Joint Statistics and Economics Ph.D.

Program Overview

This program is designed to allow a student to earn an interdisciplinary Ph.D. in the fields of Statistics and Economics. Students obtaining this degree are expected to make meaningful research contributions to both fields.

The program will be overseen by a four-person committee (Oversight Committee), comprised of 2 faculty members from each department. The 2 members from each department will be chosen by the relevant departmental Graduate Advisory Committee with input from the relevant departmental Chair. The committee is a subcommittee of the Graduate Advisory Committees of the two Departments.

Entrance to the Program  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/Economics Ph.D. program are expected to have intermediate level training in economics (both macroeconomics and microeconomics) and adequate mathematical background including 3 semesters of calculus, a course in linear algebra and a course in mathematical statistics.

Qualifying Examinations  Students are required to pass the PhD qualifying exams of both departments. The Statistics qualifying exam is over Stat 882, 883, 970, 802. The Economics qualifying exam is over Econ 973,974,983,984.

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 30 hours of Economics 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 (Statistical Modeling), Stat 980; (Advanced Probability) and Stat 982 and 983 (Advanced Inference I and II) and 6 additional hours of 900 level classes, excluding Stat 970, Stat 997 and Stat 999.

Economics: Econ 973, 974, 983, 984 (Core Theory), Econ 957, 958, 959, 960 (Econometric Theory) and at least two 900 level economics courses in an economics field other than econometrics.

Research tool requirement: The Statistics research tool requirement will be met by considering Economics to be a ‘collateral field’. 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 Examination The student's Ph.D. Supervisory Committee will determine the timing and the content of the Ph.D. comprehensive exam in Statistics. In addition, the students will take a comprehensive examination in a field of economics other than Econometrics. 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 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.