.0 cr)

PLPA 5480 - Principles of Plant Pathology (3.0 cr)

PLPA 8103 - Plant-Microbe Interactions (3.0 cr)

PLPA 8104 - Plant Virology (2.0 cr)

PLPA 8105 - Plant Bacteriology (3.0 cr)

PLPA 8123 - Research Ethics in Plant and Environmental Sciences (0.5 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans. Students may not complete the program with more than one sub-plan.

Masters

Doctoral