

Joint Natural Resource Sciences and Statistics Ph.D.

Program Overview

This program is designed to allow a student to earn an interdisciplinary Ph.D. in the fields of Natural Resource Sciences and Statistics (i.e. a Joint PhD). Students obtaining this degree are expected to make meaningful research contributions to both fields.

Entrance requirements

A student may apply to the program by request, either as a new student or as a current student. Admission must be approved by the Graduate Chairs of both Departments. As a general guide, students considered for the program should demonstrate backgrounds of sufficient strength to warrant entrance into the Ph.D. program of both departments.

Students entering the joint Statistics/Natural Resource Sciences Ph.D. program are expected to have a background relevant to their area in Natural Resources Sciences (determined by the graduate committee of SNR) and adequate mathematical background including 3 semesters of calculus and a course in linear algebra. Students who have not taken these courses can be accepted into the program on a provisional basis. Provisional status will be removed when the deficiencies are made up.

Supervisory Committee

The graduate chairs of each department shall jointly appoint a supervisory committee: thus both graduate committee chairs must sign the Appointment of Supervisory Committee form. The committee must consist of equal numbers of faculty from each department. The committee will be co-chaired by a faculty member from each department and two readers with one reader from each department. A faculty member cannot serve as both a reader and a co-chair on the committee. The committee must approve the program of study and special details of the program.

Program of Study

The program of study must consist of at least 90 hours. In addition, the program of study must include 30 hours in Statistics courses and at least 15 hours of Natural Resources courses. The following courses must be included in the program of study, unless credit has been granted for equivalent courses taken elsewhere:

Statistics: Stat 802, 882, 883, 970, 971 and five additional 900-level Statistics courses(excluding Stat 997and 999).

Natural Resource Sciences: Course requirements to be determined by the student's PhD committee; some specializations have specific requirements that must be met.

No more than 36 credits in total may be transferred in from other programs or institutions.

Research tool requirement

The research tool requirement will be determined by the student's PhD committee. Students are expected to be proficient in at least one statistical computing language such as SAS, S-Plus, R, Statistica, SPSS, IMSL, Gauss etc.

Comprehensive Examinations

The student must qualify for PhD status by passing the MS Statistics comprehensive exam with a high pass. See the graduate student handbook for more details of the exam. Among other options, students who do not achieve a high pass may choose to take an MS in statistics and complete their PhD. in Natural Resource Sciences only.

The student's Ph.D. Supervisory Committee will determine the timing and the content of the Ph.D. comprehensive exam. The written comprehensive exam will not be a repetition of course materials but an investigation of the student's breadth of understanding of the fields of knowledge. Upon completion of the written comprehensive examinations, the student's supervisory committee will meet and administer an oral examination.

Dissertation

The Ph.D. dissertation will be developed under the supervision of the co-advisors on a topic approved by the student's Ph.D. graduate committee and is expected to make an original contribution to both areas. See the Graduate Studies Bulletin for further requirements for the Ph.D. dissertation.

Final Oral Exam

After the dissertation is completed, the student takes a final oral exam. This exam, also called a "thesis defense," is open to the public. Complete details of the final examination procedure are in the Graduate Studies Bulletin.

Other considerations

This program is exclusively a PhD program in that only a PhD program of study will be offered. A B.S. applicant can be provisionally accepted into the joint PhD program, if he/she submits evidence of outstanding abilities and credentials justifying why this direct entry is warranted, with full admission into the joint PhD program after receiving a high pass on the Statistics Qualifying exam.

For more information see:

1. Department of Statistics Graduate Student Handbook:
http://statistics.unl.edu/Acrobat/Statistics_Student_Handbook.pdf
2. School of Natural Resources:
<http://snr.unl.edu/gradstudent/future/index-future.asp>