FOREST, RANGELAND, AND FIRE SCIENCE (PH.D.)

Doctor of Philosophy. Major in Natural Resources.

Candidates must fulfill the requirements of the College of Graduate Studies and of the College of Natural Resources. Graduate programs are offered in many forest and rangeland specialization areas including Ecology and Biogeosciences of Forest and Rangeland Ecosystems: ecosystem processes/modeling, biometrics, biogeochemistry, hydrology and ecohydrology, remote sensing and geospatial ecology, landscape ecology, community ecology, population ecology, ecosystem ecology, disturbance ecology, paleoecology, restoration ecology, ecophysiology, global environmental change, conservation biology/genetics, and molecular plant systematic; Forest Sciences and Management: forest mensuration, forest regeneration, forest ecosystem management, tree physiology, forest pathology, forest policy, forest operations, silviculture, forest ecology, and forest genetics; Fire Sciences and Management: fire effects and recovery, fire behavior, fuels management, biophysical controls of fire and fire regimes, air quality and smoke management, fire history, and fire ecology; Rangeland Sciences and Management: grazing behavior and management, invasive plant management, livestock-wildlife relations, rangeland and habitat management, rangeland riparian management, and rangeland ecology.

Admission to the graduate program is based on: evidence of ability to complete graduate-level work as discerned from undergraduate transcripts, the applicant’s statement of career objectives, and letters of recommendation; the compatibility of the student’s educational and career objectives with faculty expertise and departmental objectives; and availability of graduate faculty to act as major advisor for an applicant. An undergraduate degree related to our programs is also recommended but an applicant may be accepted with the understanding that certain course deficiencies may be required by the student’s advisory committee.

Students can transfer up to 12 approved credits taken as a non-degree seeking student into a MS or PhD program in the College of Natural Resources with permission of the departmental graduate committee. Students who are considering transferring non-degree credits into a CNR graduate program should request early advising from the appropriate department.

1. Students plan and conduct research or implement a project under the guidance of an advisor and/or committee while demonstrating intellectual independence.
2. Demonstrate original thought and insights to advance their discipline.
3. Develop skills in disseminating oral communication to peers in disciplinary research areas.
4. Demonstrate skills in disseminating written communication to peers in disciplinary and/or interdisciplinary research areas.
5. Demonstrate skills in disseminating and presenting complex information to non-science groups.
6. Demonstrate skills in synthesizing need of research focus to potential sponsors.